

ALPHA EXCHANGE INC.

NOTICE OF PROPOSED AMENDMENTS AND REQUEST FOR COMMENTS

Alpha Exchange Inc. (“**Alpha**” or “**we**”) is publishing this Notice of Proposed Amendments and Request for Comments in accordance with the “Process for the Review and Approval of Rules and the Information Contained in Form 21-101F1 and the Exhibits Thereto” regarding amendments to the Alpha Trading Policy Manual (the “**Alpha Rules**”) to (i) introduce two new order books on Alpha; (ii) make changes to Alpha’s order processing delay; and (iii) make other ancillary amendments, all as described below (collectively, the “**Amendments**”).

Market participants are invited to provide comments. Comments should be in writing and delivered by April 3, 2023 to:

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Senior Counsel, Regulatory Affairs
TMX Group
100 Adelaide Street West, Suite 300
Toronto, Ontario M5H 1S3
Email: tsxrequestforcomments@tsx.com

A copy should also be provided to:

Market Regulation Branch
Ontario Securities Commission
20 Queen Street West
Toronto, Ontario M5H 3S8
Email: marketregulation@osc.gov.on.ca

Comments will be made publicly available unless confidentiality is requested. Upon completion of the review by staff at the Ontario Securities Commission (“**OSC**”), and in the absence of any regulatory concerns, a notice will be published to confirm approval by the OSC.

Background and Rationale for the Amendments

(i) *Alpha-X™ and Alpha DRK™ - New Order Books*

Alpha intends to introduce two new order books: (i) one order book being visible (sometimes referred to as a “lit order book”) (“**Alpha-X**”); and (ii) the other order book being non-visible (sometimes referred to as a “dark order book”) (“**Alpha DRK**”, and together with **Alpha-X**, the “**New Order Books**”). Alpha proposes to launch the New Order Books in Q3 of 2023, subject to applicable approvals and client readiness. The New Order Books will leverage the well-established trading infrastructure of TMX Group Limited (“**TMX**”), as well as the existing expertise of TMX’s business, and technical groups, which will facilitate the development and implementation

of the New Order Books. The New Order Books will only trade securities listed on Toronto Stock Exchange (“**TSX**”) and TSX Venture Exchange (“**TSXV**”).

The New Order Books will be available to all Alpha members (“**Members**”) at no additional membership fee.

The New Order Books will introduce: (i) on Alpha-X, in addition to the existing trading functionalities and order types currently available on Alpha, a visible limit order type, which is discretionary in nature (“**Smart Limit™**”) (the “**Smart Limit Amendments**”); (ii) on Alpha DRK, certain of the dark order types currently available on TSX and TSXV (Mid-point Peg, Primary Peg, Market Peg, Minimum Price Improvement Peg, and Dark Limit/Market); (iii) on Alpha DRK, a dark peg order type, which is discretionary in nature (“**Smart Peg™**”) (the “**Smart Peg Amendments**”); and (iv) on Alpha and the New Order Books, a static order processing delay (“**Static Order Processing Delay**”).

The introduction of the New Order Books provides platforms on which TMX can introduce innovative trading solutions, such as Smart Limit and Smart Peg orders, without incurring the risk of potential disruption that may accompany similar innovation on TSX, TSXV or Alpha. In addition, the New Order Books are not expected to have inverted fee models (where participants are charged for providing liquidity, which may make it more costly for natural participants) and as a result we expect broader adoption of the innovative new features introduced to improve execution quality. The fee model for the New Order Books will be subject to regulatory approval.

(ii) *Smart Peg and Smart Limit Amendments*

In the current multi-marketplace environment, certain market participants may receive market data more quickly than others, giving them the most up-to-date view of the national best bids and offers (the “**NBB**” and “**NBO**”, together comprising the “**NBBO**”) on the Canadian market, allowing them to take favorable action. This is known as “latency arbitrage”, whereby some market participants are able to take advantage of their view of the NBBO to anticipate future price changes based on activity happening on the various marketplaces in Canada. This latency advantage exists for both active and passive orders: on the active side, by sending aggressive orders to execute against resting liquidity at soon-to-be-stale prices; and on the passive side, by canceling or moving aside their resting orders before other market participants are able to trade against them.

