ALPHA-X AND ALPHA DRK FAQ



As at December 20, 2023

GENERAL

1. WHY DO WE NEED A NEW MARKET?

We see an unfulfilled need in the Canadian marketplace - a venue which democratizes the trading experience among faster and slower participants, and offers a platform where the natural investor can post liquidity with protections against adverse selection and more favourable markouts as a result.

Similar approaches have been taken in other jurisdictions. We have taken the opportunity to bring these concepts to Canada.

2. WHAT IS THE NEW MARKET?

The new market consists of two order books - the visible Alpha- X^{TM} order book and the fully dark Alpha DRKTM order book. Unlike the visible and dark orders on TSX and TSXV, these order books do not interact with each other.

3. WHY CAN'T WE JUST USE TSX ALPHA EXCHANGE OR TORONTO STOCK EXCHANGE?

TSX Alpha Exchange ("Alpha") is an established marketplace with its own order processing delay (or "speedbump"), whose inverted fee model make the economics unsuitable for the class of natural investor the new order books are intended to attract. In addition, introducing a new market allows us to provide innovative trading solutions without the risk of potential disruption on our existing markets (Alpha, TSX and TSXV).

4. WHAT IS ALPHA-X? HOW IS IT DIFFERENT FROM ALPHA?

Alpha-X is similar to Alpha, in that it supports all of the order types and trading functionalities available on Alpha. The main differences are:

- Alpha-X's fee model is make-take, different from Alpha's inverted fee structure.
- Alpha-X's speedbump is longer than Alpha's.
- In addition to the Alpha order types, Alpha-X also includes the Smart Limit[™] order type with its ability to reprice in response to unstable market conditions.

5. WHAT IS ALPHA DRK? HOW IS IT DIFFERENT FROM TSX DRK™?

Alpha DRK supports the standard pegged and limit Dark order types currently offered on TSX and TSXV, excluding the CMO+ and Conditional order types, and the SDL and PDL order types necessitated by the interactivity of Dark and displayed liquidity on those markets. In addition, Alpha DRK includes the Smart Peg[™] order type, which pegs on the passive side of the quote and has the discretionary ability to trade at more aggressive prices against incoming orders, up to the midpoint of the protected NBBO.

6. WHAT SYMBOLS CAN WE TRADE ON ALPHA-X AND ALPHA DRK?

All securities listed on TSX and TSXV are tradeable on Alpha-X and Alpha DRK.

7. HOW DO WE LIST SECURITIES ON THE NEW MARKET?

Like Alpha, the new market is not a listing market.

8. WHAT IS THE MEMBERSHIP FEE ON THE NEW MARKET?

There is no charge to become a member of Alpha-X and Alpha DRK.

ORDER PROCESSING DELAY

9. WHAT'S THE ORDER PROCESSING DELAY ON THE NEW MARKET?

The new market includes an order processing delay, or "speedbump", whose characteristics are similar to those on Alpha - orders marked Post Only and of sufficient size are exempt from the delay. The speedbump applies to both Alpha-X and Alpha DRK, with a static length of 3 milliseconds, longer than the speedbump on Alpha today.

10. WHY IS THE SPEEDBUMP 3 MILLISECONDS LONG?

The speedbump's 3-millisecond length is a result of careful analysis of post-trade markouts, and is designed to provide optimal protection from adverse selection.

NEW ORDER TYPES

11. HOW DO SMART LIMIT ORDERS WORK?

Smart Limit $^{\text{TM}}$ orders behave like regular limit orders, with the following enhancements:

- If the quote is likely to imminently decay (as predicted by the TMX Quote Decay Signal™ (TMX QDS™) - see below), resting Smart Limit™ orders are repriced one tick more passive than the current quote.
- If the quote winds up not decaying, the repriced Smart Limit[™] orders are restored to their original limit prices.
- If the quote improves after decaying, the repriced Smart Limit[™] orders are again repriced, following the improving quote, up to their original limit prices.

12. WHAT'S THE EXECUTION PRIORITY ON ALPHA-X?

The execution priority on Alpha-X is the same as on Alpha today:

- 1. price; then
- 2. broker preferencing (excluding anonymous orders); then
- 3. priority time

Note that when Alpha-X reprices a Smart Limit order on your behalf, the order gets a new priority time.

