TMX | Toronto Stock Exchange | TSX Venture Exchange | Select | Alpha

Order Types and Functionality Guide

TMX Equity Markets

Toronto Stock Exchange | **TSX Venture Exchange** | **TMX Select** | **Alpha** | Montreal Exchange | BOX | NGX | Shorcan
The Canadian Depository for Securities Limited | Canadian Derivatives Clearing Corporation
TMX Datalinx | TMX Atrium | TMX Technology Solutions | Equicom

Document Management

This document shall be updated on an annual basis, or with any newly introduced features or functionality, whichever occurs sooner, by the TMX Markets product & sales team. It is available in both English and French on the ~~TMX website~~TMX website.

Scope

This document provides an overview of trading on all ~~four~~three TMX equity markets; Toronto Stock Exchange, TSX Venture Exchange~~, TMX Select~~ and TSX Alpha Exchange. It is intended to provide an introduction to the functional operation and order types of each market and serve as a reference for new and existing trading participants.

For details on becoming a member, fees, connectivity and technical specifications, or additional information related to trading, please refer to the links below or contact a TMX Account Manager.

References	Link
TMX Trading Policies	http://tmx.complinet.com/en/tsx_rulebook.html http://tmx.complinet.com/en/tsxv_rulebook.html http://www.tsx.com/resource/en/4 http://www.tsx.com/resource/en/1069
TMX Fee Schedule	http://www.tsx.com/trading/toronto-stock-exchange/fee-schedule http://www.tsx.com/trading/tsx-venture-exchange/fee-schedule http://www.tsx.com/trading/tmx-select/fee-schedule http://www.tsx.com/trading/alpha/fee-schedule
TMX Specifications (FIX and STAMP) **available to registered users only*	https://www.tcbdata.com/tmxequitymarkets/login.cfm
TMX Datalinx	http://www.tmxinfoservices.com/?lang=en
UMIR Rules	www.iiroc.ca/industry/rulebook/Pages/UMIR-Marketplace-Rules.aspx
Investment Industry Regulatory Organization of Canada	www.iiroc.ca
Ontario Securities Commission	www.osc.gov.on.ca

Table of Contents

Document Management 3

Scope 3

1 Overview 7

1.1 KEY CONTACTS 7
1.2 REGULATION 8
1.3 ORDER AND TRADE REPORTING 8

2 Trading Sessions 9

2.1 HOURS OF OPERATION 9
2.2 PRE-OPEN 10
2.2.1 CALCULATED OPENING PRICE (COP) 10
2.3 OPENING 11
2.3.1 OPENING ALLOCATION 12
2.3.2 GUARANTEED ORDERS 13
2.3.3 DELAYED OPENING 14
2.4 CONTINUOUS TRADING 14
2.5 MARKET ON CLOSE (MOC) 19
2.5.1 MOC-ELIGIBLE SECURITIES 19
2.5.2 PARTICIPATING IN MOC 20
2.5.3 MOC IMBALANCE DETERMINATION 21
2.5.4 MOC IMBALANCE 21
2.5.5 CALCULATED CLOSING PRICE 21
2.5.6 PRICE MOVEMENT EXTENSION 21
2.5.7 CLOSING CALL ALLOCATION 21
2.5.8 MOC VOLATILITY PARAMETERS 22
2.6 POST MARKET CANCEL SESSION 22
2.7 EXTENDED TRADING SESSION 22
2.8 MUST BE FILLED (MBF) SESSION FOR OPTION EXPIRY 22

3 Products & Order Features 24

3.1 ROUTING 24
3.1.1 AUTOMATED JITNEY ARRANGEMENT 24
3.2 DARK TRADING 25
3.2.1 DARK TRADING ON TSX AND TSXV 25

3.3 Cancel on Disconnect **26**
3.3.1 Configuration Levels 27
3.4 Order Protection Rule (OPR) Features **28**
3.4.1 Directed Action Order (DAO) 28
3.4.2 Order Protection by Re-price 28
3.4.3 Order Protection by Cancel 28
3.4.4 OPR Route Out Service 28
3.5 Post Only **28**
3.6 Drop Copy **30**
3.7 Self Trade Prevention **30**
3.7.1 Self Trade Management 32

4 Order Types **35**

4.1 Change Former Order instructions (CFO) **35**
4.2 Market Orders **35**
4.3 Limit Orders **36**
4.4 Duration **37**
4.4.1 Day Orders 37
4.4.2 Good Til Cancelled (GTC) 37
4.4.3 Good Til Date (GTD) 37
4.4.4 Immediate or Cancel (IOC) 38
4.4.5 Fill or Kill (FOK) 38
4.5 On-Stop Orders **39**
4.6 Iceberg Orders **42**
4.7 Short Sales **43**
4.7.1 Short Marking Exempt (SME) marker 43
4.8 Anonymous Orders **44**
4.8.1 Broker Preferencing 44
4.9 Dark Orders **45**
4.10 Bypass Orders **45**
4.11 Cross Types **45**
4.11.1 Basis Cross 46
4.11.2 VWAP Cross 46
4.11.3 Contingent Cross 46
4.11.4 Internal Cross 47
4.11.5 Bypass Cross 47
4.11.6 Special Trading Session Cross 47
4.12 Order Features **47**
4.12.1 TSX Alpha Order Processing Delay 47
4.12.2 Minimum Guaranteed Fill (MGF) 47
4.12.3 Buy-ins 48

5 Market Maker Program & Odd Lot Dealer System 49

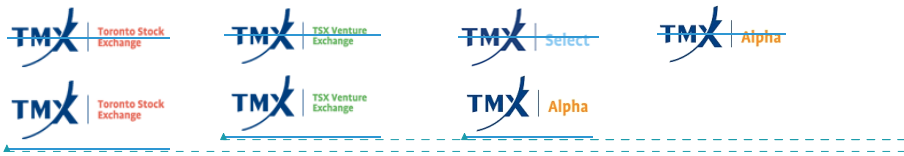
5.1 TSX Market Maker Program 49
5.1.1 Odd Lots 50
5.1.2 Minimum Guaranteed Fill (MGF) Size 50
5.1.3 RT Participation 52
5.2 TSXV Odd Lot Dealer Program 55
5.3 TSX Alpha Odd Lot Dealer Program 55
5.4 Electronic Liquidity Provision (ELP) Program 55

6 Other Features 56

6.1 Minimum Ticks 56
6.1.1 Standard Trading Units 56
6.1.2 Standard Trading Price Increments 56
6.2 Trading Controls 57
6.2.1 Halts 57
6.2.2 Freeze Parameters 57
6.2.3 Bid/Ask Limits 57
6.2.4 Single Stock Circuit breakers 58
6.3 Order Markers 58
6.3.1 NCIB Marker 58
6.4 Account Types 58
6.5 Debentures 59
6.6 USD-Denominated securities 59
6.7 Clearing Arrangements 59
6.7.1 Clearing give-up 59
6.7.2 Special Settlement Terms 59
6.8 Erroneous Trade and Trade Amendment Policy 59
6.9 Reports 60
6.9.1 Daily Diary Files 60
6.9.2 Compliance Alerts Reporting System (CARS) 60
6.10 Fees & Billing 61

1 Overview

TMX Group operates ~~four~~three fully electronic marketplaces that represent the primary trading destinations of choice and sources of liquidity for equity trading in Canada.



Canada's primary market. The largest and most recognized source of liquidity for Canadian equity trading of senior board securities	Canada's public venture equity marketplace dedicated to trading junior equities from around the world during their early stages of growth	~~An alternative marketplace to trade TSX and TSX Venture securities, offering streamlined order types, extended trading hours and no broker preferencing~~TSX Alpha Exchange provides a competitive alternative for the active order flow of natural investors by promoting a higher quality of execution through increased fill certainty and sizes and lower trading costs.	~~Specializing in trading securities popular with retail investors and offering the renowned Intraspread™ dark pool designed with retail investors' interests in mind~~

Field Code Changed
Field Code Changed
Field Code Changed

Each marketplace is supported by TMX's proprietary Quantum XA technology platform, and offer different features, functionality, and pricing to offer choice and flexibility of execution to various trading participants.

1.1 Key Contacts

The TMX Markets Account Management team is your resource for information on being a Participating Organization / Member of TMX's equity marketplaces, new trading products and services, and how to access Canada's capital markets efficiently. We are dedicated to providing Participating Organizations / Members and the investment community with a high level of customer service and support. Support is available from 7:30 am – 5:00 pm on all trading days.

CONTACT	PHONE	EMAIL
Account Management	1-877-421-2369	trading_sales@tsx.com

Trading Services	416-947-4357	trading_services@tsx.com
Vendor Services	416-947-4705	vendor_services@tsx.com

1.2 Regulation

The Investment Industry Regulatory Organization of Canada (IIROC) is the self-regulatory organization (SRO) which oversees all trading activity on TMX's equity marketplaces. IIROC regulates securities trading and market-related activities of participants, and administers and enforces the Universal Market Integrity Rules (UMIR) which applies to all participants trading on TMX Group equity marketplaces. All markers, identifiers, and order types required by UMIR and/or IIROC are supported by TMX's equity marketplaces. .

1.3 Order and Trade Reporting

Order and trade messages which include both public and private data may be submitted to the TMX through ~~either STAMP or~~ the TSX FIX order entry ~~protocols~~protocol through the client's order entry connection. Corresponding responses will be sent to the client through this connection.

TMX also provides a broadcast feed which provides real-time public trade and quote, as well as the participant's private data associated with all its trades and orders.

TMX provides real-time market data feeds in the proprietary STAMP and TMX eXtreme Message Transfer (XMT) protocols. STAMP Level 2 data feed is a real-time data transmission service that provides pre- and post-trade data delivered in a tag based data format and variable record length messages. TMX XMT Level 1 and Level 2 data feeds are a real-time data transmission service that provides pre- and post-trade data delivered in a binary data format and fixed record length messages.

Level 1 content includes equity quote and equity trade information. Level 2 content includes full depth of book equity order and trade information.

2 Trading Sessions

2.1 Hours of Operation

The following trading session hours of operation are as follows:

TSX and TSX Venture Exchange

TIME (ET)	SESSION
7:00 AM – 9:30 AM	**Pre Open** – Orders may be entered, but will not be executed. The COP is displayed and continuously updated.
9:30 AM	**Market on Open (MOO)** – All matching orders are executed at a single opening trade price with any remaining orders carrying through to the continuous limit order book.
9:30 AM – 4:00 PM	**Continuous Trading** – All regular order types are accepted.
3:40 PM – 4:00 PM	**Market On Close (MOC)** – Cut-off for MOC orders is at 3:40. MOC imbalance is published at 3:40 after which Limit on Close (LOC) orders opposite to the imbalance side are accepted (subject to a price collar) into the non-displayed MOC facility. Trades publish at 4:00 unless a Price Movement Extension is required, in which case trades publish at 4:10.
4:10 PM – 4:15 PM	**Post Market Cancel Session** – During this session, open orders may be cancelled by the dealer.
4:15 PM – 5:00 PM	**Extended Trading Session** – Orders at the last sale price are accepted, but trades may only occur at the last sale price except for regulatory approval of a specialty price cross. Day orders participate in this session. MBF session for option expiry takes place during Extended Trading once per month, the evening before an option expiry day.

~~TMX Select~~

TSX Alpha

TIME (ET)	SESSION
7:00 AM – 8:00 AM	**Pre Open** – New orders or CFO's are not allowed, only cancels are permitted
8:00 AM – 5:00 PM	**Continuous Trading** – At 8:~~00, the market transitions into~~00am continuous trading commences. All regular order types are accepted.

~~Alpha~~

~~TIME (ET)~~	~~SESSION~~
~~7:00 AM – 9:30 AM~~	~~**Pre Open** – Orders may be entered, but will not be executed. The COP is displayed and continuously updated.~~
~~9:30 AM – 4:00 PM~~	~~**Continuous Trading** – At 9:30, the Opening Call transitions the market into Continuous Trading. All regular order types are accepted.~~
~~4:00 AM – 4:15 PM~~	~~**Post Market Cancel Session** – During this session, open orders may be cancelled by the dealer.~~

~~4:15 PM – 5:00 PM~~	~~**Extended Trading** – Orders at the last sale price are accepted, but trades may only occur at the Alpha Last Sale Price except for regulatory approval of a specialty price cross. Regular Day orders participate in this session, while Good for Day orders expire at 4:00 and do not participate.~~

2.2 Pre-Open

The TSX, TSX Venture and TSX Alpha markets support a pre-open session. During the TSX and TSX Venture pre-open session, market and limit priced orders can be entered but will not be executed until the market opens. Limit orders that were previously booked as GTC or GTD are available to be CFO'ed and/or cancelled during this session. Odd lot orders may be entered as well.