There have been attempts by marketplaces, including TMX, to mitigate the impact of latency arbitrage. On TSX, liquidity providers that rest their visible orders are paid a rebate, up to \$23 for every 10,000 shares executed on their resting order, to compensate them for their risk. The approach taken on Alpha is to leverage a random-duration order processing delay, whereby active orders incur a 1-3 millisecond (“**ms**”) delay to reach the market, which gives time for some Members to receive quote updates and determine whether or not the NBBO will change, and adjust the price on their resting orders if desired. Any market participant willing to commit liquidity

to the Alpha book may bypass the order processing delay via passive-only orders greater than a security-specific minimum size.

Overall, a best execution analysis is based on a variety of factors. In our view, “markouts” are a standard way of measuring execution quality of *resting orders* on a marketplace. At a high level, “markouts” are a measure of what the market does (on average) *after* a participant gets a fill. For example, a participant buys at \$10.00 at time T, and the price goes down to \$9.99 10ms later (T+10ms). This means that the participant has paid more than they should have had they waited 10ms. This is referred to as a “negative markout”. In contrast, if the price 10ms later increases to \$10.01, this would be considered a “positive markout”, indicating that the participant has bought at a good price. Markouts are typically always negative (as the act of getting hit for liquidity by its nature will, on average, remove quotes). However, it is the relative difference from one marketplace to another that is worth comparing.

Markouts can be improved in one of two ways: (1) attracting active order flow earlier in participants’ routing tables when liquidity exists on multiple markets (i.e. the Canadian order book is “deep”), typically via inverted pricing; or (2) moving one’s orders away from a “decaying” quote (i.e. a decreasing NBB or increasing NBO) to avoid being impacted by latency arbitrage. When comparing other marketplaces’ markouts with Alpha, we found that Alpha markouts were indeed better to a greater degree due to its inverted pricing as well as the order processing delay providing some protection against latency arbitrage.

We believe there is room for further improvement. Not every participant is able to move its order away from a “decaying” quote. A study of orders within Alpha showed that faster participants tend to have better markouts than slower, more natural participants. As such, we developed a proprietary signal, known as the TMX Quote Decay Signal™ (“**TMX QDS™**”), to predict quotes likely to imminently “decay”. We also conducted a study measuring markouts of Alpha orders¹ that were executed during “decaying” quote conditions as predicted by the TMX QDS and found that these orders tended to have more negative markouts. This suggests that execution quality could be improved on such orders by providing functionality to move orders out of the way during “decaying” market conditions.

Given our analysis showing that there is opportunity for improvement in the Canadian markets, we are proposing to introduce discretionary order types on the New Order Books to give Members the ability to minimize the effects of latency arbitrage. We expect that the introduction of the discretionary order types (Smart Limit and Smart Peg) will result in improved execution quality, better markouts, and greater client satisfaction.

(iii) *Static Order Processing Delay*

As noted and described above, the order processing delay currently on Alpha was implemented as a means to minimize the impact of latency arbitrage. Members willing to provide liquidity to

¹ In a study of trades on Alpha from October 1 - 28, 2021.

the Alpha order book are exempted from the Alpha order processing delay. In order to bypass the order processing delay, a Member's order must be marked as post-only (i.e., orders that are not executed immediately), guaranteeing that it will not execute upon entry, and meet a minimum order size requirement. The minimum order size is security-specific and calculated based on the security's historical traded price.

