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May 27, 2020

Ms. Vanessa Countryman  
Secretary  
U.S. Securities and Exchange Commission  
100 F Street, N.E.  
Washington, D.C. 20549-1090

**Re: Proposed Rule on Market Data Infrastructure; Release No. 34-88216; File No. S7-03-20; RIN 3235-AM61**

Dear Ms. Countryman:

On behalf of RBC Capital Markets, thank you for the opportunity to comment on the above-referenced proposed rule (hereinafter “the Proposal”).

RBC Capital Markets, LLC, (RBCCM) is the investment banking platform of Royal Bank of Canada.<sup>1</sup> RBCCM is a U.S.-registered broker-dealer that, among other activities, provides equities trading and execution services to retail and institutional investors. These investors include large investment managers with trillions of dollars in assets under management. Those assets reside in employee pension funds, mutual funds, and other vehicles that hold the savings of individual investors.

RBCCM has supported recent Commission efforts to strengthen the fairness, transparency, and efficiency of U.S. equity markets,<sup>2</sup> and we believe that the Proposal advances those

<sup>1</sup> Royal Bank of Canada (RBC), headquartered in Toronto, Ontario, is a global provider of financial services, including personal and commercial banking, wealth management services, corporate and investment banking, and life insurance and transaction process services. RBC's approximately 85,000 employees serve more than 16 million personal, business, public sector, and institutional clients worldwide through offices in Canada, the United States, and 36 other countries. In the United States, RBC's approximately 12,300 employees primarily provide corporate and investment banking, wealth management, asset management, and retail banking services to customers and clients in more than 40 states.

<sup>2</sup> See, e.g., letter dated February 28, 2020, from Rich Steiner, RBC Head of Client Advocacy, related to SRO Governance Proposal, <https://www.sec.gov/comments/4-729/4729-6353203-195588.pdf>; letters dated February 4, 2020, from Rich Steiner, related to two SRO NMS rule proposals, <https://www.sec.gov/comments/sr-ctacq-2019-04/srctacq201904-6768288-208067.pdf>; <https://www.sec.gov/comments/sr-ctacq-2019-01/srctacq201901-6768289-208068.pdf>; letter dated December 10, 2019, from Rich Steiner, in support of the SEC Proposal to Rescind the Effective-Upon-Filing Procedure for NMS Plan Fee Amendments, <https://www.sec.gov/comments/s7-15-19/s71519-6526196>

efforts. The Commission recently adopted a related order that would alter the governance structure for securities information processors (SIPs) and NMS plans, and we were supportive of that order (the “governance order” or “order”) when proposed and when finalized.<sup>3</sup> Our primary recommendation in connection with the order, as well as with the Proposal, is that it be implemented expeditiously, and that any barriers to swift implementation be eliminated by the Commission. Those portions of the governance order that can be adopted promptly should be, and other portions should follow an aggressive implementation schedule. In so doing, the governance reforms in the order can provide improved market data and functioning until the Proposal, if and when finalized, takes full effect.

Similarly, we recommend that the two critical components of the Proposal – namely, improved depth and scope of data, and a competitive model designed to eliminate or reduce disparate latencies between core and proprietary data – be implemented as closely in time as possible. That is because, in our view, both of these reforms must be in place to achieve the purposes of the Proposal. Insufficient data received quickly, or sufficient data received late, essentially amount to the status quo ante which the Proposal seeks to remedy, and would not advance the Commission’s mandate under the Exchange Act to make information with respect to quotations for and transactions in securities available to brokers, dealers, and investors in a prompt, accurate, reliable, and fair manner.<sup>4</sup>

We discuss selected provisions of the Proposal in more detail below.

