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VIA ELECTRONIC MAIL

February 10, 2023

British Columbia Securities Commission
Alberta Securities Commission
Financial and Consumer Affairs Authority of 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
Office of the Superintendent of Securities, Service NL
Northwest Territories Office of the Superintendent of Securities
Office of the Yukon Superintendent of Securities Nunavut Securities Office Ontario Securities Commission
20 Queen Street West
19th Floor, Box 55
Toronto, Ontario M5H 3S8
comments@osc.gov.on.ca

Re: CSA Consultation Paper 21-403, Access to Real-Time Market Data (Consultation Paper)

Dear Sirs/Mesdames::

Nasdaq CXC Limited ("Nasdaq" or the "Exchange")[1] appreciates the opportunity to comment on the consultation paper on Access to Real-Time Market Data ("RTMD").[2]

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1 Nasdaq Canada operates three trading books for trading TSX, TSX-Venture, and CSE listed securities. Nasdaq CXC is a lit book providing clients with a reliable platform for trading Canadian equities, offering the benefits of anonymous or attributed trading and price/broker/time priority. Nasdaq CX2 is designed to provide additional cost savings and trading efficiencies. Through unique pricing model and broker preferencing functionality, this lit book helps to improve investment performance and to drive positive market structure change. Nasdaq CXD provides an alternative source of non-displayed liquidity, which facilitates robust size discovery and price improvement opportunities.

2 See CSA Consultation Paper 21-403, Access to Real-Time Market Data (November 10, 2022), available at https://www.osc.ca/en/securities-law/instruments-rules-policies/2/21-403/csa-consultation-paper-21-403-access-real-time-market-data.

As a global technology company serving the capital markets, Nasdaq operates trading platforms throughout the world. In our experience, capital market reforms are best accomplished through targeted, incremental changes based on a pragmatic, deliberate, data-driven and collaborative approach, rather than revolutionary or disruptive changes. Changing elements of today's complex and interconnected market can have unintended and even harmful consequences. Unintended consequences can be more severe with sweeping changes. The least disruptive means to accomplish a goal is generally preferable.

Our recommendations follow these principles. We recommend a focus on incremental changes that are likely to provide the greatest benefits to the distribution of RTMD with the least disruption. Specifically, we recommend the following:

1. **Enhance the efficiency and reliability of the IP through a single administrator and contract.**

The current IP model is overly complex and burdensome on participants. Not all Investors require the full IP but those that do enter into multiple contracts with underlying trading venues, and there is no single administrator to facilitate distribution of data. Nasdaq recommends replacing the current system with a single administrator with responsibility for overseeing a unified contract for consolidated data.

2. **Discontinue the DFM.**

The DFM is used on an annual or ad-hoc basis to review the professional user fees charged by marketplaces for access to Level 1 and Level 2 feeds for securities listed on Toronto Stock Exchange (TSX), TSX Venture Exchange (TSXV), and Canadian Securities Exchange (CSE), relying on pre- and post-trade metrics to establish a permissible fee range for each marketplace. This range is estimated based on a domestic reference originally determined by taking the data fees charged by each marketplace at the time the DFM was introduced and aggregating them into a single pool, which is then re-allocated based on the ranking models.

The DFM is conceptually flawed because it is designed to be a rate-setting mechanism. Rate-setting mechanisms invariably undermine innovation, distort resource allocation and slow the capacity of the market to respond to change. It distorts the economics of trading venues by focusing on RTMD fees in isolation, limiting the ability of trading platforms to develop packages of products and services that address particular customer needs. As the Consultation Paper notes, there are no international comparisons to the DFM because it is inconsistent with the dominant model of exchange regulation globally, which relies on the review of fees generated by trading venues, rather than the top-down approach to fee regulation represented by the DFM. As discussed below, exchanges compete as trading platforms. Customers choose among platforms based on their "all in" cost of each platform. Using the DFM to selectively set a subset of prices limits customer choice and reduces incentives for platforms to compete and innovate. The DFM should be discontinued.

3. **Retain the current review protocol for RTMD.**

The current review process allows fees that have a significant impact on stakeholders or raise public interest concerns to be circulated for public comment. CSA Staff have proposed to replace the current process with a requirement to publish for comment all proposed RTMD fees, rather than only those of greatest significance.