Based on consultation with TMX's trading participant community, it has become apparent that any potential benefit associated with the order processing delay randomization (i.e., from 1 to 3ms) is countered by the complexity it adds and the difficulty it introduces to participants using algorithmic trading. There is a strong consensus that the randomization should be removed, and consequently, Alpha is currently anticipating changing the order processing delay to a static order processing delay as follows: (i) on Alpha, a 1-millisecond processing delay; and (ii) Alpha-X and Alpha DRK, a 10-millisecond processing delay. Based on our research and client consultations, we believe that removing the randomization component, and introducing the static delay period in its place, will not result in "gaming" of the order processing delay, and some Members may be able to benefit from a more predictable static delay.

The Static Order Processing Delay will be implemented on Alpha in Q2 2023, and on Alpha-X, and Alpha DRK in Q3 2023.

As set out in the Alpha Rules, the duration of the order processing delay is determined by Alpha and notice must be provided to Members of such determination. Such discretion will continue to apply on Alpha and will apply to the New Order Books.

Outline of the Amendments, and Approach

(i) Alpha-X and Alpha DRK - New Order Books

The Alpha-X order book will have all of the same order types and trading functionalities available on Alpha today. In addition, new order types and functionalities will be introduced that are only available on the New Order Books. Hence, while amendments are not required for the majority of the Alpha Rules to accommodate the New Order Books, including the Smart Peg and Smart Limit Amendments and the Static Order Processing Delay, certain changes will be made to the Alpha Rules to reflect the Amendments:

1. Table of Contents - The Table of Contents will be updated to include new sections entitled "Part V.1. Trading on Alpha-X", and Part V.2. Trading on Alpha DRK, and new subsections entitled "Order Types", "Self-Trade Prevention", and "Allocation of Trades - Establishing Price and Time Priority", as applicable, to reflect the New Order Books, including the new order types. Consequently, certain page numbers in the Table of Contents will also be updated to reflect the new additions to the Alpha Rules.
2. Definitions - The definition of "Alpha" will be amended to introduce the New Order Books, unless otherwise specified in the Alpha Rules.

3. Interpretation - A new provision will be added to clarify that all references to Alpha in Alpha Requirements (as defined in the Alpha Rules) also apply to the New Order Books, unless otherwise specified in the Alpha Rules.
4. Order Entry - Unattributed Orders - This provision will be amended to replace the reference to "Alpha order book" to "Alpha", so that it also applies to the New Order Books.
5. Trading on Alpha-X and Alpha DRK - New sections will be added to the Alpha Rules to reflect the various order types and attributes available on the New Order Books, as applicable:
 - a. Order Types - A new provision will be added to the Alpha Rules to indicate that in addition to the existing order types currently available on Alpha and set out in the Alpha Rules, the New Order Books will also include the following order types: (i) Primary Peg; (ii) Market Peg; (iii) Minimum Price Improvement Peg; (iv) Mid-point Peg; (v) Dark (Limit/Market); (vi) Smart Peg; and (vii) Smart Limit. Primary Peg, Market Peg, Minimum Price Improvement Peg, Mid-point Peg, Dark (Limit/Market), and Smart Peg are all dark order types with no pre-trade visibility and may interact with each other. Please see the section entitled "Smart Peg and Smart Limit Amendments" below for a detailed description of the proposed amendments relating to these order types, and the related rationale. Primary Peg, Market Peg, Minimum Price Improvement Peg, Mid-point Peg, and Dark (Limit/Market) are dark order types that are currently available on TSX and TSXV. Unlike currently on TSX and TSXV, none of the dark order types on Alpha DRK will interact with any lit order type.
 - b. Self-Trade Prevention - A new provision will be added to the Alpha Rules to indicate that in addition to the self-trade prevention mechanisms set out in the Alpha Rules, a new No Cancel (XM) self-trade prevention mechanism will be available for Primary Peg, Market Peg, Minimum Price Improvement Peg, Mid-point Peg, Dark (Limit/Market) and Smart Peg order types on Alpha DRK. This optional feature prevents two orders from the same broker executing against each other based on unique trading keys defined by the broker. Instead of trading against a resting order from the same broker with the same unique trading key, the active order is booked. This same self-trade prevention feature currently exists on the dark order books for TSX and TSXV.
 - c. Allocation of Trades - Establishing Price and Time Priority - The current provisions in the Alpha Rules regarding establishing price and time priority will be duplicated in the new section of the Alpha Rules relating to the New Order Books. However, these provisions will be amended to reflect the allocation priority of the new order types in the New Order Books.

