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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
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Via Email

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

Scotiabank appreciates the opportunity to provide comments on the Canadian Securities Administrators' consultation on the Canadian regime governing access to real-time market data for investors in the Canadian equity market.

This letter was prepared jointly by Scotiabank Global Banking and Markets, and Global Wealth Management.

Global Banking and Markets (GBM) conducts the Bank's wholesale banking and capital markets business with corporate, government and institutional investor clients. GBM offers a range of products and services in the U.S., Latin America (excluding Mexico), and in select markets in Europe, Asia and Australia. Global Wealth Management (GWM) delivers comprehensive wealth management solutions with a view to achieving strong long-term investment results through a personalized approach to

enrich the lives of its clients. GWM offers a full range of wealth management advice and solutions to help address its retail and institutional clients' financial needs.

Both divisions are significant consumers of Canadian equity market data, in furtherance to the services we offer both retail and institutional clients.

General Remarks

Access to high quality market data, both real-time and delayed, is integral to the healthy function of Canada's capital markets. Real-time market data ("RTMD") ties directly into investor engagement with capital markets, and high-quality data fosters confidence in capital markets. For this reason, we believe that governing the production, delivery and distribution of real-time market data is consistent with the CSA's mandate of promoting the attributes of fair and efficient markets: transparency, price discovery, liquidity, and transaction cost management.

The central role of market data in the capital markets ecosystem makes real-time data a public good. Widespread access benefits all capital markets participants by broadening the investor base, fostering confidence, and making the ecosystem more liquid. Conversely, frictions to the broad access of market data, including the high costs evidenced in the Discussion Paper, hurt the overall health of the Canadian capital markets ecosystem.

Equity market data in Canada is currently comprised of a collection of marketplace producers each of which has a monopoly on the data from that marketplace. Simply put, no marketplace can substitute the data of another. For the ideal conditions of widespread data access to be achieved, users would need to pay all monopoly providers individually for the data each produces, whether this cost is borne directly by the investor, or by their financial services providers. This lack of effective substitutes leads to monopolistic pricing models among data producers, which disadvantages investors and investors' service providers, including the dealer community.

We further note that certain regulatory constructs and requirements effectively mandate the purchase of real-time data by the dealer community, without sufficient countervailing controls on the price of the data itself, or its distribution. For example, the requirement on dealers to establish (and hence implement) policies & procedures designed to avoid trade-throughs implies a need to purchase data that would allow them to identify those trade-throughs in the first place. This cannot be done without observing data from all sources, which in turn requires dealers to purchase data from all monopoly producers and pay all distribution costs, irrespective of the relative size of the marketplace and its overall contribution to price discovery. Further, last-mile routing (i.e. order routing decisions directly interacting with electronic markets) designed to avoid trade-throughs must necessarily be using the fastest feeds available – since using stale feeds would likely not be seen as "reasonably" effective at avoiding trade-throughs. This example, one of many, is part of the tapestry wherein the dealer community (and by extension its clients, to whom costs are passed on) is a captive consumer of RTMD, and in particular data products which typically are not governed by the Data Fee Model ("DFM") cited in the Discussion Paper.

This dynamic is evidenced in the returns earned by market data producers. For example, TMX Group's latest financial results (as of the year ended December 31, 2022) illustrate that the data division "Global Solutions, Insights & Analytics" has earned operating margins in excess of 64%. Indeed, the data division is by far the most profitable (on an operating margin basis) of TMX Group's four divisions.

Reported margins from U.S.-based comparable trading venue operators are also high. We attribute the profitability of the data division largely to the market power available to data producers to set the cost of the product and its cost of delivery, with little to no competitive pressure due to a lack of substitutes. Market data is foundational to fair and efficient capital markets for all market participants, including the retail investor. With the growth of the order execution platform, these considerations are increasingly important to support transparency and confidence in capital markets. Discussions of cost, accessibility and fairness should specifically consider the retail investor's needs in making investment and trading decisions which ultimately may impact investment results.

