CSA Staff Notice 21-334 Next Steps to Facilitate Access to Real-Time Market Data

April 18, 2024

Item 1 - Introduction and background

On November 10, 2022, the Canadian Securities Administrators (the CSA or we) published for comment CSA Consultation Paper 21-403 Access to Real-Time Market Data (the Consultation **Paper**). The purpose of the Consultation Paper was twofold:

- 1. to present the results of our fact-finding review regarding the concerns raised by Canadian market participants in relation to accessing real-time market data (RTMD); and
- 2. to seek feedback on proposed initial and longer-term options that, if undertaken, could potentially alleviate some of the inefficiencies introduced by fragmentation and other concerns raised by market participants in relation to accessing RTMD.

Initial Options for Addressing Staff Considerations (1 to 2 years)	Longer-term Options for Addressing Staff Considerations (Over 2 years)
1. Enhance transparency of the fee changes proposed by marketplaces	1. Improve access to consolidated RTMD by leveraging the current information processor (IP) model
2. Retain external assistance to review the use of the data fees methodology (DFM) and the reference points used to allocate fees, as well as improve transparency of the DFM by publishing each marketplace's fee ranges	2. Introduce a new model for data consolidation to improve access to consolidated RTMD
3. Create an industry group to help standardize key terms and definitions for access to and use of RTMD between marketplaces and market participants	

The Consultation Paper proposed the following initial and longer-term options:

We received twenty comment letters to the Consultation Paper and thank the commenters for their feedback.

As stated in the Consultation Paper, RTMD provides vital information about equity securities markets. In particular, consolidated RTMD contains information about orders sent to and trades executed on all Canadian marketplaces, both exchanges and alternative trading systems (ATSs). The multi-marketplace environment in Canada allows marketplaces to compete for trading in the same securities and, as a result, order and trade information is fragmented across multiple venues. Access to consolidated RTMD provides increased transparency and improves price discovery of Canadian equities on Canadian marketplaces. As a result, we remain of the view that access to consolidated RTMD is key for market participants, investors, and their advisers to make informed investment, routing, and execution decisions.

Securities regulators from around the globe are considering regulatory changes to ensure that market participants are able to access RTMD, including consolidated RTMD, at a reasonable cost. Despite these regulatory efforts, concerns about the accessibility and increasing cost of RTMD in a fragmented trading environment remain.

Item 2 – Purpose and scope

The purpose of this CSA Staff Notice is twofold:

- 1. to summarize the comments received to the Consultation Paper; and
- 2. to advise stakeholders of the CSA's next steps to address the access to and use of RTMD.

Item 3 – Comments received

We received twenty comment letters¹ from a wide range of stakeholders, including industry associations, advocacy groups, marketplaces, dealers, and individuals. Copies of these comment letters are publicly available on the websites of the securities regulatory authorities (**SRAs**). Appendix A provides a summary of the comments received, along with responses prepared by the CSA Staff.

In analyzing the feedback received from stakeholders and developing the next steps to enhance transparency and improve the regulation of the fees charged by marketplaces for RTMD products and services,² we considered factors that included:

- the intended goals of the options we had proposed;
- the complexity of achieving these goals in a reasonable, cost effective, and timely manner for both the SRAs and industry stakeholders;
- the adequacy of the current Canadian regulatory framework to address industry's concerns with respect to the fees and other charges to access RTMD; and
- developments in other jurisdictions that may impact or influence our approach in choosing the best way forward from a regulatory perspective.

The comments received demonstrate that the views of commenters continue to be very diverse, especially between producers (i.e., marketplaces) and consumers (i.e., market participants, such as dealers, buy-side, etc.) of RTMD products and services. In general, consumers of RTMD were more supportive of some of the proposed options set out in the Consultation Paper. Despite different views expressed, overall, there was positive feedback for the initial options proposed. In light of this and following additional analysis, we have decided to move forward with these initial options.

With respect to the longer-term options, although some commenters supported certain elements of each of the two options, others emphasized the deficiencies and potential challenges with adopting these options. With either of these longer-term options, significant resources would

¹ The list of commenters is: National Bank, TD Securities, Scotia Global Banking and Markets, BMO Capital Markets, CIBC Capital Markets, Virtu Financial, Select Vantage Canada, Wealthsimple, BlackRock, Tradelogiq Markets Inc., Nasdaq Canada, TMX Datalinx, Canadian Securities Exchange, Cboe Global Markets, Investment Industry Association of Canada, Canadian ETF Association, Canadian Security Traders Association, WAR Room Consulting, Ian Bandeen, and the Canadian Advocacy Counsel.

² RTMD fees include fees related to a service which impacts the access to order and trade information that is distributed immediately after an order has been entered, amended, or cancelled or a trade has been executed, including, but not limited to, fees charged for top-of-book (Level 1), depth-of-book (Level 2), distribution, display, non-display, and applicable connectivity services that are associated with the access to and use of RTMD.

need to be engaged for an extended period of time to achieve the objectives. Ultimately, it was not clear to the CSA that the costs involved in pursuing either of these options justified the benefits, at this time. Instead, the CSA is of the view that addressing some of the concerns through the initial options may help address the impact of the cost of access to RTMD for market participants. The CSA will continue to monitor developments in this area.

A suggestion made by a number of commenters was to consider facilitating access to consolidated RTMD products for retail investors and their advisers. Retail access to consolidated RTMD is not a new concept and was explored during the interviews conducted by CSA Staff with stakeholders prior to the publication of the Consultation Paper. At that time, none of the stakeholders interviewed clearly expressed the view that retail investors and their advisers require more access to consolidated RTMD. Rather, the feedback gathered indicated that access is provided based on balancing the need and costs of such access. Following publication of the Consultation Paper, we received feedback to indicate that "*these users would be better served by having access to consolidated RTMD to make informed decisions*."³

To this end, we have determined that regulatory action to improve access to consolidated RTMD for retail investors and their advisers should be further explored. As a result, we are proposing to undertake a consultation to determine whether the introduction of consolidated RTMD products for retail investors and their advisers will benefit the Canadian capital markets.