Currently, execution priority on Alpha is established as follows:

1. **Price** (best price gets priority, i.e., highest bid and lowest offer)
2. **Broker** (incoming orders will match with other orders from the same dealer, providing neither order is marked as “anonymous”, ahead of similarly priced orders from other dealers, before time priority is considered)
3. **Time** (orders entered first get priority over orders entered after them)

An undisclosed portion of an order does not have broker priority or time priority until it is disclosed. An order loses its time priority if its volume is increased.

This provision will be amended to reflect the New Order Books, including the new order types described herein:

Alpha-X

1. **Price**
2. **Broker** (including orders marked as anonymous)
3. **Time** (Please also see the section entitled “Alpha-X - Smart Limit” below.)

Alpha DRK

1. **Price**
2. **Broker** (including Smart Peg orders and orders marked as anonymous)
3. **Booked** (orders trading at their booked prices are prioritized over Smart Peg orders trading at discretionary prices)
4. **Time**

Trades on dark orders are subject to any minimum quantity and minimum interaction size or other conditions as optionally indicated on a Member’s order.

Please see “Examples of Smart Peg Priority” and “Examples of Smart Limit Priority” below.

(ii) Smart Peg and Smart Limit Amendments

Alpha DRK - Smart Peg

The Smart Peg order is a new dark order type that will rest (i.e., will be “booked”) at a price pegged to the same side NBBO (i.e., NBB for buy orders, NBO for sell orders), with an optional offset in ticks as specified by the Member. The Smart Peg order will be available only on Alpha DRK.

In addition to trading at its booked price, a Smart Peg order is permitted to execute more aggressively, up to the midpoint of the NBBO, as its limit price permits. In this way, a Smart Peg

order is able to execute with more immediacy when there is an opportunity to do so. When a Smart Peg order executes at a more aggressive price than its booked price, the execution price is referred to as its “**Discretionary Price**”. Because the Discretionary Price is not a firm price (i.e., it depends on the limit price of the order it is executing against), a Smart Peg order with a Discretionary Price executes only after all other orders have been executed at that price level. Among Smart Peg orders executing at the same price, broker-time priority applies.

When a resting Smart Peg order has the opportunity to trade against an incoming active order, it does so at the best (least aggressive) price possible. For example, if the NBBO is \$10.00 - \$10.06 (with the midpoint being \$10.03) and a Smart Peg buy order is resting at \$10.01, having been entered with an offset of 1 tick, then it may trade at the following prices against an incoming sell order:

1. Sell limit \$10.04 - Smart Peg order may not trade - Sell limit is higher than NBBO midpoint
2. Sell limit \$10.03 - Smart Peg order may trade at \$10.03 (Discretionary price)
3. Sell limit \$10.02 - Smart Peg order may trade at \$10.02 (Discretionary price)
4. Sell limit \$10.01 - Smart Peg order may trade at \$10.01 (booked price)
5. Sell limit \$10.00 or lower - Smart Peg order may trade at its booked price of \$10.01

In short, the Smart Peg order will trade at the active order’s limit price, or its own booked price, whichever is less aggressive from the active order’s perspective.

The examples below illustrate how Smart Peg orders are prioritized among other orders.