Scotiabank's fundamental view is that monopoly provision of market data products should be regulated consistently with other monopoly industries. The nature of monopoly product is that competitive forces cannot control the price of delivery, and therefore monopoly producers are able to impose economic rents on consumers. Since real-time market data is a public good integral to the health of the market, these economic rents have the potential to harm the Canadian capital markets ecosystem. For this reason, we believe that access to real-time market data should be subject to price controls which adequately strike the balance between the cost to consumers and a suitable risk-adjusted return to producers.

We stress that our views are not limited simply to equity data for retail consumers. The RTMD regime should cover all RTMD used in the ecosystem, including its delivery costs. This includes without limitation professional and non-professional user fees, feed charges, connectivity costs and other ancillary costs as they may arise. Further, the regime should equally apply to both equity and derivative data, as both components contribute to the integrity of the trading ecosystem.

The Retail Advisor & Direct Investor Experience

Today, most investors on order execution only platforms only see real-time pre-trade market data from the listing exchange. This data is used indicatively to inform investing decisions, but is not used for last-mile routing or other execution purposes. We believe the investment community's experience would be improved if pre-trade (indicative) market data consistently offered a consolidated view of all activity in Canada, including consolidated historical trading volumes. The costs of a consolidated view to the retail investor should not be barrier for access.

From the perspective of professional users (including investment advisors) we support a single fee for consolidation across all application used by a particular individual. Otherwise, consolidation would lead to multiplication of costs, as real-time data would need to be provided to each application requiring data, even though the same eyes are facing the applications at the same time. We would strongly support a data regime where multiple instances of data for a single user are charged individually.

Rationalizing market data costs in Canada would be directly beneficial to investors, both in the absolute level of investor-borne costs, and in the quality of the investor experience in the Canadian market.

Initial Options

(a) Enhance transparency of any fee proposals related to RTMD by requiring marketplaces, as part of the regulatory review and approval process, to publish proposed changes when they are filed for approval.

Question #1: Please identify any potential unintended consequences at the industry, marketplace, or firm level if we pursue this option.

Question #2: Would this approach satisfy the need for more transparency in relation to proposed fee changes and their review process? If yes, please indicate what benefits this approach would offer. If no, please explain why and whether other requirements should be considered.

We generally support enhanced transparency for fee proposals. Greater transparency would be achieved if all marketplace fee proposals, including proposals related to products not currently covered by DFM, were subject to public comment. The views of all stakeholders should be considered, including retail investors, buy side firms and the dealer community. A public process would also compel data producers to publicly explain the rationale for pricing changes, including supporting analysis and justification. We welcome the opportunity to publicly comment on aspects of fee proposals (such as proposed definitions or other structural elements) which may have implications beyond the quantum of fees. This is particularly important since market data contracts frequently leave the purchaser with no negotiating power, as the purchase of data is effectively mandatory.

One possible unintended consequence of public disclosure of pre-approval proposals would be allowing marketplaces to examine each other's competitive moves prior to their implementation, including being able to infer which proposals ultimately do not receive approval. This would permit marketplaces to understand better where the proverbial "cliff edge" may be. However, we do not view this as a negative consequence; similar dynamics exist in the marketplace functionality area, where marketplaces proposals are routinely scrutinized by competitors prior to approval or implementation.

We do not believe that public filing of fee proposals would negatively impact innovation in market data products.

(b) Retain external assistance to review the DFM and its relevance in the context of domestic and international developments in equity markets.

Question #3: What are your concerns, if any, with continuing to use the DFM? If the DFM were to continue to be used, what changes are necessary?

Question #4: Is the application of the DFM appropriate for both senior and venture market data?

Question #5: Should the application of the DFM be extended beyond subscriber fees? For example, should the DFM be applied to non-display and distribution fees (whether internal and/or external distribution fees) given the potential challenges noted above?