During the TSX Alpha pre-open session new orders or order amendments are not permitted. Orders resting in the TSX Alpha order book may be canceled.

2.2.1 Calculated Opening Price (COP)

The COP is calculated as follows. It is displayed and continuously updated during the entire Pre-Open session on the TSX~~, TSXV~~ and ~~Alpha~~TSXV.

1. The COP is determined as the price where the most shares can trade.
2. If there is more than one price that satisfies the first criterion, then the COP is the price that leaves the least imbalance.
3. If there is more than one price that satisfies the second criterion, then the COP is the price that is closest to the previous trading day's Closing Price. (The TSX/TSXV closing price is used on TSX/TSXV markets~~, and the Alpha Last Sale Price is used on the Alpha market~~)

The following orders participate in the COP calculation:

- Previously booked duration orders (GTC or GTD)
- Regular board lot sized market and limit orders received during the pre-open session; odd lots do not contribute to COP formation
- The entire disclosed and undisclosed portions of iceberg orders are included in the COP calculation; however the remaining imbalance will not include the reserve volume of any icebergs

Orders priced more aggressively than the current COP are displayed at the COP price instead of revealing their true limit price. Market priced orders are also displayed at the COP instead of revealing their unconditional market price.

Example: Calculated Opening Price

Assume at 9:00 am, the following orders exist in the system:

Previous Day's Close price: $10.02

Bid			Offer		
Order # 001	1000	10.00	MKT	200	Order # 002
Order # 003	200	9.99	9.99	500	Order # 004
Order # 005	200	9.99	10.00	100	Order # 006
			10.01	100	Order # 007

Possible Open Prices:

Price	Tradable Volume	Remaining Imbalance	Deviation from Prev. Day's Close Price
$10.01	0	-	$0.01
$10.00	800	Bid of 200	$0.02
$9.99	700	Bid of 700	$0.03
$9.98	0	-	$0.04

The COP will be: **$10.00** since this price maximizes the tradable volume.

2.3 Opening

~~**TMX Select**~~

~~TMX Select only~~ **TSX Alpha**

TSX Alpha supports ~~day orders and does not support~~ a pre-open session~~.~~ where only cancels are permitted. Odd lots resting in the Odd lot book with a price equal to or more aggressive than the opposite NBBO will auto-execute at the NBBO against the odd lot dealer prior to transitioning into the continuous trading session. The market transitions directly into continuous trading at 8:~~00 am.~~ 00am. The continuous first trade of the day is subject to price volatility (freeze) parameters based on the listing market's (i.e. TSX / TSXV) previous day closing price.

TSX~~, TSXV~~ and ~~Alpha~~TSXV

The TSX~~, TSXV~~ and ~~Alpha~~TSXV support a Market on Open (MOO), which is a visible single price opening call market at 9:30 am. Any surviving orders are automatically carried forward into the continuous trading session. A few minor differences exist between TSX~~, TSXV~~ and ~~Alpha~~TSXV:

TSX	TSXV ~~& Alpha~~
Registered Market Makers (a.k.a. RTs) • Auto-execute odd lots • Can enable participation • Guarantee a minimum fill size for client orders (MGF)	Odd Lot Dealers (OLD) • Auto-execute odd lots • No participation • No guaranteed fills
Must Be Filled orders supported	Must Be Filled orders not supported

2.3.1 Opening Allocation

At the opening call, matching of orders is performed sequentially at the COP (Note each starts with orders from the imbalance side using the total volume of guaranteed fill[1] orders and then limit orders priced at the COP, allocated to orders from the non-imbalance side)

1. Trade with the disclosed volume of offsetting Guaranteed Fill orders entered by the same PO, provided that neither order is an unattributed or jitney order; then
2. Trade with the disclosed volume of offsetting Guaranteed Fill orders, then
3. Trade with the disclosed volume of offsetting limit orders priced at the COP entered by the same PO, according to time priority, provided that neither order is an unattributed or jitney order; then
4. Trade with the disclosed volume of offsetting limit orders priced at the COP according to price/time priority; then
5. Trade with the undisclosed volume of offsetting Guaranteed Fill orders, according to time priority; then
6. Trade with the undisclosed volume of offsetting limit orders priced at the COP according to time priority

When trades are executed in the Opening Auction, the COP sets the last sale price. If there are no trades at the Opening, the close price from the previous trading day sets the open price.

If the round lot portion of a mixed lot order is fully filled in the Opening Auction, the odd lot portion of the order is auto-executed at the COP.

Undisclosed portions of iceberg orders have the same priority as disclosed portions. If during the opening allocation, the displayed portion of an iceberg order partially trades, its remaining displayed volume retains priority after the opening.

There is no distinction between Active or Passive orders during the Opening Allocation. Please refer to the TSX Markets Fee Schedule posted on the TMX website for more information on opening fees.

On the TSX, ~~Must Be Filled (MBF) orders~~Must Be Filled (MBF) orders for option expiry are treated the same as any other regular market priced order in the opening and the MBF marker is not publicized on any of these orders.

[1] The following orders are guaranteed a complete fill at the Calculated opening price (COP): MBF, MKT and Better Price Limit orders (those priced better than the COP). Undisclosed order volume of Iceberg orders that meet these criteria are not guaranteed a fill if the order is on the side that has the imbalance

~~**Example: Opening Allocation**~~

~~Assume at 9:30 am, the following orders exist in the system:~~

~~COP: $10.00~~

~~Bid~~				~~Offer~~			
~~Time~~	~~Broker~~	~~Qty~~	~~Price~~	~~Price~~	~~Qty~~	~~Broker~~	~~Time~~
~~Order 001~~	~~A~~	~~1000~~	~~10.00~~	~~MKT~~	~~200~~	~~79~~	~~Order 002~~
~~Order 003~~	~~B~~	~~200~~	~~9.99~~	~~9.99~~	~~500~~	~~79~~	~~Order 004~~
~~Order 005~~	~~C~~	~~200~~	~~9.99~~	~~10.00~~	~~100~~	~~80~~	~~Order 006~~
				~~10.01~~	~~100~~	~~2~~	~~Order 007~~

~~The following trades are allocated in the following order:~~

~~Trade~~	~~Buy Order #~~	~~Sell Order #~~	~~Volume~~	~~Price~~
~~#1~~	~~001~~	~~002~~	~~200~~	~~$10.00~~
~~#2~~	~~001~~	~~004~~	~~500~~	~~$10.00~~
~~#3~~	~~001~~	~~006~~	~~100~~	~~$10.00~~

~~Resulting order book:~~

~~Bid~~			~~Offer~~		
~~Order 001~~	~~200~~	~~10.00~~	~~10.01~~	~~100~~	~~Order 007~~
~~Order 003~~	~~200~~	~~9.99~~			
~~Order 005~~	~~200~~	~~9.99~~			

Example: Opening Allocation

Assume at 9:30 am, the following orders exist in the system:

COP: $10.00

Bid				Offer			
Time	Broker	Qty	Price	Price	Qty	Broker	Time
Order 001	A	1000	10.00	MKT	200	79	Order 002
Order 003	B	200	9.99	9.99	500	79	Order 004
Order 005	C	200	9.99	10.00	100	80	Order 006
				10.01	100	2	Order 007

The following trades are allocated in the following order:

Trade	Buy Order #	Sell Order #	Volume	Price
#1	001	002	200	$10.00
#2	001	004	500	$10.00
#3	001	006	100	$10.00

Resulting order book:

Bid			Offer		
Order 001	200	10.00	10.01	100	Order 007
Order 003	200	9.99			
Order 005	200	9.99			

2.3.2 Guaranteed Orders

On TSX~~/TSXV~~ and ~~Alpha~~TSXV, aggressively priced displayed limit orders that are better than the COP and displayed market priced orders are both guaranteed to trade fully in the opening. Non-displayed portions of these orders will contribute to COP formation but the non-displayed portions are not guaranteed. A guarantee means that the security will not open unless the guaranteed portions of

these orders are completely filled. In the event that the guaranteed portions of orders are not filled the security will move into a Delayed Open state.

2.3.3 Delayed Opening

The opening occurs automatically at 9:30 am unless otherwise delayed due to either:

1. A **systematic delay** due to a price movement relative to the previous day's closing price beyond acceptable system parameters configured by TMX staff. Most opening delays are systematic due to price movements, and typically cleared within a few minutes.
2. A **manual delay** initiated by either the market maker or TMX staff where more time is needed to validate an appropriate opening price. In the case of a manual delay, depending on which of the parties has initiated the delay either the market maker or TMX staff will open the market manually.
3. An **automatic delay** due to an unfilled imbalance of guaranteed orders. In the case of an automatic delay the market is opened manually (re-scheduled or immediately) by TMX staff once the imbalance of guaranteed orders has been resolved. (Either more liquidity is provided to offset the guaranteed portions of orders or the guaranteed orders themselves are either removed or price adjusted.)

Special openings in unusual circumstances can be delayed longer and scheduled by TMX staff to open at a specific time to coincide with other external events.

During an opening-delay orders can still be entered and/or cancelled until the opening takes place. A rescheduled opening can be cancelled and either further delayed or opened immediately.

2.4 Continuous Trading

TSX/TSXV

TSX and TSX Venture operate a real-time, continuous auction market that matches individual orders with continual price discovery from 9:30 AM to 4:00 PM in the central limit order book (CLOB). This period is referred to as the Regular Session. All regular order types are accepted during this session.

During the regular session, orders are individually displayed in the CLOB. Displayed portions of CLOB orders are given trading priority based on price/broker/time priority. Broker priority does not apply if either side has marked their order Anonymous or Jitney. For more information, see the Broker Preferencing section.

At a given price, orders will be processed in the following sequence:

1. Broker Preference amongst displayed portions (in time priority if multiple matches exist).
2. Displayed portions of all other orders (in time priority if multiple matches exist).
3. At this step, if the incoming order was marked 'bypass' the undisplayed portions of icebergs are replenished and there is no further matching.
4. Undisplayed portions of icebergs (in time priority if multiple matches. There is no broker preferencing amongst undisplayed portions of icebergs).

5. Broker preference amongst non-displayed (dark) volume with a Minimum Quantity in time priority
6. Dark order volume with a Minimum Quantity in time priority
7. Broker preference amongst dark volume without a Minimum Quantity in time priority
8. Dark order volume without a Minimum Quantity in time priority
9. Any remaining portion of the incoming order is then booked or cancelled (depending on the trader's "duration" instructions).

TSX Alpha

TSX Alpha also operates a real-time, continuous auction market that matches individual orders with continual price discovery from ~~9:30~~8:00 AM to 45:00 PM in the central limit order book (CLOB). This period is referred to as the Regular Session. All regular order types are accepted during this session.

During the regular session on TSX Alpha, the same price/broker/time priority exists as on TSX/TSXV, with the exception of interactions with dark orders.

At a given price, orders will be processed in the following sequence:

1. Broker Preference amongst displayed portions (in time priority if multiple matches exist).
2. Displayed portions of all other orders (in time priority if multiple matches exist).
3. At this step, if the incoming order was marked 'bypass' the undisplayed portions of icebergs are replenished and there is no further matching.
4. Undisplayed portions of icebergs (in time priority if multiple matches exist. There is no broker preferencing amongst undisplayed portions of icebergs).