Examples of Smart Peg Priority

In the following scenarios, the order book is as follows:

NBBO: \$10.01 / \$10.05

NBBO Midpoint: \$10.03

Buy orders are entered in the following order:

Order #	PO	Order Type	Limit	Booked	Comments
1	A	Smart Peg (offset = 0)	\$10.03	\$10.01	<i>Booked at the NBB + offset, but can execute up to NBBO midpoint</i>
2	B	Smart Peg (offset = 0)	\$10.05	\$10.01	
3	C	Smart Peg (offset = 1)	\$10.04	\$10.02	
4	D	Mid-point Peg	\$10.04	\$10.03	Booked at the NBBO midpoint
5	E	Dark Limit	\$10.02	\$10.02	Booked at its entered limit price

Order #	PO	Order Type	Limit	Booked	Comments
6	B	Primary Peg (offset = 1)	\$10.03	\$10.02	Booked at 1 tick from the NBB
7	C	Dark Limit	\$10.02	\$10.02	Booked at its entered limit price

The scenarios below enumerate allocation priorities when an active sell order is received from a particular Member, with order volume large enough to interact with all resting buy orders.

The resulting allocation priority of each of the buy orders is shown below.

Sell PO = B

Sell limit price = \$10.02

Trade Price	Rank of Priority	Order #	PO	Order Type	Comments
\$10.03	1	4	D	Mid-point Peg	Price Priority over all other orders
\$10.02	2	6	B	Primary Peg	Broker Pref Priority at this price, over all other regular orders and Smart Peg orders trading at discretionary prices
\$10.02	3	2	B	Smart Peg	<i>Broker Pref Priority at this price, behind Order 6 as it is a Smart Peg order trading at a discretionary price</i>
\$10.02	4	3	C	Smart Peg	<i>Time Priority over other orders as it is an trading at its booked price</i>
\$10.02	5	5	E	Dark Limit	Time Priority over Order 7, and priority over Smart Peg orders trading at discretionary prices
\$10.02	6	7	C	Dark Limit	Priority over Smart Peg orders trading at discretionary prices
\$10.02	7	1	A	Smart Peg	<i>Lowest priority - Smart Peg order trading at a discretionary price</i>

Sell PO = C

Sell limit price = \$10.03

Trade Price	Rank of Priority	Order #	PO	Order Type	Comments
\$10.03	1	3	C	Smart Peg	Broker Pref Priority over all other tradeable orders
\$10.03	2	4	D	Mid-point Peg	Priority over Smart Peg orders trading at discretionary prices
\$10.03	3	1	A	Smart Peg	Time Priority over Smart Peg Order 2 trading at a discretionary price
\$10.03	4	2	B	Smart Peg	Lowest priority - Smart Peg order trading at a discretionary price

TMX Quote Decay Signal

As noted above, we are proposing to introduce the Smart Limit Amendments to help improve execution quality and provide additional protection from latency arbitrage. As part of the Amendments, the TMX QDS will be used to signal when a Smart Limit order would need to take protective action.

Utilizing real time public market data, the TMX QDS detects conditions that may indicate that a symbol's NBB or NBO is about to "decay" (i.e., that its NBB may be about to decrease or its NBO may be about to increase) to the disadvantage of resting orders at the current price levels.

When an imminent quote "decay" condition is detected, the TMX QDS sends an indicative message (the "on" signal) to Alpha. A short interval later, the TMX QDS follows this message with a second message (the "off" signal) to Alpha. Accordingly, from Alpha's perspective, the signal state for the NBB and NBO for each traded symbol is either "on" or "off". The behavior of the Smart Limit orders on Alpha-X is influenced by this signal state, as detailed below.

The TMX QDS will be in operation during continuous trading hours (9:30am - 4:00pm ET).

Alpha-X - Smart Limit

The Smart Limit order is a new visible order type, to be available only on Alpha-X, whose booked price is influenced by the TMX QDS. If the TMX QDS is "off" at time of entry, a Smart Limit order books at its limit price.

When the TMX QDS turns “on”, resting Smart Limit orders are automatically repriced one tick less aggressive than the NBB/NBO (the “**Smart Limit Booked Price**”). This repricing provides immediate protection against any new incoming orders looking to execute at a price which is about to become “stale”, and allows time for Members to take further action as desired, such as canceling their Smart Limit orders or amending them to more appropriate prices.

If a Smart Limit order is entered while the TMX QDS is “on”, it is automatically repriced as described above.