### 1. Harmonizing the Recent Market Data Governance Order with the Proposal

We commend the Commission for its recent adoption of the governance order<sup>5</sup> requiring the SROs to develop a single NMS Plan within 90 days that will replace the multiple plans currently in place, reduce conflicts of interest, expand participation in the operating committee for this new plan, and assign to the operating committee certain duties. As the Commission has

**200406.pdf**; letter dated October 25, 2019, from Rich Steiner, providing analysis related to market data and access, <https://www.sec.gov/comments/4-729/4729-6353203-195588.pdf>; Brief of Amicus Curiae RBC Capital Markets, LLC, In Support of Respondent and Denial of the Petitions for Review, New York Stock Exchange LLC, Et Al. v Securities and Exchange Commission, D.C. Cir. Docket No. 19-1042, filed August 1, 2019; letter dated August 15, 2019, from Rich Steiner, regarding Proposed Rule Change to Introduce a Liquidity Provider Protection, <https://www.sec.gov/comments/sr-cboeedga-2019-012/srcboeedga2019012-5977239-190213.pdf>; comments of RBC participant Rich Steiner, SEC Roundtable on Market Data and Market Access, October 25-26, 2018, <https://www.sec.gov/spotlight/equity-market-structure-roundtables/roundtable-market-data-market-access-102618-transcript.pdf>; letter dated October 16, 2018, from Rich Steiner, in support of the proposed SEC Transaction Fee Pilot, <https://www.sec.gov/comments/s7-05-18/s70518-4527261-176048.pdf>; letter dated May 24, 2018, from Rich Steiner, in support of the proposed SEC Transaction Fee Pilot, <https://www.sec.gov/comments/s7-05-18/s70518-3711236-162472.pdf>; letter dated September 23, 2016, from Rich Steiner, in support of Equity Market Structure Advisory Committee (EM SAC) Recommendation for an Access Fee Pilot, <https://www.sec.gov/comments/265-29/26529-86.pdf>; letter dated May 24, 2016, from Rich Steiner, regarding EMSAC Framework for Potential Access Fee Pilot, <https://www.sec.gov/comments/265-29/26529-70.pdf>.

<sup>3</sup> See Rich Steiner letter, id, at <https://www.sec.gov/comments/4-757/4757-6891621-210886.pdf>.

<sup>4</sup> Proposal at 17.

<sup>5</sup> Release No. 34-88827, <https://www.sec.gov/rules/sro/nms/2020/34-88827.pdf>.

explained, this new single NMS Plan would oversee all Competing Consolidators (CCs) that provide comprehensive Core Data, which will provide for a more efficient distribution of data to market, and will allow better governance by the single NMS Plan operating committee.<sup>6</sup> In a departure from the Proposal, the governance order appears to allow that a CC may sell proprietary data. So long as the Proposal, if and when finalized, aligns latencies between core and proprietary data, and so long as the fees charged by CCs are, like securities information processor (SIP) fees, subject to the NMS Plan operating committee and to Commission approval following public input, we believe that allowing CCs to sell proprietary data can introduce efficiencies and actually improve access to core data.

## 2. Newly-Defined Core Data

As we have noted in prior communications to the Commission, RBC and others view the Core Data currently provided by the SIPs to market participants to be suboptimal both in terms of the quality of data provided to SIP users and the speed with which it is provided to them.<sup>7</sup> In contrast, proprietary products offered by the exchanges and SROs provide the data quality and transmission speed that are increasingly necessary to many investors to participate effectively in today's markets. For instance, proprietary feeds generally contain significantly more information about market prices for round lots and odd lots, including multiple depths of book. Proprietary feeds also usually have lower latency than SIP-provided Core Data because they are transmitted using the fastest technologies and because, unlike the information in the SIPs, information in the feeds does not have to first be consolidated with other information administered by one of the three NMS plans.

<sup>6</sup> Release No. 34-88827, at 25, <https://www.sec.gov/rules/sro/nms/2020/34-88827.pdf>.