Item 4 – Next steps

After considering all the comments received and conducting our own analysis, the CSA is taking the following next steps:

	Area of immediate action – Transparency	
1.	Implementation of an enhanced transparency regime for any fee proposals by requiring	
	marketplaces to publish proposals relating to RTMD products and services	
Areas for further study through industry committees – DFM, Retail Access to		
RTMD, and Standardization		
2.	Reconsider the DFM	
3.	Assess facilitating access to RTMD products and services by retail investors and their advisers	
4.	Standardization of key terms and definitions to consolidated RTMD agreements	
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Each of these steps is discussed in detail below.

4.1. Implementation of an enhanced transparency regime for any fee proposals related to RTMD products and services

Under the current regulatory regime, most marketplaces are subject to a process for the review and approval of fee changes (the **Protocol**). For exchanges that are subject to it, the Protocol is appended to their recognition orders, while for ATSs, they are subject to an Ontario Securities Commission (**OSC**) Order.⁴ These orders require that marketplace fee changes be published for comment where, in Staff of the applicable SRA(s)' view, they may have a significant impact on the marketplace, its market structure, members, issuers, investors, or the Canadian capital

³ See page 17 of the Consultation Paper.

⁴ Please see <u>https://www.osc.ca/en/securities-law/orders-rulings-decisions/bloomberg-tradebook-canada-company-et-al-s-2101</u> for an example of the Protocol. Note that the OSC is the lead regulator for all ATSs, which is why there is only an OSC order to ensure their compliance with the Protocol.

markets, or otherwise raise regulatory or public interest concerns and should be subject to public comment.⁵

To enhance transparency related to RTMD fees, we have introduced an enhanced version of the Protocol. To respond to local matters in a local jurisdiction, an appendix to this Notice may include the OSC Variation Order that introduces these changes, as well as blacklined versions of the Protocol applicable in Ontario that show what changes were made. The order is dated April 5, 2024 and takes effect on April 18, 2024. The Alberta Securities Commission and British Columbia Securities Commission expect to review whether to pursue a similar approach for the TSX Venture Exchange.

The first change made to the Protocol is to introduce a subset of fee changes, called RTMD fee changes. We define a RTMD Fee Change as a Fee Change that, in Staff's view, relates to a product or service which impacts the access to order and trade information that is distributed immediately after an order has been entered, amended, or cancelled or a trade has been executed. RTMD Fee Changes include, but are not limited to, changes proposed to top-of-book (Level 1), depth-of-book (Level 2), distribution, display, non-display and applicable connectivity services.

The next set of changes to the Protocol set out the publication process for RTMD Fee Changes, including the information to be included. Marketplaces are required to submit the Notice of Publication or Request for Feedback and all relevant materials to the SRAs at least 30 business days prior to the expected implementation date of a RTMD fee change. Further, within two business days of the submission date, marketplaces are required to publish RTMD Fee Changes on their websites, where they can be easily accessible to interested stakeholders, and/or through a communication to market data customers. The SRAs will also publish the proposed fee change on their websites as soon as practically possible after receipt of the Notice of Publication or Request for Feedback from marketplaces.

The information required to be published about a proposed fee change to a RTMD product or service includes, but is not limited to, the following:

- (a) how the proposed fee change complies with the regulatory requirements set out in ss. 5.1(1) and 5.1(3)(a) of *Regulation 21-101 respecting Marketplace Operation* (also known as the fair access requirements) and in Part 10 of the exchange recognition criteria, where applicable, including reasonability, fairness, appropriateness, and transparency; and
- (b) a description and analysis of the proposed RTMD fee change that includes the current information submitted with a proposed fee change, as well as some additional information, including, but not limited to:
 - i. a description of the fee change being proposed,
 - ii. the expected date of implementation,
 - iii. the rationale for the proposed fee change and any analysis in support of it,
 - iv. a description of the methodology used to set the proposed fees,
 - v. an analysis of the impact on stakeholders,
 - vi. an overview of any alternatives considered,
 - vii. any analysis conducted to determine how the proposed fee compares to fees charged for similar services by other marketplaces in Canada and abroad, and
 - viii. the costs of producing the product or service, where relevant.

⁵ This reflects the current practice in Ontario and the expected practice in British Columbia and Alberta.

In Ontario, the Notice of Publication must provide market participants with an opportunity to provide comments to Staff of the SRAs and to the marketplace within 15 business days from the date the Notice of Publication appears on the SRA's website. Staff of the SRAs will consider feedback submitted by market participants as part of their review and approval process.

If the RTMD Fee Change is approved, the marketplace and the SRAs will publish, promptly after the approval, on their respective websites, a notice indicating that the proposed change is approved.

If the RTMD Fee Change is withdrawn, the marketplace and the SRAs will publish an applicable notification.

In addition, where, in Staff's view, the RTMD Fee Change may have a significant impact on the Canadian capital markets, marketplaces might also be required to publish a summary of public comments and responses prepared by the marketplace.

Marketplaces and market participants alike commented that requiring disclosure of costs may ultimately harm marketplaces as this information may be commercially sensitive. We would like to point out that s. 7(a)(ii) of the Exchange Protocol and s. 6(a)(ii) of the ATS Protocol provides, in part, that the Notice of Publication does not need to include the information discussed above if it "would result in public disclosure of sensitive information or confidential or proprietary financial, commercial or technical information." We are of the view that this provision addresses commenters' concerns about cost disclosure or other information of that nature.