When the TMX QDS turns “off”, the following actions are taken on the repriced Smart Limit order:

- If the quote **did** become less aggressive while the TMX QDS was “on” (i.e., its quote “decay” prediction was valid), then the Smart Limit order is left at its repriced value.
 - If the quote is **subsequently** improved (after becoming less aggressive) by another order while the TMX QDS is “off”, the Smart Limit order joins the more aggressive quote (respecting the original limit) while maintaining original time.
- If the quote **did not** become less aggressive while the TMX QDS was “on” (i.e. its quote “decay” prediction was invalid), then the Smart Limit order is repriced back to its previous value.

Smart Limit orders retain their time priority when they are repriced as a result of the TMX QDS turning “on” or “off”.

Aside from the repricing mechanism based on the TMX QDS, a Smart Limit order may have the same features and behavior as are available to any other visible limit order, including how undisclosed portions of iceberg orders are prioritized. The TMX QDS operates, and re-pricing only occurs, during continuous trading hours (9:30am - 4:00pm ET); outside of this time, a Smart Limit order behaves as a regular limit order.

A Smart Limit order can never be repriced to be more aggressive than its original limit price.

Examples of Smart Limit Priority

NBBO: \$10.00 / \$10.04

Buy orders are entered in the following order:

Order #	PO	Order Type	Limit Price	Comments
1	A	Iceberg Limit	\$9.99	Booked at limit price
2	B	Smart Limit	\$9.99	Booked at limit price (if TMX QDS is “off”)

Order #	PO	Order Type	Limit Price	Comments
3	C	Smart Limit	\$10.00	Booked at limit price (if TMX QDS is "off")
4	D	Limit	\$9.98	Booked at limit price
5	A	Limit	\$9.99	Booked at limit price

An aggressive sell order is received with an order volume large enough to interact with all 5 of the buy orders above.

The resulting priority of each of the buy orders is shown below. Note that, while the TMX QDS is "off", Smart Limit orders trade at their limit price in price/broker/time priority.

Sell PO = B
 TMX QDS is "off":

Trade Price	Rank of Priority	Order #	PO	Order Type	Comments
\$10.00	1	3	C	Smart Limit	Price priority at Smart Limit entered limit price.
\$9.99	2	2	B	Smart Limit	Broker Preference priority over order 1 at Smart Limit entered limit price
\$9.99	3	1	A	Iceberg Limit	Displayed portion of iceberg order; time priority over order 5 at this price level
\$9.99	4	5	A	Limit	Priority over undisplayed volume at this price level
\$9.99	5	1	A	Iceberg Limit	Undisplayed portion of iceberg order
\$9.98	6	4	D	Limit	Lowest price level

Sell PO = A

TMX QDS is "on". Smart Limit orders repriced to \$9.99, one tick less aggressive than the NBB.

Trade Price	Rank of Priority	Order #	PO	Order Type	Comments
\$9.99	1	1	A	Iceberg Limit	Displayed portion of iceberg limit order; broker pref and time priority at this price
\$9.99	2	5	A	Limit	Broker pref priority at this price
\$9.99	3	2	B	Smart Limit	<i>Time priority over order 4 at this price</i>
\$9.99	4	3	C	Smart Limit	<i>Lowest priority among displayed liquidity at this price, as this Smart Limit order has been repriced from \$10.00 to \$9.99</i>
\$9.99	5	1	A	Iceberg Limit	Undisplayed portion of iceberg order
\$9.98	6	4	D	Limit	Limit order; lowest price level

(iii) Static Order Processing Delay

The Static Order Processing Delay will be available on Alpha (1-millisecond processing delay), Alpha-X and Alpha DRK (10-millisecond processing delay). No amendments to the Alpha Rules are required to reflect the change from the randomized order processing delay on Alpha to the proposed Static Order Processing Delay.

