

# Appendix 1: Functional Overview



## 1.1 Notable functional differences between the current Alpha platform and Alpha on TMX Quantum:

Product/Feature Category	Current Alpha Product/Feature	Alpha on TMX Quantum Product/Feature
Order Entry Protocols	Alpha FIX EMAPI	TSX- FIX 4.2 TSX STAMP
Data Feeds	Alpha Top of Book Feed Alpha Top Five Feed Alpha Price Depth Feed Alpha Full Book Feed Alpha Private Order Book Flow	Alpha Broadcast Feed Alpha Level 1 Feed Alpha Level 2 Feed Alpha Quantum Level 1 Feed Alpha Quantum Level 2 Feed Alpha Reconciliation Feed
Market Sessions	Opening session	The Opening session will employ the same rules and features that are available in the TSX/TSX Venture Market on Open
Volatility control mechanisms	<p><b>Price Bands</b> Price bands set limits where if a tradable order would trade through the price band, the order will trade up to the price band parameter and the remaining balance will be cancelled.</p>	<p><b>Bid Ask Tick Limits</b> Limits applied to market and better priced limit orders which restrict how many price ticks past the bid/offer an order can trade.</p> <p><b>Freeze Limits</b> Freeze limits are established by applying a pre-determined price deviation against the most recent reference price (primarily the marketplace's last sale price). If executing an order will cause the price of the security to exceed the freeze limit there will be a temporary suspension of trading on the security.</p>
Self Trade Management	<p><b>Self Trade Management</b> A designation that suppresses trades which occur in the continuous trading session from the public feed, and prevents trades between two Dark orders in the IntraSpread™ facility, where orders on both sides of the trade are from the same Member and contain the same “self trade key” set by the Member.</p>	<p><b>Self Trade Management</b> A designation that suppresses trades which occur in the continuous trading session from the public feed, and prevents trades between two Dark orders in the IntraSpread™ facility, where orders on both sides of the trade are from the same Member and contain the same “self trade key” set by the Member.</p> <p><b>Self Trade Prevention</b> An optional feature that prevents two orders from the same broker from executing against each other based on</p>





## 1.2 Current features to be discontinued with Alpha on TMX Quantum:

Based on historic demand and current use the following features will be retired from the Alpha Exchange

Product Category	Feature
Market Sessions	Market on Close
Order Durations	Good-till-Time
Order Types	Inside Match order Price improvement Iceberg Limit on Open Market on Open Market on Close Route at Close

## 1.3 Summary of Order Entry and Data Feed Specification Changes

The table below summarizes the notable order entry and broadcast data feed specification changes associated with the Alpha Integration. (Please reference the release notes for each specification for a complete list of changes to the protocols)

Feature	Description	FIX OE	STAMP OE	Broadcast Feed
Alpha destination instruction	Indicates the order must be routed to Alpha Exchange	100ExDestination = XATS	607 ExDestination = XATS	607 ExDestination = XATS
SDL order	An IOC order that trades with eligible IntraSpread Dark and CLOB orders depending on the match attribute.	7731SeekDarkLiquidity 1 = Trade with dark and lit volume 2 = Trade with price improving dark orders* 3 = Trade with dark only*	613 SeekDarkLiquidity 1 = Trade with dark and lit volume 2 = Trade with price improving dark orders* 3 = Trade with dark only*	613 SeekDarkLiquidity 1 = Trade with dark and lit volume 2 = Trade with price improving dark orders* 3 = Trade with dark only*
Midpoint Dark order	An IntraSpread dark order that will only execute at the midpoint of the NBBO within the IntraSpread facility.	7726TSXUndisplayed =Y 7723 TSXPegtype = M 40 Ordertype = P	604 Undisplayed =Y 597 PegType = M	604 Undisplayed =Y 597 PegType = M
Touch Dark order	An IntraSpread Dark order that is pegged to the same side of the NBBO (Buy pegged to the bid, Sell	7726TSXUndisplayed =Y 7723 TSXPegtype = R 40 Ordertype = P	604 Undisplayed =Y 597 PegType = R	604 Undisplayed =Y 597 PegType = R



Feature	Description	FIX OE	STAMP OE	Broadcast Feed
	pegged to the offer)			

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attribute