



TD Securities

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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

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

Dear Sirs and Mesdames,

TD Securities Inc. ("TD Securities", "we" and "our") welcomes the opportunity to comment on CSA Consultation Paper 21-403 – Access to Real-Time Market Data, which covers the important topic of access to real-time market data.

TD Securities is a leading securities dealer in Canada and a top ranked block trader in Canadian equities and options based on both dollar value and shares/contracts traded. TD Securities also acts as the executing dealer for TD Waterhouse, one of the largest brokerage firms in Canada.

Overarching Themes:

- Market Data fees must be fair and reasonable
- Fees cannot be deemed fair and reasonable when participants are required by rule or regulation to consume proprietary data for day-to-day trading (the "value" argument)
- Fair and reasonable determination must be a function of "cost" of production and not include co-mingling of costs to build and maintain an exchange matching engine
- Fee analysis must be inclusive of all market data charges including but not limited to connection fees, port fees, non-display fees, cross connects and membership and/or licensing fees
- Fees charged to institutional participants should be the same regardless of jurisdiction
- Professional investors should pay once for real time market data regardless of the number of instances used (so called MISU or "Multiple Instances, Single User")
- Market Data is an essential utility
- Once all comments have been considered, there should be public hearings on this topic.

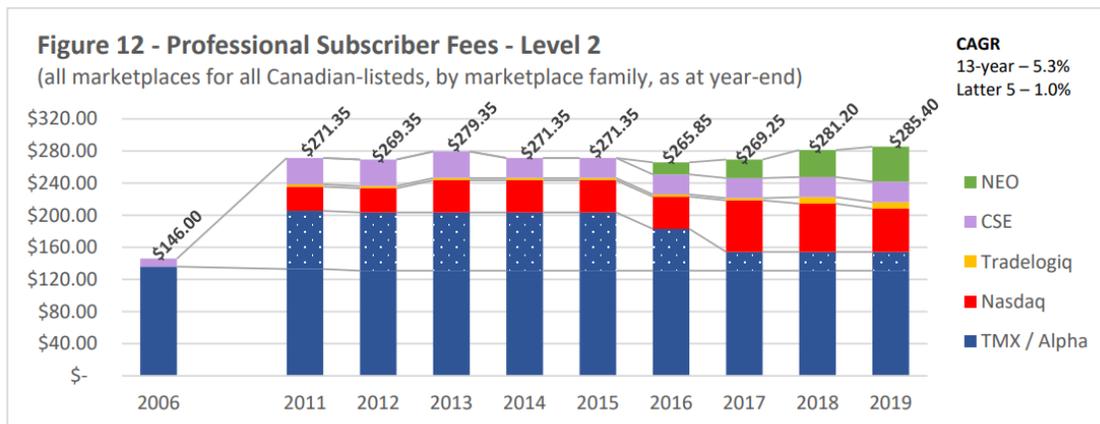


Historical Trends in Market Data Fees

In 2003, The Canadian Securities Administrators created a task force entitled "Industry Committee on Data Consolidation and Market Integration in Canada" to address data consolidation in a potential future state multiple marketplace environment. While one option contemplated by this task force was the creation of a US-style central information processor, industry participants were reluctant to spend money to solve a problem that did not exist in practice. Instead, the industry was left to solve the problem of data consolidation.

With the demutualization of the TSE to a for profit enterprise in the early 2000s¹ and the subsequent transition to a multi-marketplace environment in Canada, no guard rails existed on fees charged for equity market data. As such, the TSE was free to charge what it deemed to be fair prices for its market data and set out a complex fee schedule for professional users that was initially tiered based on number of instances. When other markets developed and were protected by virtue of regulatory fiat (order protection), these new markets were able to charge for market data regardless of its value or contribution to price discovery. Market participants became "captive" to the fees charged by these new marketplaces, which in the early days represented multiples of the revenue earned by these marketplaces from trading, and before long market data fees began to rise.

Chart 1: CSA-Calculated Professional Subscriber Fees – Level 2



²Source : https://www.osc.ca/sites/default/files/2022-11/csa_20221110_21-403_real-time-market-data.pdf

As is evidenced in Figure 12 of the Appendix A of the CSA report, full depth of book (Level 2) market data fees for professional subscribers nearly doubled in the first five years of marketplace competition, a period in which four new marketplace operators launched protected marketplaces.