As set out above, the Alpha Rules permit Alpha to determine the duration of the order processing delay, and require Alpha to provide notice to Members of such determination. We intend to implement the Static Order Processing Delay on Alpha in Q2 2023 (regardless of whether the other Amendments regarding the New Order Books as described herein are approved and/or implemented), and the required notice will be provided to Members prior to implementation of the change. The Static Order Processing Delay will be implemented on Alpha-X and Alpha DRK in Q3 2023.

Blackline of Amendments

A blackline of the Amendments against the existing rules is attached as **Appendix A** hereto for ease of reference.

Analysis of Impacts

(i) Impact on Market

We anticipate that the Amendments will have a positive impact on the market structure, Members, investors, issuers or the capital markets. We believe that the Amendments are fair and reasonable, and will not create barriers to access.

With respect to the New Order Books generally (their creation, and their existence as an additional venue on which trades can be executed), we do not anticipate that the New Order Books will negatively impact the market as a whole. The presence of the Static Order Processing Delay ensures that the New Order Books will not be considered protected markets and as such, Members will not be required to incorporate market data from the New Order Books into their regulatory obligations (i.e., the Order Protection Rule); this minimizes any potential burden that the New Order Books might place on the trading community. Members that wish to utilize the New Order Books will, however, need to consume market data from the New Order Books.

With respect to the Smart Peg and Smart Limit Amendments, the amendments are expected to have a positive impact on the markets. As noted above, we expect the Smart Peg and Smart Limit Amendments to offer protection from latency arbitrage, and may result in some Members receiving better pricing on their orders. Our study of Alpha orders and applying the TMX QDS, showed that the Smart Limit order type could result in better markouts, representing better pricing. It is expected that by using Smart Limit or Smart Peg orders, Members will gain confidence in their execution quality and be able to post larger sized orders. This may improve the depth of liquidity in the markets, have a positive impact on price discovery, and benefit the market as a whole.

Since Smart Peg orders are a dark order type, such orders would not have an impact on visible orders. We anticipate that Smart Peg orders will result in greater liquidity in the dark market, and have a positive impact on the markets in general.

(ii) Impact on Members and Service Vendors

The Amendments are expected to have a positive impact on Members.

With respect to the New Order Books as a whole, their addition to the Canadian equity trading ecosystem provides unique value for Members who wish to post liquidity in an environment with protections against latency arbitrage. Members who choose to obtain access to the New Order

Books are required to connect via one additional FIX order entry session, which will be included in their existing session bundles.

We anticipate Members will need to undertake some development work to use the new order types in the New Order Books, and Members to adjust their trading strategies generally to account for the New Order Books and the accompanying new order types.

Market data vendors may also need to undertake development work in order to consume the new market data from the New Order Books.

(iii) Impact on Compliance with Applicable Securities Laws

The Amendments will not impact Alpha's compliance with applicable securities laws and in particular the requirements for fair access and maintenance of fair and orderly markets. Alpha is of the view that the Amendments will support the maintenance of fair and orderly markets.

Timing

Following receipt of regulatory approval, we intend to implement the Static Order Processing Delay on Alpha in Q2 2023, and the other Amendments (i.e., the New Order Books, including the new order types) in Q3 2023, subject to client readiness.

APPENDIX A

BLACKLINED VERSION OF ALPHA RULES REFLECTING THE AMENDMENTS

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[...]	
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PART I. Definitions and Interpretations		
1.1 Definitions		
	[..]	
Alpha	TSX Alpha Exchange marketplace, including Alpha-X and Alpha DRK unless otherwise specified herein.	
	[...]	
1.2 INTERPRETATION		
	[...]	
	(13) All references to Alpha in Alpha Requirements also apply to Alpha-X and Alpha DRK, unless otherwise stated herein.	
	[...]	
PART V. Governance of Trading Sessions		
	[...]	
DIVISION 2 - ORDER ENTRY		
	[...]	
5.15 UNATTRIBUTED ORDERS		
(1)	Members and Electronic Access Clients may enter orders on an attributed or unattributed basis.	
	Commentary: When an order is entered in an Alpha-order book , the identity of the Member will be disclosed to the trading community for attributed orders and will not be disclosed for unattributed (anonymous) orders.	
	[...]	
PART V. Governance of Trading Sessions		
	[...]	
DIVISION 4 - CONTINUOUS TRADING SESSION		
5.18 ESTABLISHING PRICE AND TIME PRIORITY		

(1) An order entered in the CLOB at a particular price will be executed in priority to all orders at inferior prices.