Example: Matching Priority on TSX / TSXV / Alpha during Continuous Trading

Assume the CLOB is as follows: (ordered in time priority)

Last Sale Price: $10.00

Bid				Offer			
Broker	Total Qty	Visible Qty	Price	Price	Visible Qty	Total Qty	Broker
A		1000	9.99	10.01	200		A
B		200	9.99	10.01	500		B
C	10,000	100	9.99				
D		100	9.99				

An incoming order is received from Broker B to Sell 5000 @ Market

The following trades take place in the following order:

Buyer	Seller	Volume	Price	Comments
B	B	200	9.99	Given same price level, seeks same-broker order first
A	B	1000	9.99	Given same price level, and no same-broker orders remain, will prioritize by time
C	B	100	9.99	
D	B	100	9.99	
C	B	3600	9.99	Iceberg volume reloads to fill the entire remaining quantity of the active order

Resulting order book:

Bid				Offer			
Broker	Hidden Qty	Qty	Price	Price	Qty	Hidden Qty	Broker
C	6,300	100	9.99	10.01	200		A
				10.01	500		B

Example: Matching Priority on TSX / TSXV / TSX Alpha during Continuous Trading

Assume the CLOB is as follows: (ordered in time priority)

Last Sale Price: $10.00

Bid				Offer			
Broker	Total Qty	Visible Qty	Price	Price	Visible Qty	Total Qty	Broker
A		1000	9.99	10.01	200		A
B		200	9.99	10.01	500		B
C	10,000	100	9.99				
D		100	9.99				

An incoming order is received from Broker B to Sell 5000 @ Market

The following trades take place in the following order:

Buyer	Seller	Volume	Price	Comments
B	B	200	9.99	Given same price level, seeks same-broker order first
A	B	1000	9.99	Given same price level, and no same-broker orders remain, will prioritize by time
C	B	100	9.99	
D	B	100	9.99	
C	B	3600	9.99	Iceberg volume reloads to fill the entire remaining quantity of the active order

Resulting order book:

Bid				Offer			
Broker	Hidden Qty	Qty	Price	Price	Qty	Hidden Qty	Broker
C	6,300	100	9.99	10.01	200		A
				10.01	500		B

Cross Interference on TSX~~,~~ and TSXV and TSX Alpha

During continuous trading an attributed cross will seek to match previously booked attributed orders from the same PO at the cross price. The side of the cross that remains unfilled (because it gives up this volume) is then killed immediately. Regular crosses are subject to this "cross interference" and only allowed at or inside the best bid/ask but some specialty crosses are exempt from these rules. See the Crosses section for more detail.

~~**TMX Select**~~

~~Select executes trades on a strict price-time priority. Cross interference does not exist on Select because there is no broker priority. Displayed portions of orders are given trading priority based on price-time priority. At any given price level after all displayed portions are exhausted, the non-displayed portions of icebergs and then non-displayed orders are given priority based on time. Orders that are not matched are booked in the CLOB for subsequent matching, subject to any special handling instructions. Select only supports day orders; Duration orders are not accepted.~~

Example: Matching Priority on Select during Continuous Trading

Assume the CLOB is as follows: (ordered in time priority)

Last Sale Price: $10.00

Bid			Offer		
Broker	Qty	Price	Price	Qty	Broker
A	1000	9.99	10.01	200	A
B	200	9.99	10.01	500	B
C	100	9.99			

An incoming order is received from Broker B to Sell 5000 @ Market

The following trades take place in the following order:

Buyer	Seller	Volume	Price	Comments
A	B	1000	9.99	Given same price level, seeks the order with highest time priority
B	B	200	9.99	Given same price level, seeks order with next highest time priority
C	B	100	9.99	Given same price level, seeks order with next highest time priority

Remaining volume books at the LSP - resulting order book:

Bid			Offer		
Broker	Qty	Price	Price	Qty	Broker
			9.99	3700	B
			10.01	200	A
			10.01	500	B

Cross Interference on TSX Alpha

During continuous trading attributed or unattributed crosses will not be subject to interference from orders in the TSX Alpha CLOB.

2.5 Odd Lot trading

TSX/TSXV

Orders with volume less than a standard trading unit are considered Odd Lot and do not trade in the regular CLOB. The majority of listed securities are assigned an RT on TSX and Odd lot dealer on TSXV. The RT/odd lot dealer automatically guarantees a complete fill at the TSX/TSXV BBO for incoming Odd Lot orders priced at or better than the opposite TSX/TSXV BBO. If the Odd Lot order's price is not marketable the Odd Lot order is displayed in the Odd Lot book and will trade at it's limit price with the RT/odd lot dealer once it's price becomes better than or equal to the opposite side TSX/TSXV BBO. If an opposite side Odd Lot order is entered with the exact same volume and priced at or better than a resting Odd Lot order's price, then the odd lots can trade against each other. For stocks with no RT/odd lot Dealer, odd lots can only trade against each other in the manner described above and without regard to the TSX/TSXV BBO. Odd lots only trade as "All or None" which means partial fills are not accepted. It is possible for the Odd Lot book to display orders with overlapping prices when resting odd lot orders can match on price but not on volume.

TSX Alpha

Orders with volume less than a standard trading unit are considered Odd Lot and do not trade in the regular CLOB. The majority of TSX Alpha traded securities are assigned an Odd lot dealer. The Odd lot dealer automatically guarantees a complete fill at the NBBO for incoming Odd Lot orders priced at or better than the opposite side's NBBO price. If the Odd Lot order's price is not marketable the Odd Lot order is displayed in the Odd Lot book and will trade at it's limit price with the Odd lot dealer once it's price becomes better than or equal to the opposite side NBBO. If an opposite side Odd Lot order is entered with the exact same volume and priced at or better than a resting Odd Lot order's price, then the odd lots can trade against each other. For stocks with no RT/Odd lot Dealer, odd lots can only trade against each other in the manner described above and without regard to the NBBO. Odd lots only trade as "All or None" which means partial fills are not accepted. It is possible for the Odd Lot book to display orders with overlapping prices when resting odd lot orders can match on price but not on volume.

~~2.5~~2.6 Market on Close (MOC)

The Market on Close (MOC) facility is an electronic call market that establishes the closing price for eligible listed stocks on Toronto Stock Exchange and TSX Venture Exchange. The MOC facility is a value added service for Toronto Stock Exchange (TSX) / TSX Venture Exchange (TSXV) providing equal access and opportunity in setting the closing price, increased price discovery efficiency, and reducing the volatility of the closing price for symbols eligible for the MOC facility.

The facility provides a fair benchmark for the fund management industry and provides a mechanism to minimize tracking error caused by deviations from the closing price. Derivative traders also benefit from the MOC facility as they require reliable benchmark closing prices for index related securities for basis, swaps, and options trades.

The MOC facility was introduced to TSX in 2004 and has since been widely adopted as an efficient and effective mechanism to establish the closing price. The facility was further extended to TSXV in 2012 to aid in portfolio and index rebalancing activities for recent Venture indices and index tracking ETFs.

Initially the MOC facility was introduced on TSX for the constituents of the S&P/TSX Composite Index. With the increase in the number of indices and the increase in the number of ETFs, there has been steady growth in the symbols added to the MOC facility.

Currently TSX and TSX Venture support a MOC session, available for specified securities. TSX Alpha ~~and Select do~~does not support a MOC session.

~~2.5.1~~2.6.1 MOC-Eligible Securities

All TSX listed equities and ETPs (which include ETFs, ETNs and ETRs) are eligible for the TSX MOC Facility. Currently TSX Venture MOC eligibility is restricted to constituents the S&P/TSX Venture Select Index.

~~2.5.2~~2.6.2 Participating in MOC

The MOC book is independent and runs in parallel with the CLOB. Orders in the MOC book are not disseminated publically. MOC trades occur as a result of interaction between the three following types of orders:

1. **MOC orders**: are priced at "market" and will only execute at the MOC calculated closing price. MOC orders are entered into the MOC book between 7:00 am - 3:40 pm and are queued in time priority. MOC orders cannot be cancelled after the imbalance is published at 3:40 pm and may be board lot, mixed lot or odd lot sized orders with regular settlement terms. MOC orders may be marked short, for jitney purposes, and/or anonymous.
2. **Limit on Close (LOC) orders**: are limit orders that will only trade at the calculated closing price. LOC orders may be board lot, mixed lot or odd lot sized orders .LOC orders are accepted prior to the imbalance publication on either side of the order book without restrictions on their limit price.

   After the published imbalance (from 3:40 – 4:00 pm) LOC orders are only accepted subject to the following restrictions.

   a. the order must be on the opposite side of the imbalance,
   b. the order's volume must not exceed the published imbalance, and
   c. must be within PME % of the last board lot sale price.

   Between 4:00 pm and 4:10 pm if a PME extension is necessary due to price volatility

   LOC orders are only accepted subject to the following restrictions.

   a. the order must be on the opposite side of the imbalance,

   b. the order's volume must not exceed the published imbalance, and

   c. must be within CPA % of the last board lot sale price.

   Cancelling and modifying LOC orders

   9:00am – 3:40pm: LOC orders may be cancelled or modified.

   3:40pm – 4:00pm: Pre-imbalance LOC orders that contributed to the imbalance determination cannot be cancelled or modified. Pre-imbalance LOC orders that did not contribute to the imbalance publication may be cancelled; Post imbalance LOC orders may be cancelled or modified.

   4:00pm-4:10pm: LOC orders may not be cancelled or modified
3. **CLOB orders**: Regular limit orders that have been placed in the central limit order book and remain open in the book at 4:00 pm are eligible to be drawn into the MOC facility in order to satisfy the MOC imbalance. Note that LOC orders and CLOB orders compete equally to satisfy the MOC imbalance. Non-displayed portions of CLOB orders (icebergs) are allocated last relative to other CLOB or LOC orders at the same price. Dark orders do not participate.

~~2.5.3~~2.6.3 MOC Imbalance Determination

MOC orders and LOC orders that are priced equal to or more aggressive than the TSX or TSXV Best-Bid-and-Offer (BBO) mid-point at the time of the calculation will be considered when determining the MOC imbalance. The imbalance side and size will be determined as the difference between the aggregate eligible buy MOC/LOC volume and aggregate eligible sell MOC/LOC volume.

~~2.5.4~~2.6.4 MOC Imbalance

At 3:40 pm, MOC imbalance messages are disseminated through the broadcast feeds identifying the imbalance side (Buy/Sell), imbalance volume and TSX or TSXV best bid and offer midpoint at the time the imbalance was determined. This one-time notification provides an opportunity to offset the imbalance using LOC orders between 3:40 and 4:00 pm.

~~2.5.5~~2.6.5 Calculated Closing Price

At 4:00 pm, the calculated closing price ("CCP") is determined by combining the orders in the MOC Book with those in the central limit order book. The CCP is validated by comparing the PME to the last sale price of the security, and/or the VWAP of the last 20 minutes of trading for the security. If the CCP does not violate the PME parameter then the symbol will close at the CCP and trades will be published, otherwise a price movement extension (PME) period between 4:00 pm and 4:10 pm will be initiated for that symbol.

MOC will fill all MOC orders against other offsetting MOC orders and offsetting LOC orders and offsetting CLOB orders up to a maximum price volatility percentage. This metric is known as the Closing Price Acceptance (CPA) parameter.

~~2.5.6~~2.6.6 Price Movement Extension

The PME period is designed to solicit further liquidity to offset a remaining imbalance. During the PME, limit orders, on the contra-side of the imbalance may be entered into the MOC book, such orders are not displayed. At 4:10 pm the CCP is recalculated and validated against the closing price acceptance ("CPA") parameters, which is a price control parameter that is used to either accept or reject the CCP that is derived from the PME. If there is a violation of the CPA parameter, the symbol will close at the price that matches the most volume, leaving the least imbalance within the CPA range.

~~2.5.7~~2.6.7 Closing Call Allocation

The closing call allocation is the priority in which MOC Orders and orders residing in the central limit order book are matched at the closing price.

Orders will be executed in the Closing Call based on the following allocation:

1. MOC Market Orders shall trade with offsetting MOC Market Orders entered by the same PO, according to time priority, provided that neither order is an unattributed or jitney order; then
2. MOC Market Orders shall trade with offsetting MOC Market Orders, according to time priority; then

3. MOC Market Orders shall trade with the offsetting limit orders (LOC or disclosed volume of continuous orders) entered by the same PO, according to price/time priority, provided that neither order is an unattributed or jitney order; then
4. MOC Market Orders shall trade with offsetting limit orders (LOC or Continuous) according to price/time priority; then
5. limit orders shall trade with the disclosed volume of offsetting limit orders entered by the same PO, according to price/time priority, provided that neither order is an unattributed or jitney order; then
6. limit orders shall trade with offsetting limit orders according to price/time priority.

~~2.5.8~~2.6.8 MOC Volatility Parameters

The following parameters are in place to manage price volatility:

Market & Product	PME %	CPA
TSX (ETF/ETN/ETR)	1%	1%
TSX (all other products)	3%	10%
TSX Venture	5%	15%

~~2.6~~2.7 Post Market Cancel Session

The Post Market Cancel Session is supported on TSX~~, TSXV~~ and ~~Alpha~~TSXV. It provides a five minute window after the continuous trading session closes from 4:10 - 4:15 pm on TSX/TSXV and from 4:00 - 4:15 pm on TSX Alpha for trading participants to cancel any open orders that they do not wish to participate in Extended Hours Trading.

~~2.7~~2.8 Extended Trading Session

The Extended Trading Session also referred to as the "Special Trading Session" or "Last Sale Trading" operates from 4:15 - 5:00 pm on TSX~~, TSXV~~ and ~~Alpha~~TSXV.