We believe that the DFM in its current state is too narrow its application. The DFM only covers one aspect of data fees to the exclusion of others, including:

- Non-display fees, including delivery fees.
- Ancillary fees and surcharges, such as port fees, location fees, or fees for the internal distribution of data from system to system.
- Fees charged to non-Canadian investors, where currently foreign investors into Canada are charged disproportionately higher fees by some marketplaces, with indirect (negative) implication on global perceptions of Canada's capital markets.

If the DFM is to be preserved and updated, we recommend its application be extended to cover all aspects of market data production and distribution, in keeping with our view that all market data origination is a monopoly product which should be regulated as such.

An expanded DFM will have a place even if the longer-term contemplated options are enacted. For instance, if an Admin IP model is introduced, centralized RTMD consolidation would still primarily benefit pre-trade uses such as indicative quotations used for investment decision-making. An Admin IP model is unlikely to be suitable for last-mile order routing or other high-performance applications which are nonetheless necessary for providing best execution and order protection in today's environment. We therefore believe that an Admin IP model is not a substitute for robust controls on the delivery of the complete spectrum of data which underpins the trading ecosystem, and robust regulation of last-mile costs will remain essential

Without such controls, we believe market data producers would seek to increase fees on data uses that do not lend themselves to the Admin IP, and overall data costs in Canada may not drop. This is largely the experience of the U.S. market, where the inequity between data provided by the SIPs and by the data richness of direct feeds has led to high data costs despite widespread retail access to RTMD.

Question #6: What are the potential benefits or risks of making the fee ranges calculated under the DFM transparent? Should there be greater transparency of other inputs to the DFM (e.g., reference points or key input metrics)? If so, please comment on the potential benefits and risks.

We expect that if DFM ranges were made transparent, all marketplaces would seek to charge the maximum amount they are permitted under the DFM. Therefore, due to the technical way the DFM is applied, we believe it could result in the aggregate cost of consolidation gradually creeping higher over time. This would defeat the DFM's ability to manage aggregate subscriber costs for market data consumers.

Question #7: Should we consider adopting a methodology for non-professional subscriber fees? If yes, what should be factored into such a methodology? If not, why not?

Currently each marketplace defines professional and non-professional subscribers independently, and charges accordingly. We believe it would be appropriate to establish a methodology for non-professional subscriber fees to ensure that cost is not a barrier to access by retail investors. We also support further segmenting the professional user category to allow

for different charges to benefit retail professional users that services retail clients, recognizing the important role played by investment advisors as intermediaries in servicing retail clients.

We believe that for non-professional users and the segment of professional users that service retail clients, the consolidated data of all marketplaces should be offered at a discount. A discount should not impact the fee caps currently being offered for non-professional users.

(c) Create an industry group to help standardize key terms and definitions for access to and use of RTMD between marketplaces and market participants.

Question #8: Should standardized key terms and definitions, such as professional and non-professional users, be developed for the access to, receipt, distribution, and use of RTMD products? If yes, please explain what the benefits of such an approach would be. If not, please explain why not.

Question #9: What other key terms and definitions should be standardized? What factors or industry legacy issues should be considered in standardizing such terms?

Question #10: Would this approach help address market participants' concerns with respect to the administrative burden related to the access to and use of consolidated RTMD? Please explain your answer.

We support standardized key terms and definitions, including professional and non-professional users. All data consumers require clarity, certainty, and consistency in administering access and fees of retail clients for market data.

Market data contract management is an unnecessary friction for industry, increasing administrative burden with the benefit accruing entirely to data producers. The lack of consistency in contractual arrangements precludes streamlined approaches to data provision We believe that an industry-wide and consistent approach to data purchase arrangements, including standardization of terms, will reduce barriers to widespread access to RTMD by alleviating unnecessary friction.

In addition to reducing overhead, we believe that ancillary benefits also exist. For example, standardization of terms would also open the possibility of data consolidation, particularly where professional vs non-professional definitions are contradictory among different producers of data, and where this contradiction therefore precludes consolidation. Further, industry-wide consistency would enable vendors to better service the needs of the industry by having greater certainty of their customers' legal obligations and constraints, and therefore being better positioned to provide tailored solutions. Conversely, the current lack of standardization and consistency is an impediment to innovation.