(2) Broker preference whereby incoming orders will match with other orders from the same dealer (excluding orders marked as anonymous) ahead of similarly priced orders from other dealers, before time priority is considered.

~~(2)~~(3) An order at a particular price will be executed prior to any orders at the same price entered subsequently in time, and after all orders at the same price entered previously ('time priority').

~~(3)~~(4) An undisclosed portion of an order does not have time priority until it is disclosed.

~~(4)~~(5) An order loses its time priority if its disclosed volume is increased

PART V.1. Trading on Alpha-X

In addition to the trading policy features and characteristics detailed herein, which apply to the Alpha system as a whole, the following section applies only to Alpha-X.

DIVISION 1 — ORDER ENTRY

5.1.1 ORDER TYPES

In addition to the order types enumerated above for Alpha, the following order types are also available on Alpha-X:

- Smart Limit

The order types on Alpha-X do not interact with order types on Alpha or Alpha DRK.

DIVISION 2 — CONTINUOUS TRADING SESSION

5.1.2 ALLOCATION OF TRADES – ESTABLISHING PRICE AND TIME PRIORITY

(1) An order entered in the visible CLOB at a particular price will be executed in priority to all orders at inferior prices.

(2) Broker preference whereby incoming orders will match with other orders from the same dealer (excluding orders marked as anonymous) ahead of similarly priced orders from other dealers, before time priority is considered.

(3) An order at a particular price will be executed prior to any orders at the same price entered subsequently in time, and after all orders at the same price entered previously ('time priority').

Note: Smart Limit orders retain their time priority when they are repriced per the design of the Smart Limit order type.

(4) An undisclosed portion of an order does not have broker preference priority or time priority until it is disclosed.

(5) An order loses its time priority if its disclosed volume is increased.

Note: Crosses may be entered without interference from resting orders at the cross price.

PART V.2. Trading on Alpha DRK

In addition to the trading policy features and characteristics detailed herein, which apply to the Alpha system as a whole, the following section applies only to Alpha DRK.

DIVISION 1 — ORDER ENTRY

5.2.1 ORDER TYPES

In addition to the order types enumerated above for Alpha, the following order types are also available on Alpha DRK:

- Primary Peg
- Market Peg
- Minimum Price Improvement Peg
- Mid-point Peg
- Dark (Limit/Market)
- Smart Peg

These order types have no pre-trade transparency and do not interact with orders on Alpha or Alpha-X.

5.2.2 SELF-TRADE PREVENTION

In addition to the self-trade prevention mechanisms set out herein, the following self-trade prevention mechanism is only available for order types available on Alpha DRK:

(1) No Cancel (XM)

An optional feature that prevents two orders from the same broker from executing against each other based on unique trading keys defined by the broker. An active order is rejected instead of trading against a resting order from the same broker with the same unique trading key.

DIVISION 2 — CONTINUOUS TRADING SESSION

5.2.3 ALLOCATION OF TRADES – ESTABLISHING PRICE AND TIME PRIORITY

(1) An order entered at a particular price will be executed in priority to all orders at inferior prices.

- (2) Broker preference (including Smart Peg orders and orders marked as anonymous) in time priority at a particular price level, subject to any minimum quantity and minimum interaction size or other conditions.
- (3) At a particular price level, an order trading at its booked price will be executed in priority over all Smart Peg orders trading at discretionary prices.
- (4) An order at a particular price will be executed prior to any orders at the same price entered subsequently in time, and after all orders at the same price entered previously ('time priority').