These changes to the Protocol will be reviewed after 18 months. After this time, Staff of the SRAs will conduct an analysis to assess if the changes achieved the intended objective to enhance the transparency of proposed RTMD Fee Changes.

4.2 Areas for further study through industry committees

4.2.1 Reconsider DFM

We are proposing to establish an industry committee (the **DFM Committee**) that would be chaired by a consultant retained by the CSA and include various stakeholders, as proposed by commenters. The mandate of the DFM Committee is to prepare a report (the **DFM Report**) that will present recommendations to the CSA regarding potential solutions to the questions identified in the DFM Committee's Mandate, which is attached at Appendix B.

As outlined in the DFM Committee Mandate, the DFM Committee will consider a number of issues including, but not limited to:

- whether the DFM continues to be an appropriate tool for assessing professional RTMD fees in the current competitive landscape;
- the pre- and post-trade metrics included in the DFM formulas as well as other inputs (e.g., inclusion of crosses, inclusion of auction data, etc.) to determine what changes are necessary to improve the fairness of the DFM application to different types of RTMD products sold by each marketplace; and
- the overall reference points (i.e., benchmarks) used to allocate fees to each marketplace's RTMD products.

The DFM Committee's analysis and recommendations will be set out in the DFM Report, which will be published.

In parallel to the work of the DFM Committee, Staff of the SRAs will conduct their own review of the DFM. The CSA will consider both this review and the recommendations set out in the DFM Report in determining whether to continue to use the DFM going forward, along with any changes required to the framework. Any proposed changes to the DFM will be published for comment in the normal course.

4.2.2 Assess facilitating access to consolidated RTMD by retail investors and their advisers

We are proposing to establish an industry committee (the **Retail Committee**) to further explore the creation of a commercial, legal, and possibly technical framework that would provide incentives or at least remove barriers for dealers to offer consolidated RTMD product(s) to retail investors and their advisers.

The Retail Committee will be chaired by a consultant retained by the CSA. The mandate of the Retail Committee is to prepare a report (the **Retail Report**) that will:

- provide analysis, quantitative or otherwise, aggregated at the level considered appropriate by the Retail Committee, that shows the gaps in access to consolidated data by retail clients and their advisers; and
- identify barriers to access to consolidated market data products by retail investors and their advisers as well as the best approach to minimize or, where possible, remove these barriers.

If the Retail Committee concludes that there is sufficient rationale for introducing retail-focused consolidated RTMD product(s), then the Retail Committee should recommend a consolidated RTMD retail product(s) framework that would set out, among other things:

- what RTMD products are to be included;
- a method to establish the fees to be charged;
- a method of revenue collection;
- a method to allocate revenues; and
- the best ways to enable access by retail investors and their advisers.

The mandate of the Retail Committee is attached at Appendix C.

As with the other industry reports, the recommendations included in the Retail Report will be considered by the CSA in reaching a decision on whether to develop consolidated RTMD product(s) for retail investors and their advisers. The Retail Report will be published in due course.

4.2.3 Standardization of key terms and definitions to consolidated RTMD agreements

We are proposing to establish an industry committee (the **Standardization Committee**) that would be chaired by a consultant retained by the CSA and include various stakeholders, such as market participants' data experts who have experience accessing and using RTMD products and services, as well as marketplace staff with expertise in administering RTMD agreements. The mandate of the Standardization Committee is to prepare a report (the **Standardization Report**) that will present recommendations to the CSA regarding the terms and definitions that should be standardized and propose an adoption and implementation plan.

The Standardization Report should also discuss the advantages and disadvantages to both marketplaces and market participants relating to the adoption and implementation of the proposed terms and definitions. In drafting the Standardization Report, the Standardization Committee should consider the undertaking by the information processor's Governance

Committee – which includes representatives of all marketplaces in Canada – to standardize terms and definitions for access to consolidated RTMD products. The Standardization Committee's Mandate is attached at Appendix D.

The recommendations included in the Standardization Report will be considered by the CSA in reaching a decision on whether to mandate the adoption of key terms and definitions proposed by the Standardization Committee. The Standardization Report will be published in due course.

Item 5 – Getting involved

Considering the substantial work required to be completed by each industry committee and the possibility that stakeholders may want to participate in multiple industry committees, CSA Staff has staggered the approach to the areas for further study into three phases, as follows:

- Phase 1 Reconsider DFM to begin three to six months after the publication of this Notice, to allow for the retaining of a consultant to chair the DFM Committee and to gather committee members;
- Phase 2 Assess facilitating access to consolidated RTMD by retail investors to begin when Phase 1 is completed; and
- Phase 3 Standardization of key terms and definitions to consolidated RTMD agreements to begin when Phase 2 is completed.

Depending on the interest of potential committee members and their resources, it is possible that phases 2 and 3 may proceed together.

If you are interested in participating in the DFM Committee, please submit your intention in writing, indicating any additional industry committee(s) you may be interested in joining following the DFM work and providing a description of your related experience to date. Please send your applications to <u>marketdata committees@osc.gov.on.ca</u>. Applications should be submitted by no later than May 31, 2024.

Item 6 – Questions

If you have any comments or questions, please contact any of the CSA Staff listed below.