Nasdaq believes that this is an unnecessary modification. This expansion, by definition, provides little public benefit as it only applies to less significant changes. This will burden one category of exchange products—market data—relative to other exchange products, leading to an inefficient allocation of resources. The current review protocol strikes the right balance between the need to obtain public comment on significant issues while at the same time not burdening the public with routine proposals that do not raise major concerns.

4. If the CSA Staff proposal on fee publication were adopted, it should be modified to support innovation and protect competition

Transparency should always be balanced against the need to support competition. We believe that a few aspects of the current CSA proposal are anti-competitive, such as: (i) requiring publication of fees prior to effectiveness; (ii) requiring exchanges to publish confidential business information; and (iii) allowing fee proposals to remain open for an undetermined period of time. If the proposal regarding the publication of fees were to be adopted, Nasdaq recommends the following modifications:

a. Fee proposals should become effective as of the date of publication.

b. Trading venues should not be required to publish confidential business information

c. The time period for regulatory actions should be limited.

We will discuss each of these points in turn.

Enhance the efficiency and reliability of the IP through a single administrator and contract.

To access consolidated RTMD[3] feeds, subscribers contract with each individual marketplace with data included in the purchased product and pay an amount equal to the

[3] Consolidated RTMD refers to the consolidation of either pre- or post-trade RTMD across multiple marketplaces trading the same securities. In Canada, consolidated RTMD (and consolidated feeds) may consist of RTMD from every equity marketplace or may be composed of only some marketplaces' RTMD, such as those that achieve protected status under the Order Protection Rule (OPR). Currently, the consolidated RTMD products distributed by the IP and approved by CSA Staff include the following: (i) Consolidated Best Bid and Offer (CBBO) – includes information about aggregated volume at the best price across all marketplaces from continuous trading on a protected and non-protected basis; (ii) Consolidated Last Sale (CLS) – includes information about executed trades that allows market participants to identify the nature of the trade (e.g., as a particular cross-type or as a closing auction trade); (iii) Consolidated Depth of Book (CDB) – includes information about aggregated volume at each price level, identifying each contributing marketplace, and offered on a protected and non-protected basis; and (iv) Consolidated Data Feed (CDF) – the Level 2 feeds of each marketplace distributed in a single format by the IP.

aggregate of the fees charged by all marketplaces as a whole.[4] In 2009, TSX became the IP for exchange-traded securities other than options.[5]

This pass-through model has impeded distribution of consolidated RTMD feeds from the IP, in part, because of the administrative burden involved in signing contracts with each individual marketplace. It has resulted in inefficiencies in managing and administering contractual relationships with multiple marketplaces, and complexity stemming from the variation in the language of data access contracts, including, for example, inconsistencies in definitions of key terms, in the application of data policies, and in the application of product bundles and packages.

To address these issues, CSA Staff propose the creation of an Administrative IP that would be responsible for establishing and managing the components of the model in relation to the access to and use of consolidated RTMD products (i.e., products, fees, and revenue sharing). The key responsibilities of the Admin IP would include product definition, fee setting, contractual terms setting, and revenue sharing. Modifications can be made to the existing IP such that the new Admin IP would be able to report to the same governance structure that exists today.

Nasdaq agrees that the current IP model for top-of-book data should be enhanced and expanded. In Canada, like the US, consolidated top-of-book market data enhances market transparency and investor confidence by providing an expanded view of the marketplace at a glance, and by establishing the National Best Bid and Offer ("NBBO")—the gold standard for the best transactions available in the market. This is a unique advantage to the Canadian (and US) securities markets. In Europe, by contrast, geographic latencies and the inability to trade all securities in all markets renders a pre-trade consolidated market data product unreasonable for trading, in that latency and limited trading would generate a complexity likely to confuse European investors, particularly retail investors. Because Canada and the US have trading venues located in close proximity, with securities able to trade in multiple markets, Canadian and US investors are in a position to benefit from an NBBO.

Nasdaq supports the distribution of consolidated Level 1 RTMD with an NBBO, and advocates for the creation of an Administrative IP to facilitate distribution and lower administrative costs.