Key areas of consistent definition include but are not limited to:

- Precise definitions of professional vs non-professional user
- A consistent methodology for counting users and display instances, which would in turn permit a model for multiple-instance, single-user arrangements.

- Key definition for what constitutes common use cases sometimes subject to contractual stipulations: algorithmic usage, analytics, risk management, etc.
- Key definitions for applications, sites, and the way applications physically located in multiple sites (or on cloud computing) are treated.
- Clarity on the delineation of between internal and external distribution

Question #11: What would be the unintended consequences, if any, of standardizing these types of key RTMD terms and definitions?

We believe a standardized approach to key RTMD terms and definition would prevent marketplaces from exerting undue influence on the internal operations, software development decisions and general internal matters of their clients. We believe this should be an intended, rather than unintended, consequence of market data reforms.

Longer-term Options

(a) Leverage the current IP model by introducing a TIP+ Model.

Question #12: Would caps on fees charged by marketplaces for their RTMD consumed through the consolidated TIP products affect the consumption and use of consolidated RTMD? If so, how? If not, why not, and are there alternatives that should be considered?

We believe that caps on consolidated quotes would reduce the cost for consumers and improve the economics of offering consolidated data to end users. The extent of this effect will depend on the level of caps.

If the TIP+ model maintains the current "additive" approach to providing consolidated RTMD, dealers and consumers will continue to judge the marginal value and marginal cost of additional sources of RTMD which would be consolidated. The marginal cost input would also incorporate the cost of the process of consolidation (including technical complexity) in addition to the dollar costs of data licensing.

We believe that a cap on *total* cost at the subscriber level would be effective at encouraging RTMD consolidation, as it would introduce a "one price provides all" model that offers cost certainty to all consumers. While this could be argued to be in place now based on the DFM, the absolute level of the cap must also be low enough to encourage consumption.

Further, we believe that a cap on total costs by a single subscriber firm could be effective, particularly as that cap would naturally incorporate multiple-instance/single-user treatment. In other words, all RTMD consumers at a firm would be subject to the cap, across all marketplaces. Depending on the level of the cap, this structure may make the cost of providing consolidated data to all users viable.

Question #13: Under this approach, do you believe data vendors would begin to offer TIP-based products and pass cost savings on to the end user? If not, what drivers would be necessary to encourage this? Do you envision any potential unintended consequences under this approach?

We believe that if a lower-cost (per subscriber) data source would become available, data redistribution vendors would offer access to their clients. However, one must be cautious of possibly introducing a difference in quality between consolidated fees from the TIP+, and those from direct data feeds. This is a significant issue in the U.S. market, where currently the SIPs do not provide the same content as proprietary direct feeds, resulting in recent reforms to data infrastructure have in part sought to define "core data" in an appropriate manner to address this gap. Similarly, data producers may choose to limit the quality of data being provided to the TIP+ as a way of improving the competitive advantage of their own proprietary data feeds.

If such a model were to be adopted, we believe it is essential to ensure that TIP+ data is of equal content and quality (though not necessarily equal speed) to proprietary feeds.

Question #14: What means of establishing caps and what factors for establishing cap levels should be considered?

We believe that calibration of cap levels should be premised on achieving a comparable cost experience (on a relative basis) between Canadian and U.S. data.

Arguments that Canadian data are acceptable based on "global" comparisons are misguided; Canadian investors typically buy real-time for data for North America because the North American markets are interconnected, open at the same trading hours, and are generally operating symbiotically. To this point, the CSA analysis indicates that Canadian data is an order of magnitude more expensive than U.S. data on a relative value basis, across all relevant categories of professional and non-professional data. We therefore believe that TIP+ caps should be substantially lower than currently prevailing subscriber fees, particularly for professional users.

A common counterpoint from Canadian data producers is that Canada is more expensive because it is a smaller market. We disagree; data production is now an established technology with substantially fixed operating costs and substantially sunk start-up costs. We therefore do not believe this argument should be used to support a higher relative price (and high margins) for Canadian data.