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APPENDIX A SUMMARY OF COMMENTS AND CSA RESPONSES FOR EACH OPTION PROPOSED IN **CSA CONSULTATION PAPER 21-403**

A. List of Commenters

- 1. Wendy Rudd (WAR Room Consulting)
- 2. Ian Bandeen
- 3. TD Securities
- 4. Select Vantage Canada
- 5. Tradelogiq
 6. Wealthsimple
- 7. Canada ETF Association
- 8. Canadian Security Trader's Association, Inc.
- 9. BMO Capital Markets
- 10. Investment Industry Association of Canada
- 11. National Bank
- 12. CIBC Capital Markets
- 13. Scotiabank Global Banking and Markets
- 14. Nasdaq
- 15. Blackrock
- 16. Canadian Securities Exchange
- 17. TMX Datalinx
- 18. Cboe Global Markets
- 19. Virtu Canada Corp.
- 20. The Canadian Advocacy Council of CFA Societies Canada

B. Summary of Comments and CSA responses

Summary of Comments	Responses
Option 1: Enhance transparency of any fee proposals related to R	
review and approval process, to publish proposed changes when	
Most commenters who addressed this topic supported enhanced	We acknowledge that the comments received were mixed, with
transparency with the exception of the marketplaces.	dealers, buy-side, and industry associations supporting the proposal and marketplaces holding the opposite view.
Market Participants	
Market participants ⁶ were very supportive ⁷ of a more transparent fee approval process for RTMD products and services as it would enable them to express concerns about the impact of these fee changes on their ability to access market data while strengthening the governance process for the review and approval of these fee changes.	As noted in the Consultation Paper, under the current regulatory regime, the process for the review and approval of fee changes is part of the exchange recognition orders as well as an order applicable to ATSs. Marketplace fee changes are published for comment where, in Staff of the SRAs' view, they may have a significant impact on the marketplace, its market
These commenters also indicated that an enhanced transparency regime may introduce certain risks for marketplaces. In this context, one commenter mentioned that marketplaces might be sensitive to publicly disclosing information about their costs to competitors,	structure, members, issuers, investors, or the Canadian capital markets, or otherwise raise regulatory or public interest concerns and should be subject to public comment. ⁸
especially before the implementation of a new product or service. Another commenter pointed out that this public disclosure could have the unintended consequence of providing marketplaces with insight into their competitors' proposals that receive regulatory approval. This commenter indicated that this may not necessarily be a negative consequence but did not expand on its view.	We remain of the view that consumers of RTMD products and services should have access to information about changes to these fees and the opportunity to raise issues regarding the impact these fee changes may have on their operations, including any barriers to access they may experience because of these changes. For this reason and after analyzing the feedback received and weighing the pros and cons of this
Marketplaces Most marketplaces were of the view that additional transparency would not benefit stakeholders. They instead expressed support for the current regulatory review process as: (i) it strikes a balance between seeking comments on significant fee changes and not burdening the public with routine fee proposals, and (ii) it provides full transparency regarding proposed fee changes.	option, we decided to propose, on a pilot basis, an enhanced transparency regime for RTMD fee changes which will be implemented through the Protocol and assessed after a period of 18 months.

 ⁶ We grouped here dealers, buy-side, trade associations, and the Canadian Advocacy Counsel.
 ⁷ Commenters supporting enhanced transparency include dealers, buy-side, trade associations, and the Canadian Advocacy Counsel.
 ⁸ This reflects the current practice in Ontario.

All marketplaces expressed concerns about the proposed enhanced transparency regime in that:

- it would be unduly burdensome, especially on those marketplaces that offer extensive RTMD products and services, to publish proposed fee changes for comment;
- it could result in a self-selection bias among those market participants that choose to raise issues and may make it more difficult for smaller marketplaces to obtain value for their services when they receive only negative public comments;
- it would burden one category of exchange products relative to other products, which could lead to a misallocation of resources; and
- it would make the process, and the resulting review by SRAs, vastly more complex, introducing delays and inefficiencies.

One marketplace was of the view that the introduction of more transparency in relation to proposed fee changes for RTMD products and services and their review process could assist the SRAs in carrying out their marketplace oversight responsibilities. However, this commenter indicated that to do so, an appropriate framework should be put into place to govern the review process, including the elimination of the requirements to publicly provide cost disclosure and summarize and respond to public comments. This commenter further indicated that the standards for the approval of proposed fee changes needs to be both clear and objective, and that an effective and efficient mechanism for marketplaces to appeal non-approval decisions needs to be created.

Option 2: Retain external assistance to review the DFM and its relevance in the context of domestic and international developments in equity markets. The review should include an examination of reference points that could be used by CSA Staff to allocate the share of fees chargeable by marketplaces under the DFM. The fee ranges assigned to each marketplace should be made transparent.

Most commenters expressed support for the CSA's efforts to address	We acknowledge that the views regarding continued use of the
concerns related to the cost of accessing RTMD products and	DFM varied. While most commenters support the continued
services, including the use of a prescribed approach to assess the	use of the DFM albeit with some changes, a few marketplaces
fees charged by marketplaces to professional users (i.e., the DFM).	suggested that the DFM should be discontinued. We

However, they expressed several concerns with the current DFM. With some exceptions, most commenters supported retaining external assistance and/or organizing roundtables or an industry committee to tackle the issues with the current DFM and to assess its potential expansion.	understand the need to reassess the DFM, but we remain of the opinion that the DFM has helped control the cost of RTMD. We intend to establish an industry committee, chaired by a consultant, to re-examine the DFM.
 Market Participants Commenters in this group provided suggestions to improve or revisit the current DFM. Overall, commenters suggested that the DFM could be improved by: grouping RTMD subscribers based on how they consume data rather than by type of subscriber; setting a fee level that market data subscribers would pay if they accessed RTMD from all marketplaces, which should be lower than the current cost of access; recalculating the baseline RTMD costs to better understand the true costs of market data administration and distribution; introducing a DFM for both the senior and venture markets and using separate formulas for large and small cap securities; and establishing a cost-based pricing model or extending the application of the DFM to most market data fees, including senior and venture market data. 	
These commenters also indicated that the current DFM does not indicate whether the fees charged by marketplaces to professional users are fair and reasonable because it calculates fee ranges on a relative basis which provides incentives for marketplaces to gradually raise their fees together. In addition, there is no public disclosure of the calculated fee ranges. Most commenters in this group supported the public disclosure of the calculated fee ranges and generally did not believe there were any material risks in doing so. However, one commenter was concerned that this transparency could result in marketplaces charging the maximum fees permitted under the DFM, leading to continuous marginal fee increases.	