<sup>7</sup> See footnote 2; "Memorandum from the Office of Commissioner Elad L. Roisman, regarding a March 30, 2020, meeting with representatives of RBC and Buy Side," <https://www.sec.gov/comments/s7-03-20/s70320-7024779-215049.pdf>; SEC Roundtable on Market Data Products, Market Access Services, and their Associated Fees, October 25, 2018, available at <https://www.sec.gov/spotlight/equity-market-structure-roundtables/roundtable-market-data-market-access-102518-transcript.pdf>, ("If a broker is routing using SIP data, they are not routing my flow. They can route someone else's but they're not eligible to get my flow, period. That's not negotiable.", Mett Kinak, Head of Global Equity Market Structure and Electronic Trading, T. Rowe Price); SEC Roundtable on Market Data Products, Market Access Services, and their Associated Fees, October 26, 2018, available at <https://www.sec.gov/spotlight/equity-market-structure-roundtables/roundtable-market-data-market-access-102618-transcript.pdf>, ("As far as market data being competitive, your clients have been here for two days, traveled from where they do their business down to Washington to talk about that. And it seems to me that we feel, collectively, that market data isn't competitive. No one here, though, is suggesting government rate-making. Rather, we want to better understand how the fees being charged are reasonable and non-discriminatory.", Rich Steiner, RBC Head of Client Advocacy; "But one thing that has to be -- if the cost of data is so expensive, and as you slide down the scale in the size of a broker-dealer, often times smaller brokers, mid-tier brokers, they have a special sweet spot in small cap and micro-cap stocks through various relationships with them.", Melissa Hinmon, Director of Equity Trading, Glenmede Investment Management; "And I would say amen to Marcy's point, where when you say that, gee, if prices stayed the same they're really going down, in a world in which the price -- the cost here is computer processing, which is plummeting, I don't think anybody sitting here, if they had an iPhone from 10 years ago that had -- was at the same cost as it was 10 years ago would say this is great. They'd say, 'Boy, we're not taking advantage of the savings and innovation that can flow from technology.'", Greg Babyak, Counsel, Head of Government and Regulatory Affairs, Bloomberg LP.).

Chairman Clayton, among others, has spoken of the conflict of interest that has become a fundamental reality in the provision of market data, and the tiered system of data products that has resulted – a system that advantages some investors and disadvantages others.<sup>8</sup> Notwithstanding that there may be valid reasons for proprietary feeds<sup>9</sup>, the disparity between proprietary data and Core Data in both quality and speed has only grown in recent years and – as Chairman Clayton has pointed out – has compromised the ability of all investors to receive “prompt, accurate, reliable, and fair dissemination of consolidated market data.” For this reason, we commend the Commission’s efforts and generally support the Proposal’s definition of Core Data, while maintaining the ability of exchanges to offer proprietary feeds to those willing and able to procure them.<sup>10</sup>

The Proposal’s definition of Core Data includes expanding depth of book to five levels for round lots. We support this element of the Proposal because it will provide additional actionable information to market participants, may help facilitate best execution requirements, and will lead to greater price discovery. As with the other proposed definitions that would expand Core Data, we believe that this requirement should serve as a floor, allowing the operating committee to require additional core data by simple amendment to the NMS Plan, which would be adopted by the new, more inclusive, operating committee for the Plan. In this way, the operating committee – which would presumably more fully reflect the views of market participants – would be able to make improvements to the quality of market data, but – barring statutory or regulatory action – would be more restricted in its ability to reduce or otherwise diminish the quality of market data.

The Proposal’s provisions to expand depth of book for round lots is consistent with an analysis submitted last fall by RBCCM to the Commission (“the RBC analysis”).<sup>11</sup> That analysis shows

<sup>8</sup> “This tiered system of data products, which includes both (1) data products mandated by regulation that are intended to facilitate fair and efficient information access and (2) data products that are provided on a proprietary basis, compiled and priced in many cases by the same market participants, raises conflicts of interests concerns. I believe these issues—the significant conflicts and potential conflicts between the exchanges’ business interests in proprietary data offerings and their obligations as self-regulatory organizations to ensure prompt, accurate, reliable, and fair dissemination of consolidated market data through the jointly administered Equity Data Plans—need to be addressed, including through an appropriate governance structure for the NMS plans.”, Chairman Jay Clayton, SEC, Statement on Order to Modernize the Governance Structure of National Market System Plans for Equity Market Data, May 6, 2020, available at <https://www.sec.gov/news/public-statement/statement-clayton-nms-governance-2020-05-06>.

<sup>9</sup> Proprietary feeds can provide types and levels of information sought by certain investors. They may also foster innovation and over time contribute to improving the quality of market data for all participants, not only those who purchase the feeds. In addition, proprietary data feeds allow the exchanges to monetize their data to some degree, which helps them to meet their shareholders’ expectations of returns while reducing pressure on trading costs.