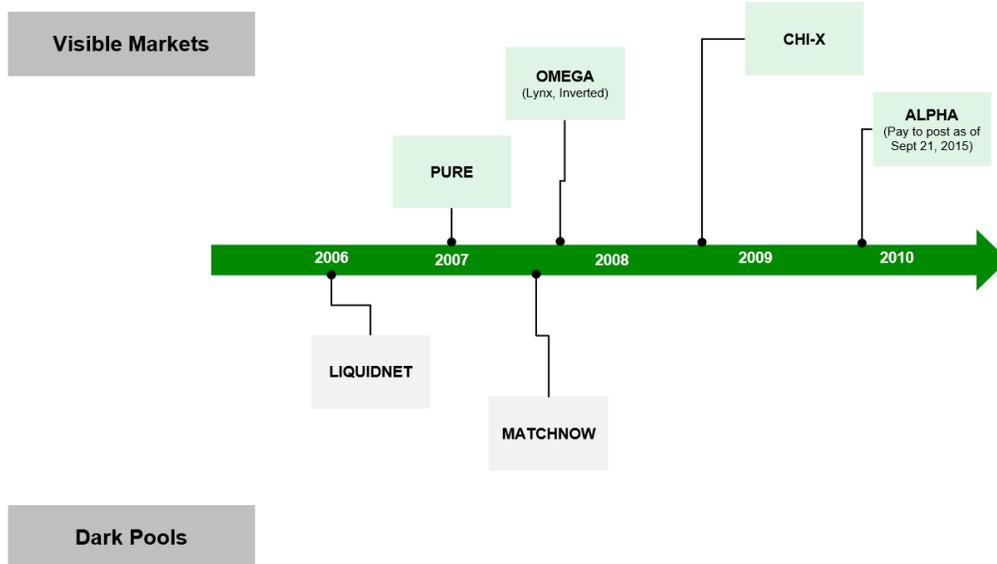
¹ The Toronto Stock Exchange (TSE) received all necessary regulatory and ministerial consents to proceed with demutualization, effective April 3rd, 2000. The TSE decision to demutualize was announced and supported by both its Board and Member seatholders at its AGM in June 1999. At that meeting members authorized the TSE to demutualize and continue operations as a for-profit company under the Ontario Business Corporations Act.

² As of November 10th, 2022, CSA Consultation Paper 21-403 Appendix A – Item 3.1: Professional subscriber fees are charged on a monthly basis to those end-users of RTMD that meet the marketplace's definition of professional subscriber. Such subscribers includes securities professionals or any individual who is not acting in his or her personal capacity. It is noted that growth rates over the latter 5 years has been lower than the entirety of the reviewed period. These lower growth figures are due to fewer marketplaces introducing these fees and the application of the DFM.



Chart 2: ATS Evolution in Canada – Starting in 2006

Canadian Marketplace Launches



Source: TD Securities

Of note during this period was the actions of one marketplace, Alpha Trading Systems, with its now famous slogan "for the industry, by the industry," who promised at its launch in 2008 to keep market data fees for professional investors at zero until its share of trading reached a meaningful percentage of the market.

Alpha's CEO Jos Schmitt was quoted at the time as follows:

*"Alpha will provide its market data without charge until such time as Alpha achieves a 20% share of trading volume in Canada. The industry should not be bearing a cost for market data until critical mass has been achieved."*³

On the first day Alpha reached 20% of trading volume in October 2009, it announced immediately that it would begin charging for market data on January 1, 2010, with fees representing approximately 20% of the overall market data fees for professionals (Alpha's initial fee for data for professionals was \$72.50 per month per instance). The trouble with this decision is that Alpha reached 20% for only that one trading day and that was by virtue of a large broker block cross which, arguably, did not contribute much to price discovery. During the fourth quarter of 2009, Alpha's normalized share of trading was approximately 15%.

Implementation of the Data Fee Model

Market participants were forced to pay for Alpha's data based on this initial calculation of 20% share of trading until 2016 when the CSA's Data Fee Model (DFM) was implemented. With Alpha since acquired by TMX Group in 2012⁴ and new dark trading rules wiping out Alpha's dark pool IntraSpread, by the time the DFM was in place, its share of trading sat at approximately 5%.