As an ancillary benefit, we believe that an Administrative IP can help standardize certain terms relevant to RTMD. Although CSA Staff had proposed to create an industry group to help

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4 The regulatory requirements applicable to the equity IP are set out in Part 14 of NI 21-101 and include provisions relating to the collection, processing, and dissemination of RTMD, as well as requirements to provide prompt and accurate order and trade information to all market participants. To access consolidated and non-consolidated RTMD feeds, subscribers must contract with each individual marketplace that has data included in the product they are purchasing and based on the use of RTMD feeds, pay an amount equal to the aggregate of the fees charged by each marketplace. Where applicable, TMX IP also charges an administration fee on top of these marketplace fees, which is subject to review and approval by the applicable securities regulatory authorities (SRAs).

5 At the time of TMX IP's approval as the equity IP, the CSA did not have statutory powers to create a regulatory regime governing fees for consolidated data from the IP, including the underlying data content. As a result, the fees charged by the IP for the consolidated and non-consolidated RTMD feeds rely on what is referred to as a "pass-through model."

standardize key terms and definitions, it is difficult to standardize terms in the abstract, outside of the context of a specific contract. The creation of an Administrative IP solves this problem by formulating definitions in a specific context.

We do have concerns, however, with other aspects of the consolidated RTMD reforms proposed by CSA staff; specifically, those related to fee setting and revenue sharing, fee caps, and multiple processors.

Fee setting and revenue sharing: Nasdaq does not believe that there is any need to increase the complexity of the proposed administrator's task with fee setting and revenue sharing. Fees are already set by trading venues, and the associated revenue is distributed back to those venues. Setting a different fee structure and revenue allocation formula for consolidated RTMD is unnecessary because the current structure already accomplishes both goals. There is no reason to treat the same data differently when it is part of a consolidated feed, rather than part of a proprietary feed, which in turn should be set not by the DFM, but through the competition among trading platforms, as discussed below .

Fee caps: CSA Staff propose to mandate an enhanced TIP model that would impose a cap on fees charged by marketplaces for marketplace order and trade data that is consumed through the consolidated products distributed by the TIP.

Nasdaq opposes the imposition of fee caps. As discussed below, the DFM is conceptually flawed, and cost-based pricing is inherently arbitrary in the context of the many joint products offered by trading venues. Even if there were an objective mechanism to set a fee cap—and there is not—fee caps eliminate the incentive for trading venues to propose new and innovative products.

Multiple processors: CSA Staff suggest the introduction of multiple processors to distribute consolidated RTMD. Nasdaq believes that this is unwarranted. The creation of multiple consolidators requires a significant investment in hardware, connections and facilities by recipients, and no such investment should be undertaken without an analysis showing that benefits would exceed costs. Nasdaq is aware of no such analysis, and there is no evidence that multiple consolidators are necessary or appropriate in the Canadian marketplace. Additionally, multiple processors would add incremental real and inherent costs to market participants. As such, CSA Staff should not move forward with this aspect of the proposal.

Discontinue the DFM.

The DFM relies on pre- and post-trade metrics to establish a permissible fee range for each marketplace, attempting to reflect each marketplace's contribution to price discovery and trading activity. The range is estimated based on a domestic reference that takes the data fees charged by each marketplace at the time the DFM was introduced and aggregates them into a single pool, which is then re-allocated based on the ranking models. If the fee being charged is beyond the range, the marketplace is required to decrease its professional user fees.

CSA Staff noted in the consultation paper that the DFM has had limited impact on RTMD fees overall, and that the DFM is difficult to calibrate: "[a]pplying a comparative approach can be difficult because different marketplaces offer products and services that may not have the same informational content or offer the same value for the fee charged."[6] CSA Staff also noted that "Canada is an outlier with respect to the application of a methodology to directly regulate professional user fees," and that they "are not aware of another jurisdiction that applies a DFM or similar formula to assess professional RTMD user fees."[7]

As a result of these observations, CSA staff propose to "[r]etain external assistance, such as a consultant, academic, or industry expert, to review the DFM and its relevance in the context of domestic and international developments in equity markets."[8] This review would include "an examination of the reference points used by CSA Staff to allocate the share of fees chargeable by marketplaces under the DFM."[9] CSA Staff also suggested that it may publish each marketplace's fee ranges.

The DFM is conceptually flawed, for several reasons.

First, the DFM artificially distorts prices. Setting RTMD fees in isolation from other products undermines the ability of an exchange to offer solutions designed to fit customer needs.