TSX and TSX Venture

During the Extended Trading Session, odd lots, board lots and crosses can trade at the official last sale price determined by MOC or if no MOC, by the last independent trade (Last Sale Price or LSP) from the CLOB session. Orders priced at or better than the Last Sale Price are carried forward from CLOB (but not from MOC) and where those order prices are better than the LSP those orders are re-priced to the LSP and are eligible to trade in the Special Trading Session at the LSP. On-stop orders are also eligible to trade in the Special Trading Session if the on-stop order is triggered as a result of an MOC changing the LSP.

~~**Alpha**~~

~~The extended trading Session on Alpha operates in the same manner as the TSX and TSX Venture, except that the trade price is based on the Alpha Last Sale Price (ALSP). *Note Alpha supports both~~

~~Day orders and Good for Day orders; Good for Day orders expire at the end of Continuous Trading at 4:00 and are not carried forward; while Day orders are carried forward into Extended Trading.~~

~~2.8~~2.9 Must Be Filled (MBF) Session for Option Expiry

The Must Be Filled session is supported on the TSX only and is provided for entering MBF orders to offset expiring derivatives positions. The MBF session takes place once per month on the Thursday immediately before the option expiry day. Option expiry day always occurs on the third Friday of every month. The MBF order entry session occurs during the Extended Session (4:15pm-5:00pm) and the resulting trades occur in the next day's (Friday's) opening.

The net MBF imbalance for each security is made public before the pre-open session on expiry day. This publicity ensures that market participants have a chance to respond with enough liquidity to satisfy the MBF orders. Imbalances less than 5000 shares are not publicized. A buy imbalance means there are excess MBF buy orders and a sell imbalance means there are excess MBF sell orders.

On the expiry day (Friday morning) all the MBF orders that were entered the previous day are treated like pre-open market orders and are thus guaranteed a fill at the COP. The MBF orders are visible to market participants but the MBF condition on those orders is not public. Trading participants can enter, change or cancel MBF Orders during the MBF session (the day before expiry) but cannot enter, change or cancel an MBF order on the expiry day. MBF orders must be in board lot multiples.

~~**Example: MBF Orders**~~

~~A trader must enter an MBF order when that trader has written an uncovered call to buy 5000 of ABC @ $10.00 that will be exercised because ABC is currently trading at $12 (i.e. the call is in the money). The trader who wrote the call has an obligation to deliver the stock at $10 when it is exercised upon expiry and since the call was not covered the trader who wrote the call must buy the stock to be in possession of the underlying security (5000 shares of ABC) upon expiry. To ensure possession of the stock the call writer must enter an MBF order to purchase 5000 ABC @ Market. That order will then trade at the market opening on expiry day.~~

Example: MBF Orders

A trader must enter an MBF order when that trader has written an uncovered call to buy 5000 of ABC @ $10.00 that will be exercised because ABC is currently trading at $12 (i.e. the call is in the money). The trader who wrote the call has an obligation to deliver the stock at $10 when it is exercised upon expiry and since the call was not covered the trader who wrote the call must buy the stock to be in possession of the underlying security (5000 shares of ABC) upon expiry. To ensure possession of the stock the call writer must enter an MBF order to purchase 5000 ABC @ Market. That order will then trade at the market opening on expiry day.

3 Products & Order Features

3.1 Routing

The TMX smart order routing solution is a turnkey, centralized service offering marketplace-neutral, customizable routing algorithms designed to meet regulatory best-price obligations. Regardless of how your desk connects to the equity exchanges, the TMX smart order router allows you to access all visible marketplaces through one connection, minimizing technology, connectivity, and data costs. More detailed information is available in the TSX SOR Product Guide.

Parent orders are sent by the client to the TSX smart order routing service. The client only manages parent orders. The router will slice the parent order into one or more child orders that are sent to Canadian marketplaces to fulfill the user's obligation to respect better priced orders across marketplaces and obtain the most beneficial fills. Child orders are linked back to the parent order by the router.

Default Marketplace Priority

There will be a choice of 3 profiles for active routing and for booking the residual order. These rankings are based on placing TMX Group marketplaces first, followed by all other marketplaces listed in order of market share. These rankings may be changed from time to time as market share changes. Please reference the SOR subscriber agreement for exact rankings. In the event the Participating Organization does not have access permissions to a marketplace defined in the ranking table, the Automated Jitney Service is available.

Routing Options

Participating Organizations have the choice of using a default routing algorithm to comply with the Order Protection Rule obligation, and additionally allows sending Directed Orders to marketplaces.

1. **By Price Spray** - For each price level, child orders are sprayed simultaneously to marketplaces with orders at the best price level and iterates sequentially by price level. This algorithm maximizes fill rates by sending child orders that interact with displayed and hidden liquidity.
2. **Directed Action Orders** (DAO) – Orders can optionally be directed to specific marketplaces, but do not offer Order Protection. The OPR Cancel and Re-price features can be used to complement directed orders.

The TMX SOR service is available during the TSX/TSXV continuous trading session (9:30 am to 4:00 pm ET). OPR Route-out orders received outside these times shall be treated as orders directed to TSX/TSXV. Market state/event messages from other marketplaces will be monitored by SOR during the continuous trading session.

3.1.1 Automated Jitney Arrangement

Automated Jitney is a service that executes a Participating Organization's orders at the best price across all protected Canadian markets without the need to join all marketplaces. This helps reduce costs by managing a single access point to all protected Canadian markets, while still meeting best

price obligations. The Automated Jitney service automatically gives-up a PO's order to a specified jitney provider if the best price is available on a marketplace where the PO is not a member. More information is available in the Automated Jitney Product Sheet.

3.2 Dark Trading

TSX; and TSXV and Alpha support dark order types. Each market has a unique value proposition; theThe TSX and TSXV markets fully integrate dark order types with the CLOB, while Alpha handles dark orders through the Intraspread™ facility. Both approaches create. This approach provides meaningful price improvement, and helphelps to significantly reduce trading costs while increasing valuable liquidity seeking options. For more information on dark trading see the TSX/TSXV Dark Liquidity Product Guide and the Intraspread™ Product Guide..

3.2.1 Dark Trading on TSX and TSXV

The Toronto Stock Exchange and TSX Venture Exchange's current offering of Dark order types include Dark mid-point orders and Dark limit orders. These orders types are introduced as native order features available in our displayed order book and can be entered using two tags toin the TSX-FIX and STAMP order entry protocolsprotocol.

- **Dark mid-point orders** will always provide meaningful price improvement of at least a full trading increment unless the NBBO spread is one trading increment. In this case the price improvement provided will be half a trading increment.
- **Dark limit orders** will provide meaningful price improvement to small orders however large orders will be eligible to trade at the NBBO once all visible volume is exhausted on the marketplace where the dark order is resting.

Dark orders interact with displayed orders as well as other Dark orders through one allocation sequence according to price-visibility-broker-time priority, ensuring the priority of displayed orders over Dark orders.

Pre-trade Transparency

There is no pre-trade transparency of Dark orders meaning order responses and changes in order attributes are not disseminated publicly. All order responses are fully encrypted in the Broadcast feed. There is full post-trade transparency of Dark execution prices which will update the last sale price and be provided to the TMX information processor's Consolidated Last Sale (CLS) feed, however all Dark tag details are classified as private content and therefore fully encrypted. As Dark orders are fully hidden they do not contribute to the symbol's quote.

Eligible Symbols for Dark Orders

The TSX/TSXV securities that are enabled to accept Dark orders are identified in two ways: through notices to Participants/Members, as well as within the symbol status message distributed on TMX market data feeds every day. During the trading day, a symbol may become ineligible to accept and trade Dark orders due to market issues such as price volatility triggering a market quality safeguard or technical issues such as an ATS sending erroneous quote data. Any change to a symbol's eligibility will be communicated to all participants through a stock status message which will have the Accept Undisplayed tag set to "N". Once the issue has been addressed that symbol may have its eligibility

reinstated. When this occurs a stock status message will be disseminated with the Accept Undisplayed tag set to "Y". These events will be followed by external notification by TSX/TSXV Trading Support serving as further notification of the event.

Minimum Quantity

An optional Minimum Quantity instruction is available for Dark Midpoint orders which will prevent the order from participating in a trade unless the tradable volume meets or exceeds the volume specified through the Minimum Quantity instruction. The Minimum Quantity instruction will only be accepted if the volume provided in the Minimum Quantity tag meets or exceeds 20 standard board lots. To better assist institutions and users in reducing market impact and to enhance TMX Dark Order types as a valuable facility for the execution of larger sized orders, Dark Midpoint orders with a Minimum Quantity instruction will receive fill priority over other Dark Midpoint orders without this condition or Dark Limit orders at the same price level.

~~3.2.2 Alpha Intraspread™~~

~~Dark trading on Alpha occurs through the Alpha Intraspread™ facility using two types of orders: Dark orders and Seek Dark Liquidity™ (SDL) orders.~~

- ~~**Dark orders** may trade with other Dark orders or with incoming SDL orders, or with both. Dark orders trade with other Dark orders at the mid-point of the NBBO. They trade with SDLTM orders at the NBBO mid-point, or at the touch. Dark orders may be entered by all participants.~~
- ~~**SDL™ orders** are active-only (FOK) and may trade with Dark orders at the NBBO mid-point, with CLOB liquidity at the NBBO and/or with Dark orders at the NBBO (if the SDL order is over 50 board lots or greater than $100,000 in value) the option to specify which orders to seek is now configurable. SDL™ orders are entered exclusively on behalf of Retail clients[2]. All trading participants interested in enabling a trader ID for SDL orders must complete the Alpha Intraspread Retail IDs form, signed by their compliance ensuring the trader IDs are indeed Retail only.~~

~~Eligible Symbols for Dark~~

~~All symbols supported on Alpha are eligible for SDL and dark orders in Intraspread™.~~

~~Minimum Acceptable Quantity & Contra Tag~~

~~When trading against other Dark orders, the Member can optionally place a minimum trade size (MAQ) on his Dark order for block trading. The MAQ does not apply to SDLTM matches. Further, Dark orders can be designated to trade with SDL orders only, Dark orders only, or both via the Contra tag.~~

3.3 Cancel on Disconnect

Cancel on Disconnect (COD) is an optional gateway session feature that will restrict order entry on user-specified session bundles and attempt to cancel all open orders per session upon an involuntary

~~[2] Alpha uses the UMIR definition of Retail Clients~~

loss of connectivity between TMX and the client. Cancel on Disconnect will assist users to mitigate risks associated with managing open orders on all TMX markets when there is an involuntary loss of connectivity.

Once COD is triggered, the session bundle will be blocked, new orders entered on that order entry port will not be accepted and order acknowledgments will not be sent. All open orders pertaining to the triggered session bundle will be cancelled, with the exception of duration orders (i.e. GTC/GTD), MOC cancels after 3:40 pm and cancellation due to the stock/stock group state (e.g. stock is frozen, stock state is inhibited). A session can only be re-activated after a COD event by contacting TMX Trading Services directly.

Availability of COD:

Session	Availability
Pre-open	No
Continuous Trading	Yes
MOC (3:40 – 4:00 pm)	Yes, but only for LOC and non-MOC orders (MOC orders are not able to be cancelled during the imbalance)
Post Market Cancel Session	Yes
Extended Trading	Yes

COD functionality is available for all gateway sessions connecting to Toronto Stock Exchange, TSX Venture Exchange~~, TMX Select~~ and TSX Alpha. Order cancellation confirmation messages as result of COD will be designated with ~~new~~ by a TSX ~~and STAMP tags~~tag.

To enable the Cancel on Disconnect feature, the COD Application Form must be completed and submitted to a TMX Account Manager by a TSX Participating Organization, TSXV Member, or ~~TMX Select Subscriber~~TSX Alpha Member, including for DMA client sessions through which access to TSX, TSXV, or ~~TMX Select~~TSX Alpha is provided.

3.3.1 Configuration Levels

Clients can specify one of the following levels of COD service for each enabled session:

Level 1	If a session is enabled for Level 1 COD, then COD will be triggered if there is no activity in the session for two consecutive heartbeat periods.
Level 2	If a session is enabled for Level 2 COD, then COD will be triggered if there is no activity in the session for two consecutive heartbeat periods or if the session gets disconnected from the client side without TMX receiving any log-out or sign-off request from the client (i.e. abnormal/socket disconnect).
Level 3	If a session is enabled for Level 3 COD, then COD will be triggered if there is no activity in the session for two consecutive heartbeat periods or if the session gets disconnected from the client side without TMX receiving any logout or sign-off requests from the client or if the client is gracefully disconnected after TMX receives the log-out/sign-off request from the client.