With respect to expanding the application of the DFM, the views of commenters in this group varied. One commenter stated that there should be a DFM applicable to non-professional subscribers to ensure that cost is not a barrier for these users to access such data. This commenter also indicated that the professional user category should be further fragmented to likewise allow for retail advisers to have reasonable access to RTMD. Other commenters indicated that, if a new information processor model were to be adopted, the DFM should include a methodology for the fees charged to non-professional as well as professional subscribers.

Marketplaces

Marketplaces' views ranged from discontinuing use of the DFM, to addressing issues related to the input metrics of the current DFM, to supporting a new, simpler DFM that cannot be artificially gamed. Specifically, they commented that the current DFM is inconsistent, applying different pricing methodologies to similar products across different marketplaces and not differentiating between senior and venture markets. However, on this latter point, only two marketplaces recommended different DFMs for the senior and venture markets. The others were concerned that this approach could add additional complexity to the fee review process.

Two marketplaces stated that the current DFM should be discontinued because: (i) it artificially distorts prices, (ii) it discourages innovation, (iii) there is no ability to calibrate it to international standards given that use of the DFM is limited to Canada, and (iv) it has brought a significant degree of unfairness in that it disadvantages growing marketplaces whose securities are being increasingly traded on away markets.

The marketplaces that supported the continued use of a DFM provided several recommendations for improving the current DFM. These included eliminating intentional cross trades or, at the very least, reducing their weight in the ranking calculations. They also suggested reducing the weight of trades executed during the opening

and closing auctions and eliminating the impact of pegging, in addition to other recommendations to be considered in any follow-up work. With one exception, the marketplaces that submitted responses supported a more transparent DFM, including the publication of any formulas used to determine fees, all datapoints used in the DFM, and the public disclosure of the calculated fee ranges. One marketplace indicated that this approach would increase accountability and provide certainty about the accuracy and fairness of the DFM. Another marketplace was not supportive of making the results of the more granular input metrics public due to the risk of their being misinterpreted or misapplied stemming from their complexity.	
 Option 3: Create an industry group to help standardize key terms a marketplaces and market participants. Only two commenters did not support this option. Market Participants These commenters supported the creation of an industry committee to standardize key terms and definitions. Several commenters indicated that standardized terms and definitions have multiple benefits for market participants, including (i) clarifying marketplace products and services which could reduce the administrative burden of reviewing and executing marketplace agreements, (ii) allowing firms to compare products across marketplaces, and (iii) ensuring protections aimed at certain user classes are more uniformly applied. One market participant was opposed to standardizing terms and definitions because of the difficulty in doing so and the potential for any errors to lead to future regulatory arbitrage. With respect to the terms and definitions that should be targeted, several market participants outlined the need to properly define professional and non-professional subscribers. One commenter indicated that doing so could result in reduced fees for non-professional subscribers and improved access to Canadian markets, since their data needs are less than professional subscribers. 	Ind definitions for access to and use of RTMD between We agree with the commenters that standardization of key terms and definitions can help reduce barriers to accessing RTMD by reducing the administrative burden on consumers. As a result, we are proposing to establish an industry committee to recommend the terms and definitions that should be standardized.

In terms of how to structure the industry committee, participants' views varied. Some suggested that the industry committee should be comprised of subject matter experts representing marketplaces, vendors, the legal community, and various subsets of data users. Others suggested that the dominant stakeholders should be dealers as this would give them the ability to negotiate key contractual terms as a group.	
Marketplaces Marketplaces provided mixed feedback. Two commenters agreed that standardizing key terms could lessen the administrative burden of maintaining data agreements, but they indicated that: (i) standardization should be limited to key foundational terms and not all terms across all categories, and (ii) standardization of terms should not be done in isolation, outside of the context of a specific contract, but through an administrative information processor in the context of access to consolidated RTMD.	
One marketplace expressed the view that under the existing model, standardizing terms would be burdensome on marketplaces and dealers and without substantial benefits. This commenter indicated that the resources involved in standardizing terms would outweigh any benefits. Further, this commenter stated that without fundamental change to the RTMD access model in Canada, standardization will not assist retail investors with easier or more direct access to RTMD.	
Option 4: Leverage the current information processor (IP) model b Only a few commenters expressed direct support for leveraging the current IP model. Comments largely focused on feedback regarding	y introducing a Technical IP+ (TIP+) Model. We acknowledge the wide range of views with respect to the proposed TIP+ model. While some commenters supported
the approach proposed in the Consultation Paper with respect to setting caps for the fees charged for consolidated RTMD. Commenters also discussed whether such caps would incentivize consumption and whether having one or multiple TIPs would create competition for the consolidated products disseminated by these TIPs.	certain elements of this approach, they were not convinced that as proposed, this option would impact the cost of access to and use of consolidated RTMD products. In addition, there were many commenters that raised concerns about the impact of the TIP+ model on Canadian producers and consumers of consolidated RTMD. As a result, we have decided to defer any