<sup>10</sup> We would raise one cautionary note about allowing firms to offer products that compete with Core Data products: if a CC were to offer a slimmed-down set of data as an economy offering – perhaps closer to the current top-of-book set of Core Data – it could create ambiguity around what is necessary to satisfy best execution (Best Ex) requirements. To satisfy this concern, the Commission could address Best Ex in guidance, clarifying that Best Ex should, at a minimum, be satisfied using the new Core Data set (or perhaps creating a safe harbor that does the same).

<sup>11</sup> See Rich Steiner letter, id, at <https://www.sec.gov/comments/4-729/4729-6353203-195588.pdf>.

that significant liquidity exists beyond the top of book and that displaying levels in addition to the top of book would reveal significant liquidity to the market. The Proposal, in proposing to include four levels beyond the top of book, is fully consistent with the RBC analysis and, in our view, strikes a sensible balance between the costs and benefits of displaying additional liquidity.

The RBC analysis also reveals that as share prices in a stock increase, so does trading in odd lots. Displaying odd lot information would, consequently, reveal greater liquidity in a stock, and so we support including odd lot information in Core Data. However, rather than redefine round lots to include these select odd lots, we believe a more modest approach may be best. The RBC analysis recommends that odd lot quotes be included into core data, while leaving the definition of what constitutes a round lot unchanged. As a result, these displayed odd lot quotes would not be protected under Regulation NMS Rule 611 and would therefore not constitute a new Best Protected Bid or Best Protected Offer, though at times they could provide an improved National Best Bid and Offer (NBBO). The RBC analysis further suggests a revision of best execution guidance, such that brokers acting in an agency capacity on behalf of their clients would be expected to route their client orders to interact with better priced displayed odd lot quotes above certain thresholds to fulfill their best execution obligations. We believe some could consider the new NBBO less relevant under the proposed round lot thresholds. Because orders less than 100 shares would not be protected, as is the case today, we suggest that requalifying such orders as round lots in some cases could be confusing as to what, in fact, constitutes a round lot and what protections are afforded to such orders.

The Proposal also would require auction information to be included in the definition of Core Data, noting that auctions comprise 7% of trading activity and are integral to pricing ETFs. We support this requirement, particularly in light of the recent trading halts due to market wide circuit breakers and the consequent multiple market re-openings that depended upon auctions.

### 3. Encouraging Competition to Reduce Latency and Improve Market Quality

The Proposal would allow CCs to provide market data provided that they meet certain minimum requirements set by the Commission. Among the requirements is that the CC must (i) make available all Core Data, not just data from a specific tape (as is currently the case); (ii) use the same technologies and processes as used for proprietary data feeds with the objective of reducing latencies between Core and proprietary data; and (iii) charge rates and make other changes subject to the NMS plan.<sup>12</sup>

As noted above, our principle concerns are improving the quality of Core Data and reducing latencies in its delivery. We believe that the first two conditions above – having CCs provide all Core Data, and requiring that they do so with the same technologies and processes as proprietary data – would address these concerns. While there could be other ways to achieve these objectives, such as a single dedicated SIP that must satisfy each of these three

<sup>12</sup> Release No. 34-88827, <https://www.sec.gov/rules/sro/nms/2020/34-88827.pdf>.

conditions, the Proposal’s use of competition to maintain fair prices and enhance quality and speed is an approach that we believe is reasonable.

Competition should incentivize CCs to provide Core Data more quickly and economically. Allowing these CCs to also sell proprietary data – a departure from the governance order’s limitation on the monopoly SIPs’ ability to sell proprietary data – may also incentivize CCs to enter the marketplace and offer attractive pricing and performance. However, we recognize the potential for unintended consequences of allowing CCs to enter the proprietary data market, including inconsistent Core Data pricing, rebates, tie-ins, or diminished transparency for investors. These concerns could be mitigated by requiring price transparency for investors.

So long as NMS plan governance, as set forth in the governance order, and the above-referenced three conditions are in place, the Commission’s goals of providing timely, useful Core Data should be advanced. However, it is vital that the NMS plan’s governance provisions include representation from the constituencies identified in the governance order, including various investor groups, and that the plans have a conflicts policy that forces disclosure and, in certain instances, recusal for conflicted parties. We are pleased that the governance order contains these requirements and we urge the Commission to continue its oversight over the amendment and management of these plans to ensure that competition between the new CCs is conducted consistent with the governance measures that the Commission has implemented.