For all three levels of service, if an order is cancelled due to a COD trigger, order cancellation confirmation messages with a COD indicator will be sent once reconnection on the associated sessions is established.

3.4 Order Protection Rule (OPR) Features

The following features are supported by TMX to comply with the NI 21-101 Order Protection Rule obligation.

3.4.1 Directed Action Order (DAO)

The private DAO marker is an implicit or explicit order instruction as defined in NI 23-101. Orders are assumed to be DAO orders provided directly to the marketplace from a participating organizations system, or if the explicit DAO marker is provided. DAO orders trade or book without any attempt to protect better-priced orders on away markets. The responsibility to prevent trade throughs for orders considered DAO is assumed by the participating organization.

3.4.2 Order Protection by Re-price

On TSX, TSXV~~,~~ and TSX Alpha ~~and Select,~~ orders designated as "OPR re-price" will prevent OPR violations by only allowing trades at or better than the away market's best price before adjusting the remainder to the most aggressive price level allowed based on the away market's best price.

3.4.3 Order Protection by Cancel

On TSX, TSXV~~,~~ and TSX Alpha ~~and Select~~, orders designated as "OPR cancel" will prevent OPR violations by only allowing trading at or better than the away market's best price before cancelling back the remainder to prevent trading or quoting at price levels prevented by the away market's best price.

3.4.4 OPR Route Out Service

The OPR route out service is supported on TSX and TSXV. Participating organizations not prepared to accept the default designation of orders as DAO can have their orders intermediated by the OPR Route Out Service made available through the TSX Inc. Smart Order Router. The use of this service, which will route orders to other marketplaces with better-priced orders, requires Participating Organizations to send orders to the TSX SOR through a separate SOR connection.

3.5 Post Only

The Post Only order feature helps liquidity providers tighten the bid/ask spread by rejecting an order upon entry when it is otherwise immediately executable. This feature is intended for orders without immediacy where the trader's strategy depends on the order displaying as CLOB-posted liquidity without removing CLOB-posted liquidity. For more information, please see the Post Only Product Sheet.

Post Only is available on TSX, TSXV~~,~~ and TSX Alpha ~~and Select~~. It is an optional designation available for visible orders (it is not available on dark orders) and does not apply to orders in the opening or MOC sessions. A post only order will be rejected if the order is fully or partially tradable.

When post only is applied to a mixed lot order, it only rejects the entire order based on whether the board lot portion is immediately tradable, regardless of the tradable status of the odd lot portion.

Post Only instructions on TSX Alpha are accepted on new orders, order amendments and cancels. Incoming messages with the post only instruction must have a volume equal to or exceeding the minimum post only volume requirements for that symbol, otherwise the message will be rejected. Each symbol trading on TSX **Alpha** will have a minimum post only volume assigned to it by TSX Alpha and communicated through the beginning of day symbol status messages. Messages containing the post only instruction will not be subject to TSX Alpha's order processing delay (described in section 4.12.1).

All durations including GTC, GTD are accepted, and the order must always contain a limit price. The Post Only flag may be CFO'ed to remove the flag after entry.

Example: Post Only Feature

Assume the CLOB is as follows:

Bid			Offer		
Order 001	100	10.00	10.02 (Dark)	400	Order 002
			10.02	100	Order 003
			10.03	200	Order 004

If an incoming Post Only order to buy 300 shares @ 10.02 is entered:
→ It will be rejected because it is entirely executable.

If an incoming Post Only order to buy 1000 shares @ 10.02 is entered.
→ It will be rejected because it is partially executable.

If an incoming Post Only order to buy 1000 shares @ 10.01 is entered.
→ It will book (see order 005) and the resulting CLOB will be:

Bid			Offer		
Order 005	1000	10.01	10.02 (Dark)	400	Order 002
Order 001	100	10.00	10.02	100	Order 003
			10.03	200	Order 004

Example: Post Only Feature

Assume the CLOB is as follows:

Bid			Offer		
Order 001	100	10.00	10.02 (Dark)	400	Order 002
			10.02	100	Order 003
			10.03	200	Order 004

If an incoming Post Only order to buy 300 shares @ 10.02 is entered:
→ It will be rejected because it is entirely executable.

If an incoming Post Only order to buy 1000 shares @ 10.02 is entered.
→ It will be rejected because it is partially executable.

If an incoming Post Only order to buy 1000 shares @ 10.01 is entered.
→ It will book (see order 005) and the resulting CLOB will be:

Bid			Offer		
Order 005	1000	10.01	10.02 (Dark)	400	Order 002
Order 001	100	10.00	10.02	100	Order 003
			10.03	200	Order 004

3.6 Drop Copy

Drop Copy is a risk management tool designed to facilitate real-time monitoring of trading activity on all ~~four~~three TMX equity marketplaces. It allows trading participants to define a secondary destination through an additional session connection for copies of all trades and cancelled trades (if any) for each order entry session. Order messages are not included on Drop Copy sessions.

~~Drop Copy is supported on both FIX and STAMP protocols.~~ Setting up a Drop Copy is facilitated by Trading Services, with safeguards in place to ensure only authorized persons can request a drop copy and private trading information is kept confidential.

3.7 Self Trade Prevention

TMX offers four types of solutions to assist trading participants in managing accidental trades with themselves (wash trades~~). Self Trade Prevention where the active order is cancelled is available on all four marketplaces (TSX, TSXV, Alpha and Select). The cancel oldest and decrement and cancel self trade prevention features are available on (TSX and TSXV); while Self Trade Management feature is offered on (TSX, TSXV, and Alpha).~~) and are available on all TMX marketplaces (TSX, TSXV, TSX Alpha).

3.7.1 Self Trade Prevention

Self trade prevention is an optional order feature that prevents two orders from the same Participating Organization or Member Firm from executing against each other based on unique trading keys defined by the Participant/Member.

Cancel Newest Self-Trade Prevention

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.

Cancel Oldest Self-Trade Prevention

The Cancel Oldest self-trade prevention instruction will prevent an incoming order from executing against a passive order from the same broker with a self-trade prevention instruction and matching self-trade keys. The passive order will be cancelled and the active order will trade up or down to its limit, booking any remaining volume if eligible.

Decrement Largest and Cancel Smallest Self-Trade Prevention

The Decrement Largest and Cancel Smallest self-trade prevention instruction will prevent an incoming order from executing against a passive order from the same broker with a self-trade prevention instruction and matching self-trade keys. If both orders are equivalent size, both orders will be cancelled. If orders are not equivalent in size, the smaller order will be cancelled and the larger order will be decremented by the size of the smaller order. If the larger order was passive, the remaining volume will continue to rest in the book; if the larger order was active, the balance of the order will trade up or down to its limit, booking any remaining volume if eligible.

These features provides more opportunities for individuals to participate on both sides of the market without unintentionally violating 'wash trading' rules described in UMIR 2.2. Rules permit individuals to place buy and sell orders on a market for a given stock at the same price so long as that individual only trades with others and does not cross his own orders. Preventing self trading ensures there is no misleading appearance of additional trading in a stock.

Cancel Newest Self-Trade Prevention How it Works

When a tradable order is received, the TMX performs a check: If the same PO is on both sides of the trade, and the unique trading keys match, then the active order is killed immediately.

Self Trade Management is applied during Continuous Trading session only, and keys are ignored during Market on Open allocation and Market on Close. Self Trade Management does not apply to odd lots and the odd lot portions of mixed lot orders. Self Trades are suppressed altogether in Dark / Dark trading.

Keys may be alpha-numeric (any combination of letters and numbers). It does not impact a member if another member uses the same key.

~~**Example: Self Trade Prevention on TMX**~~

~~Assume the CLOB is as follows:~~

~~Bid~~					~~Offer~~
~~Broker A, Unique Key "BAYS9"~~	~~100~~	~~$10.00~~	~~$10.02~~	~~400~~	~~Broker B~~
~~Broker B~~	~~100~~	~~$9.99~~	~~$10.02~~	~~100~~	~~Broker C~~
			~~$10.02~~	~~200~~	~~Broker A, Unique Key "ABCD7"~~
			~~$10.03~~	~~500~~	~~Broker A, Unique Key "BAYS9"~~

~~If an incoming order from Broker A with Unique Key "ABCD7" to buy 100 shares @ MKT is entered:~~
~~→ Based on Price/Broker/Time priority, the trading engine seeks the opposing Broker A order @ $10.02 first, however since the Unique Keys match, the entire active order would be rejected.~~

~~If an incoming order from Broker A with Unique Key "BAYS9" to buy 500 shares @ MKT is entered:~~
~~→ Based on Price/Broker/Time priority, the trading engine again seeks the opposing Broker A order first, and since the keys do not match, it trades 200 @ $10.02. After orders with broker priority are exhausted, time priority allocates the remaining volume of 300 @ $10.02 against Broker B.~~

Example: Self Trade Prevention on TMX

Assume the CLOB is as follows:

Bid					Offer
Broker A, Unique Key "BAYS9"	100	$10.00	$10.02	400	Broker B
Broker B	100	$9.99	$10.02	100	Broker C
			$10.02	200	Broker A, Unique Key "ABCD7"
			$10.03	500	Broker A, Unique Key "BAYS9"

If an incoming order from Broker A with Unique Key "ABCD7" to buy 100 shares @ MKT is entered:
→ Based on Price/Broker/Time priority, the trading engine seeks the opposing Broker A order @ $10.02 first, however since the Unique Keys match, the entire active order would be rejected.

If an incoming order from Broker A with Unique Key "BAYS9" to buy 500 shares @ MKT is entered:
→ Based on Price/Broker/Time priority, the trading engine again seeks the opposing Broker A order first, and since the keys do not match, it trades 200 @ $10.02. After orders with broker priority are exhausted, time priority allocates the remaining volume of 300 @ $10.02 against Broker B.

3.7.2 Self Trade Management

~~3.7.2~~ Self Trade Management is available on TSX ,TSXV and TSX Alpha

~~Alpha.~~ Self Trade Management is an optional trading feature that suppresses trades from the public feed where orders on both sides of the trade are from the same Member and contain the same "self trade key" defined by the Member. When a Self Trade occurs, the order in the book appears on the public feed as a cancelled or updated order, and no trade report is published. The trade is, however, reported to CDS. As these trades are suppressed from the public realm, the trades do not update the ~~ALSP~~LSP, or any trading statistics, such as daily volume and turnover.

Self Trade Management is applied during Continuous Trading session only. Self Trade Management does not apply to odd lots and the odd lot portions of mixed lot orders. ~~Self Trade functionality is not applied in dark-to-dark trading on Intraspread.~~

Keys may be alpha-numeric (any combination of letters and numbers). It does not impact a member if another member uses the same key.

Example: Self Trade Management on Alpha

Assume the CLOB is as follows:

Bid			Offer		
Broker A, Unique Key "BAYS9"	100	$10.00	$10.02	400	Broker B
Broker B	100	$9.99	$10.02	100	Broker C
			$10.02	200	Broker A, Unique Key "ABCD7"
			$10.03	500	Broker A, Unique Key "BAYS9"

If an incoming buy order from Broker A with Unique Key "ABCD7" for 100 shares @ MKT is entered:
→ Based on Price/Broker/Time priority, the order trades against the Broker A sell order @ $10.02. As the STM Keys match, the trade is not displayed on the public feed.

If an incoming order from Broker A with Unique Key "BAYS9" to buy 1500 shares @ MKT is entered:
→ Based on Price/Broker/Time priority, the following trades occur:

Buyer	Seller	Qty	Price	Notes
A	A	200	$10.02	Keys do not match, trade is published on public feed
A	B	400	$10.02	trade is published on public feed
A	C	100	$10.02	trade is published on public feed
A	A	500	$10.03	Keys do match, trade is not published on public feed

Example: Self Trade Management on Alpha

Assume the CLOB is as follows:

Bid			Offer		
Broker A, Unique Key "BAYS9"	100	$10.00	$10.02	400	Broker B
Broker B	100	$9.99	$10.02	100	Broker C
			$10.02	200	Broker A, Unique Key "ABCD7"
			$10.03	500	Broker A, Unique Key "BAYS9"

If an incoming buy order from Broker A with Unique Key "ABCD7" for 100 shares @ MKT is entered:
→ Based on Price/Broker/Time priority, the order trades against the Broker A sell order @ $10.02. As the STM Keys match, the trade is not displayed on the public feed.

If an incoming order from Broker A with Unique Key "BAYS9" to buy 1500 shares @ MKT is entered:
→ Based on Price/Broker/Time priority, the following trades occur:

Buyer	Seller	Qty	Price	Notes
A	A	200	$10.02	Keys do not match, trade is published on public feed
A	B	400	$10.02	trade is published on public feed
A	C	100	$10.02	trade is published on public feed
A	A	500	$10.03	Keys do match, trade is not published on public feed

4 Order Types

TMX supports a variety of order types across its ~~four~~three marketplaces to offer choice while creating fair and orderly markets for all participants.