Naturally, with a lower share of trading and the DFM implemented, TMX was forced to lower its Alpha data fees, first to \$52 and then to \$23.40 per month where it sits today. However, non-Canadian subscribers did NOT benefit from the Data Fee Model in the same way as Canadians. Instead, the TMX created a US dollar class of Alpha subscriber and left fees essentially where they were when

³ "Alpha confirms launch and announces fee strategy" by: IE Staff, May14th, 2008, source: <https://www.investmentexecutive.com/news/research-and-markets/alpha-confirms-launch-and-announces-fee-strategy/>

⁴ August 1st, 2012, Maple Group Acquisition Corporation (renamed as TMX Group Limited on August 10th, 2012) announced its completed acquisition of Alpha Trading Systems Inc. and Alpha Trading Systems Limited Partnership collectively known as "Alpha".



Alpha first began charging for data. These Alpha fees for non-Canadians remain elevated to this day at \$67.70 US per month per instance.

The fee differences between Canadian and non-Canadian subscribers raises the question of why non-Canadian investors with eyeballs on the Canadian market pay higher rates than Canadians for the same data. Clearly, TMX charges higher data fees for non-Canadians simply because it is not encumbered by the Data Fee Model, and this has been a source of outsized data revenue for TMX that is not a result of an increase in users.

In our view, the implementation of the DFM in 2016 was important to stem the tide of data fee increases for Canadian users as in theory every fee increase resulting from an increase in market share should be offset by a fee decrease forced on a marketplace that lost share. However, this is not how the rule's implementation played out in practice.

Under the DFM, marketplaces charge for data based on a fee range, which allows for fees to be increased to the top of a range without necessarily requiring an offsetting fee decrease if no other market falls outside its allowable range. As a result, data fee subscribers suffered from what we call "fee creep."⁵ We believe there should be complete transparency in each marketplace's fee range as well as the CSA analysis of data fee ranges so that the users can ensure accuracy with the CSA calculations.

In addition, when the DFM was implemented, it did not take into consideration whether data fees at that time were "fair and reasonable." While the CSA noted in its 2012 data fee study that Canadian fees were 10 times higher than the US on a comparable per user basis⁶, the higher fees in Canada were attributed to a smaller user base covering the fixed costs of production. We do not agree with this reasoning and suggest that technology improvements in the past 10 years make the cost of producing market data cheaper today than previously. Further, the existence of enterprise agreements that cap the fees for non-professional users prove that data costs of production are not linear – in fact, the cost to produce one more unit of data is probably close to zero.

Determining Fair and Reasonable Fees with a Cost of Production Analysis

The only way to determine if fees are fair and reasonable is to use a cost of production analysis, which would require marketplaces to make their financial information available to regulators or auditors so that they can properly determine costs of producing market data and then comparing them against revenues earned from market data. Marketplaces in the US have resisted the notion of analyzing data revenues relative to cost of production, claiming that costs to produce market data were in fact comingled with the cost of building and maintaining the exchange matching engine, a concept known as "platform theory."⁷ Absent the ability to comingle costs across platforms, we believe an analysis would show data fee costs at a fraction of revenues earned. However, this analysis can only take place if required by regulators.

An important aspect of industry costs for data that is not covered by the DFM includes all the "other" charges that are necessary to be fully connected to a marketplace. These charges include port fees, cross connects, server co-location costs, license fees, non-display fees, re-distribution fees (if applicable), session fees, membership charges (why are participants required to pay a membership fee to trade on a marketplace on which they are required to trade by law?), among other charges. Recently, the TSX began charging a small fee for session bundles, which is a common charge in the US and can be a very significant revenue source for a marketplace. While we understand the logic in charging session fees, we fear that absent regulatory scrutiny, exchanges will resort to increasing

⁵ The term "Fee Creep" is used in this instance to illustrate the slow but steady increase in subscriber fees under the Data Fee Model (DFM).

