ANNEX E

SUMMARY OF RESPONSES TO STAFF NOTICE 23-331 RELATING TO SEC TICK SIZE AND TRADING FEE PROPOSALS

List of Commenters

1. Canadian Securities Exchange
2. BMO Financial Markets
3. Virtu Financial
4. TD Securities
5. Investment Industry Association of Canada (IIAC)
6. Canadian Security Traders Association, Inc (CSTA)
7. Scotiabank Global Trading & Markets
8. Tradelogiq
9. TMX
10. Cboe
11. Nasdaq CXC Limited
12. National Bank Financial Markets

Summary of Comments

Question 1: If adopted as proposed by the SEC, please provide your views regarding whether Canada should harmonize with an amended SEC rule, including with respect to:

a) **the methodology used to calculate minimum trading increments, including, source of data (which marketplaces and what entity should be responsible for calculation) and time periods during which the metrics are calculated,**
b) **securities to which any amended Canadian price increments would apply (e.g., inter-listed securities only or all or some classes of securities, exchange-traded funds and/or other exchange-traded securities),**
c) **treatment of situations where the use of an aligned methodology results in different trading increments between inter-listed securities traded in Canada and the U.S. (i.e., where the time-weighted average quoted spreads in Canada and the U.S. are different for the same security).**

a)

- Some commenters supported harmonizing with the U.S. and among the Canadian regulators the methodology used to calculate minimum trading increments.
- One commenter noted that Canadian listing exchanges should identify which inter-listed stocks are affected and therefore subject to reduced tick sizes – for example, through start of day symbol status messages.

b)

- The vast majority of commenters supported harmonizing Canadian price increments for Inter-listed Securities. Not a single commenter expressed outright opposition to harmonizing price increments for U.S. Inter-listed Securities.
  On the issue of non- U.S. Inter-listed Securities, most commenters urged caution, or outright opposed harmonizing trading increments for non- U.S. Inter-listed Securities. Only one commenter supported harmonizing trading increments for these securities.

c)

- A commenter noted that if the regulators cannot harmonize their data sets, Canadian regulators should apply SEC data over Canadian data.
- Another commenter argued that in case of having different trading increments for U.S. Inter-listed Securities, the trading increment chosen for Canada should be the narrower of (1) the U.S. increment and (2) the increment calculated through the Canadian method.

Question 2: If Canadian requirements as related to minimum trading increments are not amended in response to an amended SEC rule as proposed:

a) **Would marketplace participants send less order flow to Canadian marketplaces in favor of U.S. trading venues?**
b) **Does the difference in value between the Canadian and the American dollars matter in your analysis?**

a)

- The majority of commenters believed that order flow to Canadian marketplaces will drop if Canadian requirements are not harmonized with SEC amendments.
- Two commenters expressed doubts with respect to the order flow drop at Canadian marketplaces; one commenter called for a more detailed, data-driven study to be undertaken.

b)

- The vast majority of commenters who responded to this question did not believe that trading increments and access fees should be viewed through the lens of foreign exchange rate. The general preference was to have those harmonized to the greatest extent possible.

Question 3: Concerns have been raised in relation to:

a) operational resiliency and systems readiness should the number of trading increments be increased, especially where they would be periodically adjusted on a per-security basis, and

b) increase in message traffic (i.e., electronic order and trade messages) that will result from an increase in the number of pricing increments.

Please discuss whether you share these concerns.

- The majority of commenters shared the identified concerns. However, the general view was that the benefits of harmonizing trading increments for U.S. Inter-listed Securities outweighed the technology-related risks. One commenter noted that the regulators should provide the industry with sufficient time to adjust their technology to smaller trading increments.

Question 4: It has been suggested that any Canadian proposal to amend minimum pricing increments would introduce complexity in managing orders. Please provide your views in this regard, including as related to:

a) complexities associated with the frequency at which minimum trading increments could change,

b) the necessary lead-time between establishment and implementation of new minimum trading increments both initially and on an ongoing basis,

c) challenges with management of existing orders entered on marketplaces at prices that have become invalid trading increments (may be particularly relevant for orders of retail investors that are entered with longer expiry dates (i.e., Good-till-Cancelled ("GTC") orders)),

d) investor education challenges associated with an amended approach to minimum pricing increments.

- Some commenters believed that such a Canadian proposal would introduce complexity in managing orders.
- Some commenters thought that GTC orders may need to be repriced and/or possibly canceled.

- In terms of the timeline of implementation, one commenter preferred infrequent and predictable changes where needed; another commenter preferred to stagger the implementation.
- One commenter expressed concerns regarding the timing: under the SEC proposals, calculations, dissemination and changes of tick sizes would all have to take place between one day's close and the next day's open. Such a compressed schedule might affect markets' ability to conduct adequate quality control and testing; also, brokers may not have sufficient time to discuss and address order management issues with their clients.
- Some commenters believe that investor education associated with an amended approach to minimum trading increments might be a challenge.

Question 5: As modifying trading increments in Canada would impact the determination of a "better price" under UMIR, please discuss whether Participants (as defined in UMIR 1.1) would still be providing meaningful price improvement in circumstances where a "better price" is required.

- Some commenters believed that UMIR should not change its definition of a "better price."
- Some commenters thought that there would still be meaningful price improvement with modified trading increments. On the other hand, one commenter believed that a "better price" at sub-penny levels is almost immaterial, and this would not be meaningful price improvement.
- Other commenters expressed different opinions:
  - One commenter suggested redefining the concept of "better price" to an absolute amount (per share), dependent on stock price and potentially order quantity. Further, any displayed orders which do not represent a "better price" relative to round trading increments should lose order protection.
  - One commenter argued that maintaining a single general standard for "better price" as the amount by which one can improve the quoted better price would make for a simple and practical standard but is open to establishing a higher threshold.
- One commenter urged the regulators to consider the policy rationale behind the determination of "better price" and whether smaller trading increments would still be providing meaningful price improvement.