4.1 Change Former Order instructions (CFO)

An order that is CFO'ed refers to an order instruction to cancel the former order's version by replacing it with the new version. Such orders will retain relative priority in the continuous book only if the change is limited to a decrease in the displayed size of the order, an increase or decrease in the undisplayed portion of an iceberg or a change from sell long to (non-public) sell short or vice-versa or any change to other non-public markers that are incidental. Any other modification to an order, including an increase in the displayed size of the order, and/or price change, and/or change from regular to iceberg order will result in such order losing time priority relative to other equally priced orders and the timestamp will revised at the time of the modification.

4.2 Market Orders

A market priced order is an instruction to trade the order at prices currently established by the opposite side of the market. Such orders have no trader defined limit on the potential trade price but these orders are subject to TMX bid/ask price limits and TMX freeze price limits to prevent unintentional trade-to-trade price gaps which may otherwise occur if the opposite side of the market is thinner than the trader submitting the market order had expected.

If there is not enough volume in the book to fill the order, the unfilled quantity of the Market order is booked at the Last Sale Price.

~~Example: Market Orders~~

~~Assume the CLOB is as follows:~~

Bid			Offer		
~~Order 001~~	~~100~~	~~$10.00~~	~~$10.02~~	~~400~~	~~Order 003~~
~~Order 002~~	~~100~~	~~$9.99~~	~~$10.02~~	~~100~~	~~Order 004~~

~~If an incoming sell order #005 for 500 shares @ MKT is entered:~~

~~→ The following trades occur:~~

Buyer	Seller	Qty	Price
~~Order 001~~	~~Order 005~~	~~100~~	~~$10.00~~
~~Order 002~~	~~Order 005~~	~~100~~	~~$9.99~~

~~The remaining unfilled quantity is booked at the LSP, and the resulting CLOB will be:~~

Bid			Offer		
			~~$9.99~~	~~300~~	~~Order 005~~
			~~$10.02~~	~~400~~	~~Order 003~~
			~~$10.02~~	~~100~~	~~Order 004~~

Example: Market Orders

Assume the CLOB is as follows:

Bid			Offer		
Order 001	100	$10.00	$10.02	400	Order 003
Order 002	100	$9.99	$10.02	100	Order 004

If an incoming sell order #005 for 500 shares @ MKT is entered:

→ The following trades occur:

Buyer	Seller	Qty	Price
Order 001	Order 005	100	$10.00
Order 002	Order 005	100	$9.99

The remaining unfilled quantity is booked at the LSP, and the resulting CLOB will be:

Bid			Offer		
			$9.99	300	Order 005
			$10.02	400	Order 003
			$10.02	100	Order 004

4.3 Limit Orders

A limit priced order is an instruction to trade the order at prices currently established by the opposite side of the market so long as those prices are within range of the limit price defined by the trader. Any remaining portion of the limit order that is not immediately traded is either booked or cancelled (trader's preference) at the limit price.

~~**Example: Limit Orders**~~

~~Assume the CLOB is as follows:~~

~~Bid~~			~~Offer~~		
~~Order 001~~	~~100~~	~~$10.00~~	~~$10.02~~	~~400~~	~~Order 003~~
~~Order 002~~	~~100~~	~~$9.99~~	~~$10.02~~	~~100~~	~~Order 004~~

~~If an incoming sell order #005 for 500 shares with a Limit Price of $10.00 is entered:~~

~~→ The following trades occur:~~

~~Buyer~~	~~Seller~~	~~Qty~~	~~Price~~
~~Order 001~~	~~Order 005~~	~~100~~	~~$10.00~~

~~The remaining unfilled quantity is booked at the limit price, and the resulting CLOB will be:~~

~~Bid~~			~~Offer~~		
~~Order 002~~	~~100~~	~~$9.99~~	~~$10.00~~	~~400~~	~~Order 005~~
			~~$10.02~~	~~400~~	~~Order 003~~
			~~$10.02~~	~~100~~	~~Order 004~~

Example: Limit Orders

Assume the CLOB is as follows:

Bid			Offer		
Order 001	100	$10.00	$10.02	400	Order 003
Order 002	100	$9.99	$10.02	100	Order 004

If an incoming sell order #005 for 500 shares with a Limit Price of $10.00 is entered:

→ The following trades occur:

Buyer	Seller	Qty	Price
Order 001	Order 005	100	$10.00

The remaining unfilled quantity is booked at the limit price, and the resulting CLOB will be:

Bid			Offer		
Order 002	100	$9.99	$10.00	400	Order 005
			$10.02	400	Order 003
			$10.02	100	Order 004

4.4 Duration

4.4.1 Day Orders

On the TSX~~/~~, TSXV and TSX Alpha, day orders expire at 5 pm and can participate in all trading sessions.

~~Alpha supports two versions of day orders:~~

- ~~Good for Day orders expire at the end of Continuous Trading at 4:00 pm and are not carried forward into the Extended Trading session~~
- ~~Day orders which are carried forward into the Extended Trading session~~

4.4.2 Good Til Cancelled (GTC)

Good Til Cancelled orders expire at 5 pm, 90 calendar days after entry. These orders participate in all regular trading sessions, including Market on Open, Continuous Trading, Market on Close, and Extended Trading. GTC orders are accepted on TSX, TSX Venture~~,~~ and TSX Alpha~~, but not Select.~~ .

It is important for participants to verify all open orders each morning to identify any orders that may have expired the night before.

4.4.3 Good Til Date (GTD)

Good Til Date orders expire at 5 pm on a specific day. These orders can participate in all trading sessions. Good Til Date orders with a specific time of expiry are not supported. GTD orders are accepted on TSX, TSX Venture~~,~~ and TSX Alpha~~, but not Select~~.

4.4.4 Immediate or Cancel (IOC)

An IOC order is eligible to receive a full or partial fill. Any portion not filled is cancelled immediately. IOC orders are accepted on TSX, TSX Venture~~, Alpha, and Select.~~ and TSX Alpha. IOC orders may have board lot, mixed lot or odd lot volumes on TSX Alpha, may only have board lot volumes on TSX and TSXV.

~~**Example: IOC Orders**~~

~~Assume the CLOB is as follows:~~

~~Bid~~			~~Offer~~		
~~Order 001~~	~~100~~	~~$10.00~~	~~$10.02~~	~~400~~	~~Order 003~~
~~Order 002~~	~~100~~	~~$9.99~~	~~$10.02~~	~~100~~	~~Order 004~~

~~If an incoming sell order #005 for 500 shares with a limit price of $10.00 is entered:~~
~~→ The following trades occur:~~

~~Buyer~~	~~Seller~~	~~Qty~~	~~Price~~
~~Order 001~~	~~Order 005~~	~~100~~	~~$10.00~~

~~The remaining unfilled quantity is then cancelled, and the resulting CLOB will be:~~

~~Bid~~			~~Offer~~		
~~Order 002~~	~~100~~	~~$9.99~~	~~$10.02~~	~~400~~	~~Order 003~~
			~~$10.02~~	~~100~~	~~Order 004~~

Example: IOC Orders

Assume the CLOB is as follows:

Bid			Offer		
Order 001	100	$10.00	$10.02	400	Order 003
Order 002	100	$9.99	$10.02	100	Order 004

If an incoming sell order #005 for 500 shares with a limit price of $10.00 is entered:
→ The following trades occur:

Buyer	Seller	Qty	Price
Order 001	Order 005	100	$10.00

The remaining unfilled quantity is then cancelled, and the resulting CLOB will be:

Bid			Offer		
Order 002	100	$9.99	$10.02	400	Order 003
			$10.02	100	Order 004

4.4.5 Fill or Kill (FOK)

An FOK order is eligible to receive a full fill only, and if not fully filled is cancelled immediately. FOK orders are accepted on TSX, TSX Venture~~, and TSX~~ Alpha~~, and Select~~ with board lot volumes.

~~**Example: FOK Orders**~~

~~Assume the CLOB is as follows:~~

	~~Bid~~			~~Offer~~	
~~Order 001~~	~~100~~	~~$10.00~~	~~$10.02~~	~~400~~	~~Order 003~~
~~Order 002~~	~~100~~	~~$9.99~~	~~$10.02~~	~~100~~	~~Order 004~~

~~If an incoming sell order #005 for 500 shares with a limit price of $10.00 is entered:~~
~~→ Since the volume cannot be fully filled, no trades occur. The remaining unfilled quantity is then cancelled, and the resulting CLOB will be:~~

	~~Bid~~			~~Offer~~	
~~Order 001~~	~~100~~	~~$10.00~~	~~$10.02~~	~~400~~	~~Order 003~~
~~Order 002~~	~~100~~	~~$9.99~~	~~$10.02~~	~~100~~	~~Order 004~~

Example: FOK Orders

Assume the CLOB is as follows:

	Bid			Offer	
Order 001	100	$10.00	$10.02	400	Order 003
Order 002	100	$9.99	$10.02	100	Order 004

If an incoming sell order #005 for 500 shares with a limit price of $10.00 is entered:
→ Since the volume cannot be fully filled, no trades occur. The remaining unfilled quantity is then cancelled, and the resulting CLOB will be:

	Bid			Offer	
Order 001	100	$10.00	$10.02	400	Order 003
Order 002	100	$9.99	$10.02	100	Order 004

4.5 On-Stop Orders

A contingent limit priced order that remains undisclosed until its limit price is triggered at which time it becomes a displayed limit order in the CLOB.

- An undisclosed On-Stop sell order is triggered when the LSP of the same marketplace trades down to or through the limit specified on the On-Stop order.
- An On-Stop buy order is triggered when the LSP of the same marketplace trades up to or through the limit specified on the On-Stop order.

Once triggered the On-Stop order will trade in the CLOB subject to its limit with any untraded volume fully displayed at its limit price. On-Stop orders are accepted on TSX, TSX Venture~~,~~ and TSX Alpha~~, but not Select~~.

~~**Example: On-Stop Orders**~~

~~Assume the CLOB is as follows:~~

~~LSP: 10.20~~

~~Bid~~			~~Offer~~		
~~Order 001~~	~~1000~~	~~10.00~~	~~10.20~~	~~1000~~	~~Order 002~~
~~Order 003~~	~~500~~	~~9.90~~			
~~Order 004 On-Stop (hidden)~~	~~1000~~	~~9.90~~			
~~Order 005~~	~~1000~~	~~9.80~~			

~~An incoming order (Order 006) to sell 1500 shares @ $9.90 is entered, the following trades occur:~~

~~Buyer~~	~~Seller~~	~~Qty~~	~~Price~~
~~Order 001~~	~~Order 006~~	~~1000~~	~~10.00~~
~~Order 003~~	~~Order 006~~	~~500~~	~~9.90~~

~~The trade at 9.90 sets the LSP triggering the on-stop and the order becomes visible.~~
~~Resulting CLOB:~~

~~Bid~~			~~Offer~~		
~~Order 004 On-Stop (disclosed)~~	~~1000~~	~~9.90~~	~~10.20~~	~~1000~~	~~Order 002~~
~~Order 005~~	~~1000~~	~~9.80~~			

Example: On-Stop Orders

Assume the CLOB is as follows:

LSP: 10.20

Bid			Offer		
Order 001	1000	10.00	10.20	1000	Order 002
Order 003	500	9.90			
Order 004 On-Stop (hidden)	1000	9.90			
Order 005	1000	9.80			

An incoming order (Order 006) to sell 1500 shares @ $9.90 is entered, the following trades occur:

Buyer	Seller	Qty	Price
Order 001	Order 006	1000	10.00
Order 003	Order 006	500	9.90

The trade at 9.90 sets the LSP triggering the on-stop and the order becomes visible.
Resulting CLOB:

Bid			Offer		
Order 004 On-Stop (disclosed)	1000	9.90	10.20	1000	Order 002
Order 005	1000	9.80			

Newly triggered on-stop orders have lower priority than any displayed visible orders.