13. HOW DO SMART PEG ORDERS WORK?

Smart Peg orders are similar to Primary Peg orders, in that they peg at or near the passive side of the quote; in addition, Smart Peg orders have the ability to trade at more aggressive ("discretionary") prices, up to the midpoint of the quote.

14. WHAT'S THE EXECUTION PRIORITY ON ALPHA DRK?

The execution priority on Alpha DRK is:

- 1. price; then
- 2. orders trading at their booked prices vs. discretionary prices; then
- 3. broker preferencing (excluding anonymous orders)

Note that a Smart Peg order trading at a discretionary price never has execution priority over any orders booked at that price.

15. WITH THESE NEW ORDER TYPES, WHOSE RESPONSIBILITY ARE BEST-EXECUTION REQUIREMENTS?

The Smart Peg and Smart Limit order types are intended to improve execution quality on Alpha DRK and Alpha-X, respectively. The Smart Peg and Smart Limit order types do not alleviate, and market participants continue to be responsible for, best execution requirements under National Instrument 23-101 - Trading Rules and the Universal Market Integrity Rules.

16. WHAT IS THE TMX QUOTE DECAY SIGNAL? HOW DOES IT WORK?

The TMX Quote Decay Signal, or "TMX QDS", is a system which examines public market data in real time and makes predictions on quotes which are likely to imminently decay. It uses a type of machine learning (ML) called "Decision Trees" to create a trained predictive model. This approach is more transparent and humaninterpretable than many other ML techniques.

17. WHAT IS A QUOTE "DECAY" ANYWAY?

A quote "decay" is the movement of the protected NBB or NBO in the passive direction, leaving resting orders at that price vulnerable to adverse selection. For example, a protected NBB change on a symbol from \$10.00 to \$9.99 is a guote decay.

MARKET DATA & CONNECTIVITY

18. WHERE ARE THE NEW ORDER BOOKS LOCATED?

Clients can access the new order books at our existing Markham data center at 3500 Steeles, with DR location at 130 King W.

19. DO I NEED NEW FIX OE SESSIONS TO CONNECT TO THE NEW MARKET?

Yes. The new market is partitioned alphabetically into two "slices", similar to TSXV: A-L symbols on one slice and M-Z symbols on the other. You need two new order entry sessions, one for each slice. Both Alpha-X and Alpha DRK can be accessed through the same sessions.

20. ARE CLIENTS REQUIRED TO CERTIFY?

No additional certification is required to connect to the new order books.

21. HOW DO I ORDER FIX ORDER ENTRY SESSIONS?

FIX OE sessions are available via request through TMX Axis TM . All standard features are available on the new sessions; e.g. COD, drop-copy, etc.

22. ARE DROP COPIES AVAILABLE FOR ALPHA-X AND ALPHA DRK?

Drop copies are available in the same format and messaging as supplied on existing TMX marketplaces.

23. WHAT ABOUT MARKET DATA? ARE THERE NEW FEEDS?

Yes, there are new QTRMD, QFS and broadcast feeds for Alpha-X and Alpha DRK together. These feeds have the same structure as the existing TSX/V and Alpha feeds, with the same recovery mechanisms and decryption keys (new decryption keys not required).

24. WHAT DO YOU CHARGE FOR TRADING ON THE NEW MARKET?

Details are TBD, but the structure of Alpha-X will be make-take and that of Alpha DRK will be take-take. The Smart Limit and Smart Peg order types will have premium rates.

Note that all trading on Alpha-X and Alpha DRK will be free of charge until February 2024.

25. WHAT IS THE CHARGE FOR MARKET DATA FROM THE NEW MARKET?

There is no charge in the initial stages for Alpha-X and Alpha DRK market data feeds.

26. WHAT CHANGES CAN WE EXPECT WITH CLEARING AND SETTLEMENT?

CDS supplies execution data as it currently does with TSX/TSXV/Alpha. Executions from Alpha-X and Alpha DRK are included with Alpha executions under the same market identifier 'XATP'. Individual executions can be identified by their MIC codes on the trade records: 'XATS' for Alpha, 'XATX' for Alpha-X and 'ADRK' for Alpha DRK.



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