⁶ CSA Staff Consultation Paper 21-401 Real-Time Market Data Fees Table 5 – Absolute and Relative Depth of Book (DOB) Fee for Consolidated Data in Canada and the US, 2011 illustrates that on a per 1 million shares basis, the consolidated Canadian marketplaces professional DOB monthly fee amounts to \$0.0454 as opposed to the consolidated US marketplaces professional DOB monthly fee of \$0.0044. Therefore, Canadian fees were approximately 10 times more expensive than US fees as of the writing of that study.

⁷ "Platform Theory" refers to a company using a business model that does not offer a specific product but instead enables interactions between participants whereby each additional participant adds value with regards to the network effect. Because the value gained of every market participant depends on the number of participants within the network, the costs associated with producing valuable data is mixed in with the costs of maintaining the infrastructure of the network. Source: "The Economics of Platforms: A Theory Guide for Competition Policy", March 2021, source: <https://www.sciencedirect.com/science/article/abs/pii/S0167624520301244>



non-regulated fees to compensate for any fee reductions that would be required in a regulated solution. This would be akin to raising fees for non-domestic users of market data to make up for the inability to control prices for Canadian users.

Finally, with the proliferation of traders utilizing multiple tools to achieve best execution, this often requires connectivity by an individual trader to several different vendor or proprietary systems that require discrete access to real time market data fees. Individual users of Canadian market data that have more than one data source are required to pay for this data multiple times, while other jurisdictions will allow users with multiple data sources to pay one fee. This service is known as MISU, which stands for "Multiple Instances Single User." We understand that there may be a view that MISU is simply too complicated to track in Canada as a result of the fact that most subscribers to exchange data do so through vendor intermediaries. This should not be a bridge too far.

It has been 17 years since the TSX faced competition for trading, a period in which its market share fell from 100% to 50-60% of daily trading across all its venues. During this same period, market data fees for professional users in Canada doubled (and the increases for non-domestic users are even higher). This cannot be the outcome that was envisioned when regulators first outlined rules for multiple marketplace competition, a decision that was aimed at lowering, not increasing, the fees of users which are a cost of trading.

Market Data is a Utility

Market data is an essential utility for market participants, no different than electricity. While out of necessity participants would in theory pay any price charged for electricity to run their business, this would not equate to a license for the electricity providers to charge fees that have no relation to cost. The concept of value extraction was outlined by Alison Bishop of Proof Trading in a submission to the SEC relating to costs of market data provided by the Security Information Processor (SIP):

*"There are certain services that we generally agree it's important to provide without full or nearly full value extraction. Electricity and water, for example, may be services that many value at a greater amount than we currently pay for it, but that doesn't mean we can all afford to pay more, and we've decided collectively that such core services should be affordable to a wider range of people than value extraction would dictate. If it is the SEC's intention that the SIPs provide a service that is meant to be more affordable and accessible than the currently available data products offered by individual exchanges, then "value to subscribers" should not be a sole determinant of SIP fees. **18*

Allison Bishop, Proof Trading, letter to SEC dated November 22, 2021

If Market data is a utility like electricity, then in order for market data fees to be fair and reasonable, these fees need to be regulated. We recognize that the CSA does not want to be a rate setter, as this puts the regulator in the uncomfortable position of determining winners and losers. However, with the implementation of the DFM, we feel like the regulator is already in the rate setting business for data and formalizing the coverage of all of market data under an umbrella organization that is responsible for setting and reviewing data fees seems like a logical extension.

Importantly, any data fee oversight committee should be made up equally of industry representatives and marketplaces so that decisions can be made that balance the interests of the commercial entities that earn revenue and the users that pay for the data.

While we appreciate the efforts of the industry to provide feedback to the CSA on the important topic of market data, we believe that once all the comment letters have been considered, the next step would be for the CSA to host a seminar, like the SEC's Market Data Roundtable in October 2018, that would allow for various participants to discuss and to question each other on the specifics of the Made in Canada data debate. We would be interested in participating in these discussions.