~~**Example 2: On-Stop Orders**~~

~~Assume the CLOB is as follows:~~

~~LSP: 10.20~~

~~Bid~~			~~Offer~~		
~~Order 001~~	~~1000~~	~~10.00~~	~~10.20~~	~~1000~~	~~Order 002~~
~~Order 003~~	~~500~~	~~9.90~~			
~~Order 004 On-Stop (hidden)~~	~~1000~~	~~9.90~~			
~~Order 005~~	~~1000~~	~~9.80~~			

~~An incoming order (Order 006) to sell 2500 shares @ $9.50 is entered, the following trades occur:~~

~~Buyer~~	~~Seller~~	~~Qty~~	~~Price~~
~~Order 001~~	~~Order 006~~	~~1000~~	~~10.00~~
~~Order 003~~	~~Order 006~~	~~500~~	~~9.90~~
~~Order 005~~	~~Order 006~~	~~1000~~	~~9.80~~

~~The incoming order trades with all visible orders at various price levels in the book. The 2nd trade at 9.90 sets the LSP, which triggers the on stop, however the visible order (Order 005) has priority of fill before the on-stop order because it was previously displayed.~~

~~Resulting CLOB:~~

~~Bid~~			~~Offer~~		
~~Order 004 On-Stop (disclosed)~~	~~1000~~	~~9.90~~	~~10.20~~	~~1000~~	~~Order 002~~

Example 2: On-Stop Orders

Assume the CLOB is as follows:

LSP: 10.20

Bid			Offer		
Order 001	1000	10.00	10.20	1000	Order 002
Order 003	500	9.90			
Order 004 On-Stop (hidden)	1000	9.90			
Order 005	1000	9.80			

An incoming order (Order 006) to sell 2500 shares @ $9.50 is entered, the following trades occur:

Buyer	Seller	Qty	Price
Order 001	Order 006	1000	10.00
Order 003	Order 006	500	9.90
Order 005	Order 006	1000	9.80

The incoming order trades with all visible orders at various price levels in the book. The 2nd trade at 9.90 sets the LSP, which triggers the on stop, however the visible order (Order 005) has priority of fill before the on-stop order because it was previously displayed.

Resulting CLOB:

Bid			Offer		
Order 004 On-Stop (disclosed)	1000	9.90	10.20	1000	Order 002

4.6 Iceberg Orders

An Iceberg order replenishes the displayed order size as executions are received. Only the disclosed portion of the order has priority at the given price level. Iceberg orders must display a minimum of 1 board lot.

Both the total size and disclosed size of an Iceberg order must be a multiple of board lots. Undisclosed volume orders that become mixed lot orders due to board lot changes overnight are purged overnight.

When an incoming order trades with a booked Iceberg order for a quantity larger than the disclosed size, one trade will be generated for both the tradable disclosed volume and undisclosed volume.

Example: Iceberg Orders

Assume the CLOB is as follows:

LSP: 10.05

Bid				Offer		
Order	Hidden Qty	Displayed Volume	Price	Price	Displayed Volume	Order
Order 001		100	10.00	10.20	400	Order 002
Order 003		500	9.90			
Order 004 Iceberg	9,900	100	9.90			
Order 005		200	9.90			

An incoming order (Order 006) to sell 1500 shares @ $9.90 is entered:

→ The order trades with all displayed liquidity at each price level first. The remaining volume is matched against the hidden iceberg volume in one single trade:

Buyer	Seller	Qty	Price
Order 001	Order 006	100	10.00
Order 003	Order 006	500	9.90
Order 004	Order 006	100	9.90
Order 005	Order 006	200	9.90
Order 004	Order 006	600	9.90

Resulting CLOB:

Bid				Offer		
Order	Hidden Qty	Displayed Volume	Price	Price	Displayed Volume	Order
Order 004 Iceberg	9,200	100	9.90	10.20	400	Order 002

Example: Iceberg Orders

Assume the CLOB is as follows:

LSP: 10.05

Bid				Offer		
Order	Hidden Qty	Displayed Volume	Price	Price	Displayed Volume	Order
Order 001		100	10.00	10.20	400	Order 002
Order 003		500	9.90			
Order 004 Iceberg	9,900	100	9.90			
Order 005		200	9.90			

An incoming order (Order 006) to sell 1500 shares @ $9.90 is entered:

→ The order trades with all displayed liquidity at each price level first. The remaining volume is matched against the hidden iceberg volume in one single trade:

Buyer	Seller	Qty	Price
Order 001	Order 006	100	10.00
Order 003	Order 006	500	9.90
Order 004	Order 006	100	9.90
Order 005	Order 006	200	9.90
Order 004	Order 006	600	9.90

Resulting CLOB:

Bid				Offer		
Order	Hidden Qty	Displayed Volume	Price	Price	Displayed Volume	Order
Order 004 Iceberg	9,200	100	9.90	10.20	400	Order 002

Both the total size and the disclosed size of icebergs may be amended (CFOed). However, when the disclosed quantity is amended, the new disclosed size becomes effective only after the next re-load of the iceberg's undisclosed volume.

4.7 Short Sales

A short sale is an order to sell shares that are not owned. Short sell orders are available on TSX, TSXV~~,~~ and TSX Alpha ~~and Select~~ and will be permitted to have the following attributes:

- A Short Sell order is treated identically to a Sell order from a matching allocation perspective
- Market priced short sell orders will be accepted in the pre-open session and also when a symbol is halted
- Short sell orders will be accepted with Mixed lot or Odd lot volumes
- Market on Close (MOC) and Limit on Close (LOC) orders may be short sell orders

~~"Tick Test"~~

~~Recent regulatory amendments repealed the "tick test" restrictions on the price at which a short sale may be made on Canadian equity marketplaces TSX, TSXV, Alpha and Select will no longer constrain short sell orders to the last sale price. Short sell orders entered will be permitted to trade down to their limit price establishing a last sale price on a down tick. Short Crosses will no longer be constrained by the last sale price.~~

~~**Short Exempt**~~

~~Discontinuing short sell price restrictions has rendered the short exempt tag redundant. The short exempt tag has been removed from the order entry and broadcast protocol specifications and is no longer accepted on orders.~~

4.7.1 Short Marking Exempt (SME) marker

UMIR rule amendments respecting short sales and failed trades have required the use of a Short Marking Exempt tag. Certain types of traders are not required to mark their orders as short, irrespective of their position (long or short) at the time of order entry. Instead, their orders (buys, sells, and crosses) are designated as Short Marking Exempt via the SME flag. The SME flag is indicative only, and has no effect on how the order interacts with the order book. All other traders enter Short Sell orders when appropriate, and do not use the SME flag on any order.

The Short Marking Exempt tag will reside in the private layer of feed messages securing the anonymity of the designation. The Short Marking Exempt designation will automatically be added to unsolicited messages resulting from market making/odd lot responsibilities. Impacted unsolicited messages include trades due to odd lot responsibilities, minimum guarantee fills and RT participation.

4.8 Anonymous Orders

On an order-by-order basis, a trading participant may elect attribution or anonymity. Anonymous orders on TSX Alpha may have board lot, mixed lot or odd lot volumes. TSX and TSXV anonymous orders may must have board lot volumes. If attributed, the Participating Organization's unique numeric ID will be publically displayed on all associated market data feeds. If marked anonymous, the non-specific numeric "001" will be associated with the order for the life of that order, including after execution, in all market information displays. At the end of the day where a trade is executed anonymously, TMX will relay the underlying PO identity for that trade to CDS, in order for the trade to be settled.

4.8.1 Broker Preferencing

Broker preferencing is a unique feature of Canadian markets. As described earlier, TSX, TSXV and TSX Alpha follow Price/Broker/Time priority. This means incoming orders to a trading venue to match with other orders from the same dealer ahead of similarly priced orders from other dealers, before time priority is considered. An order must be attributed in order to participate in broker preferencing. Jitney orders are excluded from broker preferencing opportunities. ~~TMX Select follows strict price/time priority, meaning there is no broker preferencing on that market.~~

~~**Example: Broker Preferencing**~~

~~Assume the CLOB is as follows: (ordered in time priority)~~

~~Bid~~			~~Offer~~		
~~Broker A~~	~~1000~~	~~$9.90~~	~~$10.20~~	~~1000~~	~~Broker B~~
~~Broker B~~	~~500~~	~~$9.90~~			
~~Broker C~~	~~1000~~	~~$9.90~~			

~~An incoming order from Broker C to sell 1500 shares @ MKT is entered, the following trades occur in the following order:~~

~~Buyer~~	~~Seller~~	~~Qty~~	~~Price~~
~~C~~	~~C~~	~~1000~~	~~$9.90~~
~~A~~	~~C~~	~~500~~	~~$9.90~~

~~While Broker C was third in priority, their order was filled first due to broker preferencing.~~

Example: Broker Preferencing

Assume the CLOB is as follows: (ordered in time priority)

Bid			Offer		
Broker A	1000	$9.90	$10.20	1000	Broker B
Broker B	500	$9.90			
Broker C	1000	$9.90			

An incoming order from Broker C to sell 1500 shares @ MKT is entered, the following trades occur in the following order:

Buyer	Seller	Qty	Price
C	C	1000	$9.90
A	C	500	$9.90

While Broker C was third in priority, their order was filled first due to broker preferencing.

4.9 Dark Orders

See the Dark trading section for more information.

4.10 Bypass Orders

Orders sent containing the bypass flag trade only with passive visible volume, and bypass all undisclosed iceberg volume or any other non-displayed volume including dark orders, dark undisclosed RT participation and RT MGF board lot obligations. Bypass orders may be single-sided or double-sided (a cross).

4.11 Cross Types

A cross is a trade resulting from the entry by a Subscriber of both the order to purchase and the order to sell a security, but does not include a trade in which the Subscriber has entered one of the orders as a jitney order.

Cross Interference

On TSX, and TSX Venture and Alpha, crosses are subject to interference from orders in the book. During continuous trading an attributed cross will seek to match previously booked attributed orders from the same PO at the cross price. The contra-side of the cross that remains unfilled (because it gives up this volume) is then killed immediately. Regular crosses are subject to this "cross interference" and only allowed at or inside the market's best bid/ask with the exception of internal and bypass crosses.

On TMX SelectTSX Alpha, crosses are not subject to interference from orders in the book, and must be entered at a price that is at or inside the market's best bid price and best ask price, unless otherwise noted.

4.11.1 Basis Cross

A Basis Cross is a trade whereby a basket of securities or an index participation unit is transacted at prices achieved through the execution of related exchange-traded derivative instruments which may include index futures, index options and index participation units in an amount that will correspond to an equivalent market exposure.

A basis cross may be executed as a board lot, mixed lot or odd lot trade during the regular trading sessionsessions on TSX and TSX Alpha and special trading session on TSX, only be executed as a board lot trade, (odd lot or mixed lot crosses are not accepted) during the Regular Session on Alpha and TMX Select and during the Special Trading Session on Alpha.,. The price of the basis cross may be printed outside the best bid and ask and may be up to three decimal places. A basis cross will not set the last sale price.

4.11.2 VWAP Cross

A VWAP Cross is a transaction for the purpose of executing a trade at a volume-weighted average price of a security.

A VWAP cross may be executed as a board lot, mixed lot or odd lot trade during the regular trading sessionsessions on TSX and TSX Alpha and special trading session on TSX, only be executed as a board lot trade, (odd lot or mixed lot crosses are not accepted) during the Regular Session on Alpha and TMX Select and during the Special Trading Session on Alpha., The price of the VWAP cross may be printed outside the best bid and ask and may be up to three decimal places. A VWAP cross will not set the last sale price.

4.11.3 Contingent Cross

A trade resulting from a paired order placed by a PO on behalf of a client to execute an order on a security that is contingent on the execution of a second order placed by the same client for an offsetting volume of a related security.

A contingent cross may be executed as a board lot, mixed lot or odd lot trade during the regular trading sessionsessions on TSX and TSX Alpha and special trading session on TSX, only be executed as a board lot trade, (odd lot or mixed lot crosses are not accepted) during the Regular Session on Alpha and TMX Select and during the Special Trading Session on Alpha., The price of the contingent cross may be printed outside the best bid and ask and may be up to three decimal places. A contingent cross will set the last sale price.

4.11.4 Internal Cross

An internal cross may be executed on TSX, TSX Venture~~,~~ and TSX Alpha ~~and TMX Select~~. An intentional cross at or between the best bid/ask and between two client accounts of a PO which are managed by the PO as a portfolio manager with discretionary authority and is not subject to interference.

4.11.5 Bypass Cross

The cross bypass order (referred to in UMIR as a "designated trade") will execute intact even when outside the current best offer and best bid ~~on TSX~~price. A cross bypass order will not be rejected and is not subject to cross interference.

Bypass Cross can be printed outside the ~~ABBO~~NBBO. When a trader needs to execute a pre-arranged trade outside of the NBBO, all better priced visible volume must be displaced first before printing the Cross. Bypass orders can be used to sweep the visible volume without interference from the undisclosed volumes, and therefore limit the trader's exposure.