Even if CCs are required under the Proposal to provide Core Data using the same methods and process to distribute proprietary data, this new distributed network may have multiple methods and processes for the distribution of Core Data, which could ultimately lead to a tiered system of market data that Chairman Clayton has warned against and actually reduce competition in the long run because of “stickiness” to one provider or another, or because firms would need multiple information technology infrastructures to support various Core Data and proprietary data feeds. The Commission could remedy this potential unintended consequence by providing guidance on minimum specifications for the methods and processes of delivery that could help to drive convergence around common methods and processes for Core Data.

In its comments on the governance order, RBCCM urged the Commission to act swiftly and to implement change on a rolling basis. As we noted above, in the case of the Proposal, we believe that both the quality and speed of the Core Data must be enhanced in order for the benefits of the Proposal to be fully realized. For that reason, we urge swift action. The Proposal would allow existing SIPs to register as CCs, and we think that is a positive outcome so long as the new governance proposals are in place.<sup>13</sup> If not, we are concerned that the existing plans, which lack balanced representation on their operating committees, could seed this new regime with unnecessary or anticompetitive features that could frustrate the Commission’s objectives.

<sup>13</sup> Proposal at footnote 29.

With a distributed system, coordination among the nodes of the system will be critical. The Proposal would have the primary exchange for each listed stock bear responsibility for producing certain information for the broader NMS system, including Limit-Up-Limit-Down (LULD) bands, market-wide circuit-breaker information, and Regulation SHO thresholds. It is not clear that this set of requirements would be possible without a single NMS plan and a single, independent plan administrator, which places more importance on standing up the governance regime quickly, and prior to the launch of the distributed CC network.

#### 4. Timing

The Commission has not set any deadlines for implementation of this new regime. Instead, the governance order requires that within 90 days of that rule a new single NMS plan must be adopted. We urge that the Commission, in this rule, require prompt adoption of an amendment to the new, single NMS plan that would facilitate this regime, including referencing a distributed CC system instead of a single SIP, assigning responsibility for various requirements such as setting LULD bands, coordinating the sharing of information between participants including CCs, and mechanisms for overseeing compliance with the NMS plan provisions and this rule. We also believe that the Commission should set a timeline for that amendment, such as within 30 days of the Commission's approval of the NMS plan submitted pursuant to the governance order. That timeline should allow sufficient time to draft the amendment during the pendency of the Commission's review of the governance order NMS plan.

The Commission has also set a requirement that any aspiring CCs (except SROs) or existing SIPs must also register before becoming CCs, and has identified a number of preconditions demonstrating readiness. Until that point, the SIPs must continue operations. It is unclear whether they are required to produce all market data or just their current tape, particularly once the single NMS Plan is established, and whether they will be required to continue operations should they choose against becoming a CC. The Commission should clarify these points so as to ensure that there is no gap in delivery of Core Data.

Finally, we are concerned about the potential for schedule slippage. As we understand it, the path to the future competitive state envisioned in this Proposal includes the following milestones: (i) submission by the SROs of a revised NMS Plan pursuant to the governance order; (ii) adoption by the Commission of that new NMS Plan; (iii) submission of amendments that will govern the regime contemplated by the Proposal by either these same SROs or the expanded operating committee of the new NMS Plan; (iv) operationalization of the new NMS Plan; (v) preparation by CCs, SROs, the Commission, and others for the competitive model contemplated by the Proposal; (vi) registration of the various participants in this new model; and (vii) operationalization of the model. While the Commission may not be able to control each of these steps, we urge the Commission to set timelines for its own reviews, and set deadlines for the completion of various steps by the involved participants as it did for portions of the governance order. We also recommend that the Commission provide periodic updates to the market on its progress and that of the NMS Plan participants.

#### 5. Conclusion

RBCCM again appreciates the opportunity to comment on the Proposal, which we generally see as a major step toward more fair, efficient, and transparent markets. Should the

Commission find it useful, we would be pleased to provide additional information to the Commission regarding the matters raised in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Steiner".

Rich Steiner  
Head of Client Advocacy and Market Innovation