Further, arguments by marketplaces that U.S. data should be relatively cheaper ignore the commonly cited "platform theory" under which U.S. exchange operators use data revenue to cross-subsidize their trading operations and other activities. By this theory, data costs in the U.S. support an internal subsidy to other businesses, and margins should be relatively higher in the U.S. This is not borne out in the financial statements publicly available. Furthermore, Canadian data producers are expressly prohibited from cross-subsidization of this nature, and therefore with all else being equal margins in Canada should be relatively lower, because they do not build in an intra-entity subsidy of other business. This is again not borne out in the data, with data production and distribution being the highest-margin business at the organizations whose financial statements are publicly available.

We reiterate our view that market data is a monopoly product for each producer, as there is no substitute for any one marketplace's data. There are no competitive forces which can keep the price of a monopoly in check. We therefore believe it should be regulated as a monopoly and subject to a target rate of return on invested capital.

(b) Introduce a new model for data consolidation through the use of an Admin IP.

Question #15: What are your views on the appropriateness of an Admin IP model for Canada? What would be the key benefits and challenges and how could any challenges be addressed?

Question #16: What are the unintended consequences or risks that should be considered?

Question #17: Are there any other key responsibilities that should be considered for an Admin IP model?

We are generally supportive of the creation of an Admin IP, as we believe that the existence of a central utility for the provision of indicative real-time market data for widespread consumption is appropriate. Crucially, such a utility must offer a one-price-buys-all model for consumption, and this price should be at a level which would support widespread dissemination of consolidated RTMD.

The existence of an Admin IP by itself is not enough to ensure access to consolidated RTMD. Existing solutions involving direct feeds and per-subscriber costs may be preserved if they are seen as less expensive and of comparable utility. For this reason, we believe that an Admin IP model should be designed with a clear purpose in mind: providing indicative quotations (including depth of book, consolidated volume at the quote, and consolidated historical price and volume information) at a substantially reduced cost to the cost of direct consolidation of independent feeds and individual per-subscriber costs. If the Admin IP is priced at a level comparable to existing cost run rates, it would be an attractive avenue for enhancing client experiences.

Further, the Admin IP model would not be able to address use cases involving "last mile" order routing or other high-performance needs. Therefore, the regulatory framework should consider the simultaneous needs for multiple solutions.

Crucially, if costs under the Admin IP model are heavily curtailed, we expect that data producers will increase costs for other data products (such as high-speed feeds) to make up for lost revenue. As a result, the total cost picture would potentially not change, and therefore the same cost base would be passed on to investors. We therefore suggest that an Admin IP solution must be implemented in conjunction with broader controls on both the production and delivery of data products, including regulatory limits on ancillary costs charged by data producers (such as site fees, port fees, or other ancillary charges).

Question #18: What governance model could be introduced that would be fair and help overcome conflicts such that the Admin IP could achieve its regulatory obligations?

We believe that the governance of a potential Admin IP should be structured such that conflicts of interest in the governance arrangement are minimized. The most prominent conflict of interest, as evidenced by discussions around the SEC's Market Infrastructure Rule, are in voting rights being assigned to organizations who are also in the business of offering competing products to the IP itself.

We therefore recommend that market data producers should, collectively, account for less than 50% of voting rights for any governing body in the Admin IP.

Further, the governance structure should include a broad range of RTMD stakeholders, including:

- Direct consumers (i.e. the buy-side and sell-side community, including wealth managers and asset managers)
- Institutional investors, including those representing foreign investment into Canadian markets.
- Static or delayed data consumers, including custodians and asset servicers
- At-large representatives of the investment community

Concurrent with a voting-rights model which minimizes conflicts, the funding model for the Admin IP should provide for adequate cost recovery for large consumers of data. If the Admin IP operates as a utility, then market data producers may receive revenue commensurate to their contributions and their voting rights. The balance of economic benefits, net of costs, should accrue to the consumers of data – which can be accomplished by periodically calibrating Admin IP fees to a cost-recovery level.