Second, the DFM discourages innovation—trading platforms have less incentive to develop and market new and innovative products because fees are rooted in a single point in time and cannot take into account changes in technology over time. This will hamper the ability of the market to respond to change.[10]

Exchanges compete as trading platforms, in which they offer an array of interrelated services, including trading, listing and market data.[11] Customers purchase such services in various combinations, based on their "all in" cost of interacting with a particular exchange in the context of their particular use case for exchange services.[12] Exchanges, in turn, set prices to attract and retain users with particular use cases. Focusing all regulatory attention on one specific category of exchange products—market data—merely serves to limit the ability of trading

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6 CSA Consultation Paper 21-403, 45 OSCB 9492.

7 Id. at 9496.

8 Id. at 9497.

9 Id.

10 Although not directly related to the DFM, there are a number of characteristics of the current regulatory structure that discourage innovation. For example, the best execution rule permits TSX data to be provided to retail participants without requiring a back-up source. This is a structural advantage to the TSX exchange not afforded to other exchanges, which partly insulates TSX from competition, particularly for listing issuers. Secondly, because of a lack of competition the TMX IP does not have to support technological infrastructure to ensure industry standard. This was evident as it took several years for the IP to upgrade its servers to address latency concerns.

11 CSA Staff noted that there is evidence of a competitive market in RTMD, commenting that there are a number of instances in which market participants lowered fees "either as a result of market participant pressures or as a result of perceived competitive pressures." This includes, but is not limited to, the introduction of Nasdaq Basic Canada, which offers "a potentially lower-cost alternative to those only requiring indicative pricing for Canadian equities." CSA Consultation Paper 21-403, 45 OSCB 9498.

12 As noted by CSA Staff, participants in interviews "expressed the view that the use of RTMD should be tailored to a participant's needs and that not all participants need access to the same RTMD to conduct their business." CSA Consultation Paper 21-403, 45 OSCB 9491.

platforms to develop packages of products and services that address the needs of particular types of customers, depriving consumers of choice without impacting all-in cost for the investor.

Third, there is no way of calibrating the DFM to international standards, given that use of the DFM is isolated to Canada. As already noted by CSA Staff, there is no regulator that applies a DFM or a similar formula to assess professional RTMD fees.

For all of these reasons, Nasdaq believes that the DFM should be discontinued.

Retain the current review protocol for RTMD.

Marketplaces are subject to a review protocol that establishes a process for the review, publication, and approval of marketplace changes, including changes to RTMD fees.[13] In this protocol, proposed fee changes are generally not subject to a public comment process unless they might have a significant impact on stakeholders or raise public interest concerns.[14]

CSA Staff propose to replace the current process with a requirement for marketplaces to publish for comment all their proposed changes to RTMD fees as part of the review and approval process. The following categories of information would be published with the proposal:

- A description of the fee change being proposed;
- The expected date of implementation;
- The rationale for the proposed fee change and any analysis in support of it;
- A description of the methodology used to set the proposed fees;
- An analysis of the impact on stakeholders;
- An overview of any alternatives considered;
- Any analysis conducted to determine how the proposed fee compares to fees charged for similar services by other marketplaces in Canada and abroad; and
- The costs of producing the product or service, where relevant.

[13] This protocol is administered by the Ontario Securities Commission (OSC) for all equities marketplaces in Canada other than the TSXV. Through TSXV's Recognition Order, the British Columbia Securities Commission (BCSC) and Alberta Securities Commission (ASC) administer the protocol for TSXV. The BCSC also administers the review protocol for the CSE, together with the OSC. Marketplaces may be required (for example, under the review protocol) to submit additional information in support of their fee proposal for our consideration. Some examples of this information are an analysis of the potential impact of the fee change on market structure or market participants, the methodology used to develop the fee, and the reasonability of the amount proposed relative to the marketplace's share of market-wide activity levels.

[14] Proposed fee changes are generally evaluated based on the fair access requirements set out in subsections 5.1(1) and (3) of NI 21-101. These requirements provide that a marketplace must not unreasonably prohibit, condition, or limit access by a person or company to services offered by it, permit unreasonable discrimination, or impose any burden on competition that is not reasonably necessary and appropriate. This means that when setting or changing their fees, marketplaces must do so taking into consideration several factors, including, but not limited to, the amount of fees charged by other marketplaces for similar services in the context of the Canadian market, or, where introducing a new fee, international comparisons may also be considered. Applying a comparative approach can be difficult because different marketplaces offer products and services that may not have the same informational content or offer the same value for the fee charged.