¹⁸ CTA/CQ/UTP Plan Fee Amendments, Release No. 34-93625; File No. SR-CTA/CQ-2021-03 by: Allison Bishop, President of Proof Services LLC, source: <https://www.sec.gov/comments/sr-ctacq-2021-03/srctacq202103-9385393-262686.pdf>



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Consultation Paper Questions

In the section below, we will answer specific questions which relate to the various options presented in the CSA paper:

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

TDS Response - We support the complete transparency of marketplace changes to data fees. At one time marketplaces might have argued that pending fee changes were a competitive matter and pre-disclosing these changes reduced the leverage of the marketplace to benefit from them. We believe transparency in advance allows the industry to properly assess the change and potentially raise any flags with regulators before a change has been implemented.

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?

TDS Response - The Data Fee Model needs to be inclusive of all other data fee charges that do not relate directly to real time market data. These fees include but may not be limited to port fees, cross connects, server co-location costs, license fees, non-display fees, re-distribution fees (if applicable), session fees, membership charges.

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

TDS Response - The DFM should apply to all market data.

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.

TDS Response - the data fee ranges and related market share computations from regulators to determine contribution to price discovery should be transparent.

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.

TDS Response - procedures for publishing data fees need to be consistent. For instance, some marketplaces combine Level 1 and Level 2 fees whereas others treat the two numbers separately, making it difficult to compare apples to apples. We have also experienced situations where a marketplace has changed its process year to year without denoting such a change. Standard terms should be created and adopted by all marketplaces.

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?

TDS Response - Caps on market data fees exist today for data in scope by virtue of the DFM. However, as mentioned previously, there are many data related products that are not in scope that allow for marketplaces to grow revenues in these unprotected areas, possibly to make up for fee reductions forced by regulators through the DFM or to meet revenue targets.

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?



TDS Response - The current IP model is out of date and is not needed as long as participants consume data through vendor consolidators. We recommend eliminating vendor-based consumption and centralizing through a market data utility structure. This would reduce cost by eliminating mark ups charged by vendors. Often these markups are not transparent to the end user.

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

TDS Response - Market data is a utility and should be regulated as such.

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?

TDS Response - We support the notion of an Administrative IP that is responsible for establishing and maintaining market data fees and collects and distributes market data revenue to marketplaces. We recognize that debate will take place over what is considered "proprietary" versus "utility" market data. That said, the success of a utility structure is dependent on eliminating opportunities to "arb" the system, meaning the chance for a marketplace to avoid the utility structure for products that participants are required to consume but that are not covered under the utility data agreement.

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?

TDS Response - the governance model for market data must be correct from the outset. If disproportionate power is given to the marketplaces, then it will be very difficult to effect change. Changes to the governance structure of the SIP in the US should prove to be a cautionary tale, as US regulators are struggling to implement approved changes that would enhance public market data feeds. We believe the problem is that the Committee overseeing governance of the SIP, which is controlled by the large exchange groups currently, will not agree on fees for enhanced market data that might result in a negative commercial outcome and sought to block these changes through litigation. The trend whereby exchanges, and participants sue the regulator in the US is in our view a negative outcome as it results in courts determining the future of market structure rather than the experts. We are moderately concerned that dramatic changes to market data oversight in Canada that result in negative commercial outcomes could lead to similar court challenges for the first time in recent memory.

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?

TDS Response - We believe market data is a utility and should be centralized under one data authority.

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.

TDS Response - One central utility for market data should be operated under strict regulation that allows for utility-type returns similar to other regulated industries.

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.

TDS Response - Critics of the US review of equity market structure on-going currently will argue that the SEC is trying to do too much at once. While we agree conceptually with the



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idea of eliminating the Order Protection Rule (OPR) in favor of enhanced best execution guidelines, this topic probably beyond the scope of this review.

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

TDS Response - There are no easy solutions to re-routing orders trapped on a marketplace during a system outage.

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.

TDS Response - futures and options market data fees should be part of the scope of this review. MX market data rates have risen from \$86 per instance in 2012 to \$103.90 per instance in 2023, with non-Canadian users billed the same rate but in USD. While we do not expect this outcome, without regulation, there is the risk that MX increases its fees without limit, perhaps in response to data fee cuts in other parts of its data business such as equities. Alternatively, another exchange could trade the same products as MX, cleared through CDCC, with no limit on prescribed data fees.

Once again, we thank the CSA for its thorough review of equity market data fees in Canada and look forward to being part of the conversation on this important topic in the months to come.

Sincerely



Riaz Ahmed
President and CEO