Market Participants Market participants indicated that: - the current IP model is out of date and is not required where participants consume data through vendors; - the current IP model should be eliminated and replaced with a utility type errorsization to reduce the costs and mark use by	changes to the current IP model until after the next steps discussed above. We want to ensure that the time and resources involved in making changes to the current IP model will result in the desired effect on the access to and use of consolidated RTMD in Canada.
 utility type organization to reduce the costs and mark-ups by vendors; a TIP+ model would allow high costs of RTMD to be passed onto the users; capping the fees charged by marketplaces for their RTMD consumed through the consolidated TIP products would not in 	
 any way impact the consumption and use of RTMD; caps would reduce costs commensurate with the level of these caps; a third-party which is free of conflicts of interest should be 	
 engaged to determine the distribution of the collected fees; there should be fee caps for all the fees associated with the consumption of market data, such as display and non-display and distribution fees; fee caps should be cost-based; 	
 the CSA should set a fee level that data users would pay if they subscribe to all marketplaces; calibration on cap levels should be premised on achieving a comparable cost experience between Canada and the US; and the CSA should mandate the use of consolidated RTMD to 	
ensure widespread adoption of its use, which would allow the TIP to increase the quantity of users and have the leverage to negotiate lower fees per user.	
Marketplaces Marketplaces did not support leveraging the current IP model. They indicated that:	
 there is no effective mechanism to create fee caps; fee caps will reduce incentives by marketplaces to propose new and innovative products; 	

 caps on TIP products lead to a cumulative fee for the TIP products; imposing caps on TIP products could potentially result in savings for regulatory data users, but may not be passed on to consumers of RTMD; information vendors will weigh the relative costs and latency needs of their clients, as they currently do, in determining the method of access to RTMD, whether via a TIP, direct from the marketplaces, or from a third-party vendor; and exchange operators are best positioned to determine the cost and value of their market data. While Level 1 data merits careful regulatory review, data beyond this core does not. 	
Option 5: Introduce a new model for data consolidation through the	
 Commenters' views varied on whether the introduction of an Admin IP would be appropriate in the context of the Canadian market. No commenters supported having multiple TIPs under an Admin IP model and took the position that a single TIP would be essential to implementation of the Admin IP model in Canada. Market Participants Market participants indicated that: the costs of establishing and implementing an Admin IP in Canada would not present a net benefit for the investment community; the TIP model should be maintained, but with enhancements; an Admin IP model would only add value if it addressed the need to access consolidated RTMD for non-execution users or indicative users; and an Admin IP would be the best long-term solution for Canada because it could reduce the administrative burden of having multiple agreements with the different marketplaces and control the costs of RTMD for subscribers. 	As discussed with respect to the TIP+ option, we have decided to defer any changes to the current IP model until after the next steps discussed above. We want to ensure that the time and resources involved in making changes to the current IP model will result in the desired effect on the access to and use of consolidated RTMD in Canada.
Marketplaces Marketplaces did not support the creation of an Admin IP because:	

 it would be an outsized response for the Canadian market that is approximately 1/10th of the US market; it would be a long, costly, and burdensome process for participants that may not justify the outcomes; it would require a meaningful and thorough cost-benefit analysis involving public review; performing the functions of an Admin IP involves both technical and administrative costs which are currently fulfilled by the TMX IP without the added cost of a separate Admin IP that would impose substantial administrative costs and burden; and the answer to cost containment, administrative consistency, and the availability of RTMD from all marketplaces participating in the price discovery processes is the appointment of one or more administrators for each listing exchange's data. 	
 Other Comments In addition to the comments made in response to the questions posed in the Consultation Paper, commenters made other suggestions and recommendations for how to improve access to RTMD, as follows: create industry committees (i.e., creating an advisory board to guide this review and/or the creation of a Blue-Ribbon Panel) made up of qualified experts without any material conflicts of interest; retain external assistance, such as a consultant, academic, or industry expert, to review the DFM and, in conjunction with an industry committee, consider its relevance and competitiveness in Canada and internationally as it pertains to the equity markets; revisit the data consolidation regime to require access to consolidated RTMD from all marketplaces for the benefit of all market participants, advisers, investors and their discount trading platforms, and other users; consider that without fundamental change to the RTMD model in Canada, retail investors will not receive easier and more direct access to RTMD; 	We agree with the commenters that we need to assess how best to facilitate access to RTMD by retail investors and their advisers. As a result, we are proposing to further explore the creation of a commercial, legal, and possibly technical framework that would provide incentives, or at least remove barriers, for dealers to offer consolidated RTMD product(s) to retail investors and their advisers.

-	ensure that retail investors and retail investment advisers have ready access to consolidated Level 1 core RTMD, which was identified as being one of "the most pressing issue related to the existing market data regulatory framework in Canada"; enhance the regulation of market data fees to facilitate retail investors' access to the market data that they require to make informed investment decisions. It was noted that it is essential for retail investors to have access to a consolidated market data feed to foster trust in the Canadian market and for clients to understand that they are getting best execution; consider the fees charged to retail investors in any discussions of cost, accessibility, and fairness of access; ensure that retail investors are being provided with consolidated real-time price and volume information when making investment and trading decisions; ensure that the information processor provides a consolidated market data feed at a price that makes it accessible to the retail investing community; consider a RTMD regime that includes all RTMD used in the ecosystem, including its delivery costs; and reevaluate fees based on the actual costs to provide services as this approach would dramatically reduce the cost of RTMD in Canada	
	as this approach would dramatically reduce the cost of RTMD in Canada.	

APPENDIX B

Mandate of the Industry Committee on Data Fees Methodology

I. Background

The Data Fees Methodology (**DFM**) is used to assess marketplace compliance with the fair access requirements set out in section 5.1 of *Regulation 21-101 respecting Marketplace Operation* (**Regulation 21-101**) when setting or changing the fees charged to professional users for access to and use of real-time market data products (i.e., Level 1 and Level 2 products). It was formalized in 2016 and is applied on an annual and ad-hoc basis (when there are fee changes submitted) to review these fees.