Approval would not be granted for at least 30 days after the proposal has been made public, or longer where warranted based on the complexity of the proposal.

Nasdaq supports transparency. The current regulatory structure, however, already provides transparency where it is needed—for fees that have a significant impact on stakeholders or raise public interest concerns. Expanding publication to all proposals provides little public benefit, as it would apply only to less significant changes. As such, the benefits of the change are unlikely to exceed the cost. The current review protocol strikes the right balance between the need to obtain public comment on significant issues, while at the same time not burdening the public with commenting on proposals that do not raise major concerns. Nasdaq therefore opposes the proposed modification to the current regulatory structure.

The proposal will also extend the minimum approval period from 15 business days to 30 calendar days. We oppose this delay as unnecessary and inefficient, and an unreasonable extension that applies to only one class of fee filings.

If the CSA Staff proposal on fee publication were adopted, modifications are needed to support innovation and protect competition.

Transparency should always be balanced against the need to support innovation and competition. As we have explained, we believe that publication of all fee proposals is unnecessary. Nevertheless, if CSA Staff were to move forward on the publication of fees, some aspects of the current proposal may harm competition if not properly implemented.

Publication prior to effectiveness. The current version of the CSA Staff proposal would require publication prior to a fee becoming effective. This undermines the incentive for a trading venue to propose new or innovative products, as any product could be copied by a competitor before the proposing venue is able to bring the product to market.

The solution would be to adopt a process currently used in the United States: allow for immediate effectiveness of an RTMD fee upon publication, followed by public comment. If the fee raises public interest or other concerns, the fee can be suspended pending further review, and ultimately rejected if, upon further review, it is in the public interest to do so.

Publication of confidential business information. Some aspects of the CSA Staff proposal may require the disclosure of confidential business information, depending on the specific details of the disclosure requirements. These include: the description of the methodology used to set the proposed fee; the alternatives considered; analyses comparing fees to fees for similar services in Canada and abroad; and the cost of producing the product or service.

The current review protocol allows for confidential consultation between individual exchanges and the regulator, providing the regulator access to confidential business information that, if publicly released, would harm competition. The proposed publication requirement would remove this safeguard. Depending on how these requirements are implemented, a trading venue may be required to publish confidential business information such as trade secrets, processes, operations, styles of work, production, or other information of commercial value. Requiring trading venues to disclose such information would harm competition.

The solution would be to make clear that publication of a fee proposal would not require the publication of confidential business information. To the degree that the regulator requires such information, that could be divulged through a separate, confidential consultation process.

Time limit on regulatory action. The current proposal does not designate a time limit on regulatory action. Indefinite delays would effectively prevent exchanges from responding to customer needs in a timely manner, discouraging innovation and undermining competition. Nasdaq therefore suggests that CSA Staff place a time limit upon regulatory review; no action by the regulator within the allocated period would result in the proposed fees remaining in effect.

In sum, if the proposal regarding the publication of fees were adopted, Nasdaq recommends the following modifications to protect innovation and competition:

- Fee proposals should become effective as of the date of publication.
- Trading venues should not be required to publish confidential business information.
- The time period for regulatory actions should be limited. Inaction would result in fees becoming effective.

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As we have explained, capital market reforms are best accomplished through targeted, incremental changes based on a pragmatic, deliberate, data-driven and collaborative approach, rather than revolutionary or disruptive changes.

In response to the request for comment from CSA Staff, Nasdaq believes that the best, incremental changes for the dissemination of RTMD are to: (i) replace the current IP model with a single administrator overseeing a unified contract for consolidated data; (ii) discontinue use of the current DFM; and (iii) retain the current review protocol for RTMD. If the CSA Staff proposal on fee publication were to be adopted, it should be modified to allow RTMD fees to become effective as of the date of publication, clarify that trading venues are not required to publish confidential business information, and provide a limited time period for regulatory action.

Thank you for the opportunity to comment. We are happy to respond to questions or provide further information.

Sincerely yours,

"*Dan Kessous*"

Dan Kessous
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