Finally, to the extent that the Admin IP follows a U.S.-style "revenue share by contribution to price discovery" model for rewarding data producers, we note that this will inextricably link data revenue to quoting activity on a particular marketplace. This will incentivize marketplaces to encourage any and all quoting, rather than bona fide improvements to price discovery. We therefore believe that any price-discovery-based revenue sharing model should explicitly reward improvements at the NBBO over quoting at depth, and penalize quote fade.

Question #19: Based on the size and scale of the Canadian market, should the CSA consider allowing for multiple TIPs to operate under the Admin IP approach?

Question #20: Alternatively, should there only be a single TIP and, if so, should it be operated independently of the Admin IP?

We believe that some degree of competitive involvement is necessary for the Admin IP product to be of high quality. While the underlying data cannot be competitive, as each producer is its own monopoly, the process of consolidation can be performed by multiple vendors.

One potential mechanism would be to allow existing data vendors to implement an Admin IP compliant consolidation framework within their own infrastructure and for their own clients, being subject to the common governance framework of the Admin IP overall. This would necessitate bifurcating the total cost of the Admin IP into two parts: the cost of data sourcing and delivery (paid to the Admin IP contributors and subject to cost recovery), and the cost of consolidation (paid to a consolidation vendor).

Question #21: If there is only a single TIP, should it operate as a for profit business or as a not-for-profit entity? Please explain your answer.

As noted above, market data is a monopoly product with no substitutes. If there is only a single TIP, we believe it should be governed as a utility, either as not-for-profit industry cost-recovery, or as a regulated for-profit utility with strict price controls.

General Questions

Question #22: With respect to Staff Consideration 1, do you think that our review of RTMD costs and accessibility should consider the impact of regulatory requirements, such as OPR and best execution? What could drive changes in consumer behaviour (such as disconnecting from marketplaces that offer little benefit to the market compared with the costs or unprotected marketplaces)? What changes could impact the competition among data producers? What could incrementally increase consumer bargaining power? And ultimately, could any of these suggestions impact fees? Please explain your answer.

We believe that a review of RTMD is fundamentally linked to the regulatory requirements which compel consumers of market data to purchase products and lose bargaining power. More specifically, RTMD usage at the last mile is expressly driven by OPR and best execution requirements. On the other hand, RTMD consumption at the order origination stage is more discretionary as order origination is fundamentally used for more "indicative" rather than immediate and actionable purposes.

We do not believe that loosening OPR or best execution requirements will accommodate cheaper RTMD. The introduction of the 2.5% threshold to OPR serves as a case study. These OPR reforms slowed the launch of new marketplaces, as the threshold took away the ability to immediately acquire customers, charge mandatory membership fees, and charge for market data required to adhere to OPR. The reforms also did not result in the "disconnection" from unprotected marketplaces, because startup costs were sunk and dealers felt that keeping marketplaces accessible retained the option of executing there if conditions warrant it. Similarly, if OPR and best execution were relaxed today, existing practices would maintain momentum and lower costs would not be achieved.

Fundamentally, we do not see a way of introducing competition amongst data producers, because no producer can produce an effective substitute for another producer's data at the last mile. The "imperfect" substitute is the current regime; many clients do not see consolidated data, because a single source is seen (by that client or by their firm) as sufficient for indicative purposes. This is at odds with CSA Staff consideration 6 and CSA analysis.

Further, if a substitute was available, this very consultation would be moot as unconsolidated substitutes would be sufficient.

Question #23: Would any of the options outlined above assist dealers with moving retail orders to other marketplaces during a marketplace outage?

Marketplace outages manifest in two distinct but interrelated areas, which may occur at the same time:

- Inability by executing dealers to access orders on a marketplace, or execute new orders on that marketplace.
- Inability by the broader community to rely on RTMD from the affected marketplace.