II. Mandate⁹

The Mandate of the Industry Committee on DFM (the **DFM Committee**) is to prepare a report (the **DFM Report**) that answers the following questions:

- 1. Should a DFM continue to be used to assess the Level 1 and Level 2 real-time market data fees charged by marketplaces to professional users? If the DFM Committee determines that the DFM should no longer be used, it should provide to the CSA an alternative approach to assessing the fairness and reasonability of these fees in the context of the Canadian market and international developments.
- 2. Are the pre- and post-trade metrics currently used by the DFM appropriate given ongoing market developments? The DFM Committee should reevaluate the pre- and post-trade metrics included in the DFM formulas, as well as other inputs to determine what changes, if any, are necessary to improve the fairness of the DFM, focusing on Level 1 and Level 2 products.
- 3. Are the formulas currently used to rank marketplaces (i.e., based on their contribution to price discovery and trading activity) appropriate given ongoing market developments? The DFM Committee should reevaluate the formulas used by the DFM to determine whether the weightings allocated to the pre- and post-trade metrics used in each formula continues to be appropriate or should be adjusted due to the addition or deletion of certain pre- and post-trade metrics or changes to the original formulas.
- 4. Is the calculation of the reference points (i.e., benchmarks by listing market) appropriate? Should the DFM continue to rely on domestic reference points, or are international reference points more appropriate? The DFM Committee should consider whether the current approach should be carried forward or adjusted. If the DFM Committee proposes to adjust the approach, then a method of calculation should be proposed, in line with the current fee structure of the Canadian market and considering international developments.
- 5. Should the CSA introduce different DFMs for senior and junior markets? The DFM Committee should consider, discuss, and explain why these markets should or should not be treated differently. If the DFM Committee concludes that senior and junior markets should have different DFMs, the Committee should advise what different pre- and post-trade metrics should be used, along with any differences in the formulas to be applied, and any other considerations.

⁹ We note that CSA Staff may choose to send additional questions or issues to the DFM Committee throughout the period of this mandate.

We also welcome the DFM Committee to identify additional questions or issues for their analysis for CSA Staff's consideration.

In addition to the answers pertaining to the questions about DFM, we welcome the DFM Committee's views on whether,

- Marketplaces should be permitted to charge different fees to non-Canadian real-time market data subscribers than those charged to Canadian subscribers for the same market data? In this context, the DFM Committee should provide its views on why charging different fees based on the geographical location of the subscriber should be permitted going forward.
- Additional methodologies should be created to assess other fees (i.e., display, non-display, distribution, connectivity, colocation and other fees) that are associated with the access to and use of RTMD? In this context, the DFM Committee should provide its views on what approach could be taken to develop additional methodologies to review these fees. If the DFM Committee agrees that the DFM should apply to other RTMD fees, then the CSA may consider setting this up as an additional project going forward.

III. Considerations

- The report of the DFM committee will be considered by the CSA in reaching a decision regarding the use of the DFM;
- The securities regulatory authorities (SRAs) will conduct their own assessment of the DFM in parallel with the DFM Committee to explore and test changes to the DFM using regulatory data;
- The SRAs may conduct additional work, separately from the DFM committee, that may
 result in interim changes to the DFM or its application, pending the CSA's decision
 regarding the continued use of the DFM; and
- Any DFM(s) generated either by the proposals of the DFM Committee or the regulatory assessment will be published for comment in the normal course.

IV. Process

The DFM Report should be presented to the CSA by no later than [enter date] and will be published in due course.

The DFM Report will present recommendations to the CSA regarding potential solutions to the questions identified in the mandate.

We expect the recommendations to be determined by a majority of the members of the DFM Committee, with the opportunity to include dissenting opinion(s) in the DFM Report, if applicable.

Meetings by the DFM Committee will be led by a consultant retained by the CSA who will act as the Chair of the DFM Committee and will cover the following topics:

- 1. Introduction of the issues
- 2. Discussion of the mandate
- 3. Propose recommendations
- 4. Finalizing the DFM Report and presentation to the CSA
- V. The DFM Committee Members

APPENDIX C

Mandate of the Industry Committee on Facilitating Access to Consolidated Real-Time Market Data Products by Retail Investors and Retail Investor Advisers

I. Background

The securities regulatory authorities (**SRAs**) in Canada are of the view that retail investors and their advisers should have access to consolidated real-time market data (**RTMD**) products to make informed investment and trading decisions. This view is supported by several market participants that indicated either in comments submitted to CSA Consultation Paper 21-403 *Access to Real-Time Market Data* (the **Consultation Paper**) or through discussions with CSA Staff, that they would support the access to and use of consolidated RTMD products, at a reasonable cost, to retail clients and investment advisers.

This concept was explored during interviews conducted by CSA Staff with stakeholders prior to the publication of the Consultation Paper. Interviewees generally indicated at that time that they did not believe that retail investors and their advisers lack access to consolidated market data. Their responses instead suggested that access to consolidated data is provided based on balancing the needs and costs of such access.

Given feedback obtained more recently following publication of the Consultation Paper and the ongoing view of the SRAs, CSA Staff is proposing to create an industry committee to further explore the creation of a commercial, legal and possibly technical framework that would provide incentives or at least remove barriers for dealers to offer consolidated RTMD product(s) to retail investors and their advisers.

II. Mandate¹⁰

The Mandate of the Industry Committee on Facilitating Access to Consolidated RTMD Products by Retail Investors and Their Advisers (the **Retail Committee**) is to prepare a report (the **Retail Report**) that will:

- Provide analysis, quantitative or otherwise, aggregated at the level considered appropriate by the Retail Committee, that shows the gaps in access to consolidated data by retail clients and their advisers; and
- Identify barriers to access to consolidated market data products by retail investors and their advisers as well as the best approach to minimize or, where possible, remove these barriers.