Question 6: Please provide any views on expected outcomes (positive and negative) associated with any changes to minimum trading increments, including as related to expected quoted volume at each price increment. Additionally, please provide your views on what metrics could be used to evaluate whether any new approach to minimum trading increments results in positive or negative outcomes.

- A number of commenters had various views on expected outcomes that would result with any changes to minimum trading increments:
  - In terms of positive outcomes,

- Several commenters noted that decreased minimum trading increments will result in tighter bid-ask spreads, leading to the lower institutional trade execution costs,
- One commenter provided that trading volume will likely increase,
- One commenter noted that reducing minimum trading increment would lead to increased potential for more precise price discovery processes for a small number of tick-constrained stocks,
- Two commenters suggested that aligning minimum trading increments with the U.S. would allow Canada to maintain competitiveness with the U.S. market.

- In terms of negative outcomes,
  - Some commenters believed that reducing tick size would reduce quoted volume available at the National Best Bid and Offer (NBBO),
  - Some commenters noted potential issues with increased message traffic, such as less ability for slower traders to quote and trade passively on the near side of the quote and the need for infrastructure upgrades, as well as increased costs to the industry,
  - A couple of commenters submitted that proposed tick size buckets are too granular, which will lead to flickering quotations, increased price instability, less aggregated liquidity, wider spreads, greater market fragmentation and ultimately will weaken the NBBO,
  - One commenter cautioned against reduced top of book size, disadvantages to liquidity providers through loss of queue priority, more challenging trade-through management due to finer tick increments and more rapid quote updates.

- Some commenters proposed the following metrics to evaluate the effect of a change in trading increments:
  - message traffic rates
  - volume traded (e.g., on inside bid/offer vs current volume; at top of book; within a one-increment spread; comparison between Canada and U.S. for U.S. Inter-listed Securities)
  - fill/cancelation rates and time to fill or cancel
  - average displayed order size and market depth
  - ratio of displayed share trading vs non-displayed share trading
  - market impact experienced by participants
  - stock quote stability and price volatility

One commenter noted that it may be challenging to determine which metrics are appropriate given the high number of variables at play and, therefore, metrics may need to evolve over time and should be periodically reassessed.

Question 7: Please discuss whether fee caps should also apply to "taker-maker" fee models and, if so, whether their fee caps should be different.
• Some commenters supported applying fee caps to taker-maker fee models, while four oppose fee caps in these cases. • Two commenters emphasized their view that the access cap in Rule 610 of Regulation NMS only applies to fees for accessing (removing) liquidity, and not to the level of rebate to remove liquidity/the fee to provide liquidity. • One commenter expressed its view that the degree of distortion permitted through rebates must be limited symmetrically for both traditional and inverted markets.
Question 8: Generally, the exact fee or rebate for an order cannot be determined until after an execution occurs, as discounted fees or credits are determined by marketplaces at the end of the month, based on trading during the month of a Participant. To be able to calculate the full cost of a transaction at the time of execution, the SEC also proposes to require that all exchange fees and rebates be determinable at the time of execution. U.S. trading venues would be required to set such volume thresholds or tiers using volume achieved during a stated period prior to the assessment of the fee or rebate so that market participants are able to determine what fee or rebate level would be applicable to any submitted order at the time of execution. **Please discuss whether we should take a similar approach in Canada.**
• Some commenters supported such a requirement, while others opposed setting this requirement.
Question 9: If adopted as proposed by the SEC, please provide your views on a Canadian approach to fee caps, **including with respect to:** **a) harmonization with an amended SEC rule, including with respect to application to inter-listed and/or non-inter-listed securities,** **b) methodology used, including with respect to:** **i. application to all securities, regardless of price,** **ii. consideration of a fee cap that reflects tick size, similar to the methodology proposed by the SEC, and** **iii. consideration of a percentage-based fee cap for securities priced under CAD1.00.**
• Numerous commenters believed that harmonizing fee caps with an amended SEC rule would be beneficial for U.S. Inter-listed Securities. • Some commenters suggested considering extending the reduced fee caps to non- U.S. Inter-listed Securities. However, most of these commenters also cautioned against doing so without extensive analysis and consultations.

- One commenter believed that if the decision is made to reduce tick sizes for Canadian non- U.S. Inter-listed Securities, a maximum access fee should be capped at 50% of the Regulation NMS requirement for the same trading increment; also, a fee for posting liquidity on inverted markets should be limited to the maximum access fee for the same stock.
- One commenter submitted that:
    - if the SEC lowers both the minimum tick size and access fee, Canadian fee caps for U.S. Inter-listed Securities should be harmonized with non-U.S. Inter-listed Securities, currently at CAD 0.0017, or be higher, in case SEC's cap is at or above that number.
    - if the SEC lowers the minimum tick size but maintains the current access fee cap, Canadian regulators should increase the fee cap for non-U.S. Inter-listed Securities to CAD 0.0030 to harmonize it with the cap for U.S. Inter-listed Securities.
    - if the SEC maintains the current minimum tick size but lowers the access fee caps, the Canadian fee cap for U.S. Inter-listed Securities should be harmonized with those for non-U.S. Inter-listed Securities, currently at CAD 0.0017, or be higher, in case SEC's cap is at or above that number.
    - if the SEC maintains the current minimum tick size and current access fee, fee caps for non-U.S. Inter-listed Securities should be increased to be harmonized with fee caps for U.S. Inter-listed Securities.