The former style of outage will not be remedied by broader access to RTMD. Execution at the last mile is performed by systems which already subscribe to RTMD from all relevant marketplaces and which are inherently more resilient to outages.

The data component of marketplace outages could be remedied by widespread access to RTMD. When a particular marketplace suffers an outage, the impact of the outage on the broader community is typically felt in the confidence investors feel at the market at large, rather than that singular marketplace operator. For example, certain smaller ATSs in Canada have suffered numerous outages affecting institutional and electronic execution, but the investing community has been largely unaffected – because those marketplace's quotes are not consolidated as part of users' displays.

On the other hand, when the outage is at a dominant marketplace operator, whose quotes serve as a proxy for market data for the Canadian market as a whole, investor confidence suffers and investors cease participation. This occurs even at times when trading may continue on alternative venues and "last mile" execution is largely unaffected. This confidence effect would be remedied by widespread access to consolidation, as many investors may be unaware that an outage took place at all.

To illustrate, consider examples from prominent outages in the U.S. market. In 2013, the Nasdaq SIP suffered an outage, affecting quotations to the market on Nasdaq-listed stocks. The effect was profound, and trading activity declined sharply. In 2015, NYSE suffered a three-hour-long outage during which the U.S. SIPs continued to function and published quotes from away markets, and overall market activity was substantially unaffected. The key differentiator is investors' ability to assess the current market conditions of the trading venues that continue to operate, and in turn dealers' ability to access those venues.

In summary, we believe that widespread consolidation would make the Canadian market more robust to outages from the perspective of investor confidence and behaviour. It would not assist dealers with the ability to move orders away from a down venue, and investors with resting orders would remain affected.

Question #24: Are there any other options to address industry's concerns about the access to and cost of RTMD that we have not considered? Please explain your answer.

In addition to the views expressed above, we request that the CSA mandate a multiple-instance/single-user regime whereby professional users are not facing duplicate charges for market data from different applications used concurrently.

We also recommend that the CSA consider the implications of the data regime (both current and proposed) on international data consumers. RTMD access outside of the Canadian market influences Canada's global relevance and global perceptions of the investability of Canada's capital markets. Barriers to access for Canadian RTMD will therefore impact capital flows into Canada.

Conclusion

This response was prepared jointly by a team of professionals from multiple areas of the Bank of Nova Scotia. It represents the combined views of both Scotiabank Global Banking and Markets, and Scotiabank Global Wealth Management. We collectively believe that robust and accessible market data is essential to a healthy trading environment, forms the bedrock of efficient capital markets, and should be viewed as a public good. We view data costs as a major contributor to market-wide limitations on data access by market participants, including retail investors.

In summary, we believe:

- Market data is foundational to efficient price discovery and for maintaining fair and efficient capital markets. Cost-effective access to consolidated market data by all market participants, including retail investors, enhances transparency and price discovery and promotes investor confidence in the investment industry and capital markets overall.
- All real-time market data, including display, non-display, professional and non-professional data, should be viewed as monopoly products. No marketplace's data is a true substitute for another marketplace's data. As a result, data costs (including ancillary distribution costs) should be regulated in a manner that recognizes data's monopoly status.
- The existing IP is functionally a data provision vendor rather than a consolidation utility. We are supportive of efforts to improve the function of the IP to broaden access to consolidated data. We are also supportive of the introduction of an Admin IP model, subject to appropriate governance and implementation details.
- Regulatory efforts to encourage widespread access to consolidated data should be combined with cost guardrails on data uses for order routing and other non-display purposes. Without a comprehensive set of cost controls, data producers could raise costs on unregulated (or less regulated) products and consumers, who would remain captive to market data producers.
- Efforts to regulate market data should consider the complete range of market data consumers and contributors to the trading ecosystem. The regulatory regime should consider the effect of the data regime on the willingness of foreign investors to access Canadian capital markets, and any impediments the data regime may present to attracting foreign capital.

We look forward to engaging in the regulatory policy development process relating to market data and appreciate the opportunity to comment on this important topic.

Respectfully,

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