If the Retail Committee concludes that there is sufficient rationale for introducing a retail focused consolidated RTMD product, the committee should, among other things:

- 1. Recommend and provide a rationale for what information should be included in the Consolidated RTMD Retail Product(s);
- Recommend a method to establish the fees to be charged for the Consolidated RTMD Retail Product(s), including a review process or a mechanism to allow for future adjustments, as the case may be. Provide supporting analysis for the recommended method and describe any alternatives considered and why they were ultimately rejected;

¹⁰ We note that CSA Staff may choose to send additional questions or issues to the Retail Committee throughout the period of this mandate.

- 3. Recommend a method to allocate revenues collected from the distribution and use of Consolidated RTMD Retail Product(s), as well as how the collection and allocation of revenues to marketplaces should be managed; and
- 4. Recommend how best to promote access by retail investors and their advisers to the Consolidated RTMD Retail Product(s) and whether such availability should be mandated.

We also welcome the Retail Committee to identify additional questions and/or issues for their analysis for CSA Staff's consideration.

III. Considerations

- The Retail Report provided by the Retail Committee will be used by CSA Staff to determine the industry's views regarding the creation, adoption, and implementation of the Consolidated RTMD Retail Product(s);
- The decision on whether to defer or continue the work on the implementation of the Retail Committee's recommendations is that of the CSA; and
- If the CSA decides to move forward with the Retail Committee's recommendations, the implementation of the recommendations will be published for comment in the normal course.

IV. Process

The Retail Report is to be presented to the CSA by no later than [enter date] and will be published in due course.

The Retail Report will present analysis and recommendations to the CSA regarding the items identified in the Retail Committee mandate.

We expect the recommendations to be supported by a majority of the members of the Retail Committee, with the opportunity to include dissenting opinion(s) in the Retail Report, if applicable.

Meetings by the Retail Committee will be led by a consultant retained by the CSA who will act as Chair of the Retail Committee and will cover the following topics:

- 1. Introduction of expectations
- 2. Debate of the issues
- 3. Discuss recommendations for each of the themes identified in the mandate
- 4. Propose recommendations
- 5. Finalizing the Retail Report and presentation to the CSA

V. The Retail Committee Members

APPENDIX D

Mandate of the Industry Committee on Standardization of Terms and Definitions to Consolidated Data Agreements

I. Background

Concerns have been raised by market participants about the increasing costs and inefficiency of managing and administering contractual relationships with multiple marketplaces to gain and maintain access to consolidated and non-consolidated real-time market data (**RTMD**). In addition, market participants have raised concerns about the variation in the language used in data access contracts and the differences in interpretation of similar language.

Inconsistencies between the definitions of key terms in the application of data policies or in the application of product bundles and packages can and does have implications for participants' costs and the market data that they choose to consume. Inconsistencies may be present both between marketplaces and even by the same marketplace from year to year.

II. Mandate¹¹

The Mandate of the Industry Committee on Standardization of Terms and Definitions to Consolidated Data Agreements (the **Standardization Committee**) is to:

- Identify the terms and definitions that should be standardized in the context of access to and use of consolidated and non-consolidated RTMD products. The Standardization Committee should review all marketplace data agreements that provide access to each marketplace's RTMD products and compare the terms and definitions used in these contracts to identify those which may cause issues from an implementation perspective (i.e., use cases);¹²
- 2. Examine any standardized terms and definitions that are used internationally with regard to RTMD and determine if such terminology would be appropriate for the Canadian marketplaces;
- 3. Propose standardized definitions for all terms identified to be harmonized. The description of these defined terms should include examples of use cases and means of reporting by market participants, as well as justification for how the term was determined;
- 4. Propose an adoption and implementation plan for the standardized definitions (i.e., assess whether such terminology should be mandated or implemented voluntarily through industry contracts); and
- 5. The information provided in steps 3 and 4 should be set out in a report (the **Standardization Report**) to be provided to the CSA and made publicly available.

We also welcome the Standardization Committee to identify additional questions and/or issues for their analysis for CSA Staff's consideration.

¹¹ We note that CSA Staff may choose to send additional questions or issues to the Standardization Committee throughout the period of this mandate.

¹² In CSA Consultation Paper 21-403 Access to Real-Time Market Data, CSA Staff indicated that in scope terms and definitions could include the terms used for: (i) end-use categories (e.g., pro- and non-pro subscribers), (ii) non-display use categories, (iii) internal versus external distribution, and (iv) real-time versus delayed data. The Standardization Committee may propose additional terms and definitions for review.

III. Considerations

- The Standardization Committee should focus on identifying those key terms and definitions directly related to the receipt and use of RTMD products;
- The recommendations of the Standardization Committee will be considered by the CSA in reaching a decision on whether to mandate the adoption of the key terms and definitions proposed by the Standardization Committee; and
- Mandating the adoption and implementation of standardized terms and definitions does not mean that marketplaces must charge fees in each category.

IV. Process

The Standardization Report is to be presented to the CSA by [enter date] and published in due course.

The Standardization Report will present recommendations to the CSA regarding the terms and definitions that should be standardized and propose an adoption and implementation plan. It should also discuss the advantages and disadvantages to both marketplaces and market participants relating to the adoption and implementation of the proposed terms and definitions.

We expect the recommendations to be determined by majority of the members of the Standardization Committee, with the opportunity to include dissenting opinion(s) in the Standardization Report, if applicable.

Meetings by the Standardization Committee will be led by a consultant retained by the CSA who will act as the Standardization Committee Chair and will cover the following topics:

- 1. Introduction of the issues
- 2. Identification of key terms and definitions
- 3. Proposal of new definitions for the identified key terms
- 4. Discussion of proposed definitions, including use cases
- 5. Finalizing the Standardization Report and presentation to the CSA
- V. The Standardization Committee Members