If then, the subsequently printed Cross is also marked as bypass, it will not be impacted by any quotes resulting from previously hidden volume. Smart order routers using 'spray' methodology to fulfill the best-price obligation may also use bypass orders when routing orders at prices outside of the NBBO.

4.11.6 Special Trading Session Cross

A special trading session cross may be executed on TSX ~~and Alpha~~. Also known as Specialty Price Cross, this is a closing price cross resulting from an order placed by a PO on behalf of a client for execution in the Special Trading Session at the last sale price. A special trading session cross may only be entered as a board lot, mixed lot or odd lot trade ~~on TSX , only executed as a board lot trade on Alpha~~ and must be reported using the appropriate marker. A special trading session cross cannot change the last sale price.

4.12 Order Features

4.12.1 TSX Alpha Order Processing Delay

New orders, order amendments and order cancels entered without an explicit post only instruction will incur a delay of between 1 and 3 milliseconds prior to TSX Alpha processing the order. Post only orders that do not incur the processing delay will be subject to a minimum volume requirement on the order to encourage sizable liquidity provision. Conditions under which TSX Alpha will accept Post Only orders are described in section 3.5 Post Only.

~~4.11.7~~4.12.2 Minimum Guaranteed Fill (MGF)

Registered Traders (RT's) guarantee automatic complete fills for marketable, board lot-sized, *client* orders that are equal to or less than the MGF size. The MGF size is a publicly disclosed volume threshold that can change during the day at the RT's discretion. Orders at or below the MGF size that contain the client marker must declare whether they are eligible for MGF fills. All orders marked other than "client" are not MGF eligible.

The MGF facility is intended to fill small retail investors with positions that are smaller than average. The MGF facility is not intended for systematic and/or repeated MGF access by sophisticated high volume or high frequency clients. If a particular MGF trade is subsequently deemed to be unsuitable for MGF, the trade is cancelled with the cancellation costs attributed to the customer that neglected to mark its unsuitable client order as MGF ineligible.

~~4.11.8~~4.12.3 Buy-ins

In order to support CDS in cases where a seller has failed to deliver a security following a trade, TSX has developed a special "Buy-In" facility to locate alternate sellers capable of immediately delivering the security, therefore enabling CDS to quickly and efficiently clear the failed position.

Buy-In Procedures:

On a daily basis, CDS provides a list of securities that Participating Organizations have failed to make delivery on.

- 1:30 PM (1st Cycle) - TSX receives and posts the preliminary Buy-In list. At this point, other Participating Organizations have the opportunity to provide liquidity by submitting Buy-In orders.
- 2:45 PM (2nd Cycle) - TSX receives and posts the Final Buy-In list. This list identifies the remaining securities that still need to be delivered.
- 3:00 PM - Cut-off for accepting Buy-In orders

Upon completion of the Buy-In period, TSX allocates fills on an equal by member basis to the sellers and calculates a price. This price is based on the last board lot trade before 3:00 plus a premium.

Buy-In Price = Last Board lot Sale Price + Premium

TSX manually enters these trades under a generic trader ID for each PO that are cleared by CDS on a same-day basis. Between 3:20 and 3:40, TSX Trading Services will provide transaction confirmations. This process efficiently clears failed delivery trades and helps to maintain overall market integrity.

For additional information about Buy-Ins or to participate in a Buy-In, please contact Trading Services.

5 Market Maker Program & Odd Lot Dealer System

5.1 TSX Market Maker Program

The Market Maker program exists exclusively on the TSX. The role of the Market Maker is to augment liquidity, while maintaining the primacy of an order-driven continuous auction market based on price-time priority. The Market Maker system maximizes market efficiency and removes the interfering influence of a traditional specialist. In the TSX environment, a Market Maker manages market liquidity through a passive role. Market Makers are visible only when necessary to provide a positive influence when natural market forces cannot provide sufficient liquidity.

Responsible Designated Traders (also referred to as Registered Traders or RTs) represent Market Maker Firms and act on behalf of the firm to ensure all responsibilities are met.

Market Makers do not have any proprietary pre-trade information or access to information regarding trade order entry of other participants.

TSX Market Maker responsibilities:

- Call a 2-sided market providing market continuity within a pre-specified range
- Contribute to market liquidity and depth
- Maintain activity in the market
- Fulfill the needs of retail-sized order flow through guaranteed minimums (MGF) that interact with aggressive orders whenever orders in the central limit order book do not meet the size required to fill aggressive orders at the quote (see MGF section below)
- Assist in the opening and with inquiries and anomalies
- Service odd lots (see Odd Lot section below)

Performance measurement system

TSX continuously monitors the performance of all Market Makers with respect to their ability to contribute to the overall market in terms of creating liquidity, depth and continuity.

- Spread Maintenance - Measures the Market Maker's ability to call a 2-sided market.
- Participation - Measures the participation of Market Makers in their security of responsibility.
- Liquidity - Measures whether Market Makers are lining the book with reasonable depth.

Allocation of securities of responsibility

Securities allocations are considered firm privileges and responsibilities. These allocations are awarded when securities are newly issued and when there are changes in responsibility. The TSX Allocation Committee determines which firms are awarded securities to manage as Market Makers based on among others:

1. A firm's overall performance in managing existing responsibilities;
2. A firm's competitive service level bids;

3. A firm's ability to remain within its qualification requirements; and
4. Special request by issuers.

Qualification requirements of a Market Maker firm

Generally Market Maker firms are required to:

- Maintain sufficient firm capital based on the classification in securities of responsibility;
- Maintain a minimum number of assignments so as to maintain their presence; and
- Maintain a certain ratio of assignments in highly liquid versus less liquid securities.

5.1.1 Odd Lots

RT's are obligated to automatically guarantee a complete fill for Odd Lot orders priced at or better than the opposite side's CLOB market price. If the Odd Lot order's price is not marketable (or if there is no RT) the Odd Lot order is displayed in the Odd Lot book and is eligible to trade continuously at its limit price (without regard to the CLOB price) and will trade at that price if an opposite side Odd Lot order is entered with the exact same volume priced at or better than the resting Odd Lot order's price. Odd lots only trade as FOK which means partial fills are not accepted. It is possible for the Odd Lot book to display orders with overlapping prices when resting odd lot orders can match on price but not on volume.

5.1.2 Minimum Guaranteed Fill (MGF) Size

RT's must also guarantee automatic complete fills for marketable, board lot-sized, *client* orders that are equal to or less than the MGF size. The MGF size is a publicly disclosed volume threshold that can change during the day at the RT's discretion. Orders at or below the MGF size that contains the client marker must declare whether they are eligible for MGF fills. All orders marked other than "client" are not MGF eligible.

The MGF facility is intended to fill small retail investors with positions that are smaller than average. The MGF facility is not intended for systematic and/or repeated MGF access by sophisticated high volume or high frequency clients. If a particular MGF trade is subsequently deemed to be unsuitable for MGF, the trade is cancelled with the cancellation costs attributed to the customer that neglected to mark its unsuitable client order as MGF ineligible.

Example: MGF Size

Assume the CLOB is as follows:

RT: AVGJOE MGF: 500

Bid			Offer		
Order 001	100	10.00	10.02	400	Order 002

If an incoming client order (Order 003) to sell 1000 shares @ MKT is entered:
→ Since the order size is *greater than* the MGF size of 500, the order is MGF-ineligible and a trade will occur against the available resting CLOB liquidity without any guaranteed fill from the RT:

The following trades will occur:

Buyer	Seller	Qty	Price
Order 001	Order 003	100	$10.00

The remaining 900 volume will be booked at the last sale price of $10.00

Resulting CLOB:

Bid			Offer		
			10.00	900	Order 003
			10.02	400	Order 002

Example 2: MGF Size

Assume the CLOB is as follows:

RT: AVGJOE MGF: 500

Bid			Offer		
Order 001	100	10.00	10.02	400	Order 002

Alternatively, if an incoming client order (Order 003) to sell 500 shares @ MKT is entered:
→ Since the order size is *less than or equal to* the MGF size of 500, the order is MGT-eligible and there is not enough resting liquidity to fully fill the client order, a guaranteed fill from the RT will occur for the balance of the order.

The following trades will occur:

Buyer	Seller	Qty	Price
Order 001	Order 003	100	$10.00
RT	Order 003	400	$10.00

Resulting CLOB:

Bid			Offer		
Order 001	100	10.00	10.02	400	Order 002

Example: MGF Size

Assume the CLOB is as follows:

RT: AVGJOE MGF: 500

Bid			Offer		
Order 001	100	10.00	10.02	400	Order 002

If an incoming client order (Order 003) to sell 1000 shares @ MKT is entered:
→ Since the order size is *greater than* the MGF size of 500, the order is MGF-ineligible and a trade will occur against the available resting CLOB liquidity without any guaranteed fill from the RT:

The following trades will occur:

Buyer	Seller	Qty	Price
Order 001	Order 003	100	$10.00

The remaining 900 volume will be booked at the last sale price of $10.00

Resulting CLOB:

Bid			Offer		
			10.00	900	Order 003
			10.02	400	Order 002

Example 2: MGF Size

Assume the CLOB is as follows:

RT: AVGJOE MGF: 500

Bid			Offer		
Order 001	100	10.00	10.02	400	Order 002

Alternatively, if an incoming client order (Order 003) to sell 500 shares @ MKT is entered:
→ Since the order size is *less than or equal to* the MGF size of 500, the order is MGT-eligible and there is not enough resting liquidity to fully fill the client order, a guaranteed fill from the RT will occur for the balance of the order.

The following trades will occur:

Buyer	Seller	Qty	Price
Order 001	Order 003	100	$10.00
RT	Order 003	400	$10.00

Resulting CLOB:

Bid			Offer		
Order 001	100	10.00	10.02	400	Order 002

5.1.3 RT Participation

Registered Trader (RT) participation is an optional Market Maker feature that enables RTs to trade passively at TSX quoted prices to accumulate or flatten a position in their assigned securities. RTs can turn on "participation" independently for each side of the market in their assigned securities. When participation is turned on the RT will automatically generate "participation" orders to trade with all non-

program incoming orders that are MGF sized or less but are otherwise ineligible for best price minimum guaranteed fills. MGF eligible orders are not affected by RT participation and these orders continue to be guaranteed by the RT at the best displayed price.

The RT auto-generates orders at each price level to trade with *no more than 40%* of the incoming order's volume (after the incoming order's broker priority volume has been allocated to other orders in the book). RT participation will fill no more than 40% of the incoming orders described above even in cases where the CLOB could fully fill the incoming order. At each price level the RT allocated participation volume is no greater than the volume allocated to other non-RT booked orders.

Allocation of the 40% RT participation is rounded down to nearest full board lot. One exception exists in the case when an order is for 200 shares – allocating 40% would result in no RT participation, so the order is allocated 50% or 100 shares.

If the RT has a booked order with time priority over all other booked order at that price level the incoming order will trade against that booked RT order at that price level rather than generate an RT auto-participation order at that price level. This mechanism ensures the rest of the orders in the order book have ample opportunity to trade.

Example: RT Participation

Assume the CLOB is as follows:

RT: JOEAVG MGF: 500 Participation: ON

Bid			Offer		
Order 001	300	10.00	10.02	400	Order 002
Order 004	200	10.00	10.02	100	Order 003

If an incoming client order (Order 005) to sell 500 shares @ MKT is entered:
→ Since RT Participation is on, the incoming trade will be allocated 40% to the RT and 60% to the resting CLOB liquidity. The following trades occur:

Buyer	Seller	Qty	Price
Order 001	Order 005	300	10.00
RT	Order 005	200	10.00

Resulting Order Book:

Bid			Offer		
Order 004	200	10.00	10.02	400	Order 002
			10.02	100	Order 003

~~**Example 2: RT Participation**~~

~~Assume the CLOB is as follows:~~

~~RT: JOEAVG MGF: 500 Participation: ON~~

~~Bid~~			~~Offer~~		
~~Order 001 - JOEAVG~~	~~300~~	~~10.00~~	~~10.02~~	~~400~~	~~Order 002~~
~~Order 004~~	~~200~~	~~10.00~~	~~10.02~~	~~100~~	~~Order 003~~

~~If an incoming client order to sell 500 shares @ MKT is entered:~~
~~→ Since the RT already has an open order with time priority, the incoming order will trade with the booked order rather than generate a net new Participation order. The following trades occur:~~

~~Buyer~~	~~Seller~~	~~Qty~~	~~Price~~
~~Order 001 - JOEAVG~~	~~Incoming order~~	~~300~~	~~10.00~~
~~Order 004~~	~~Incoming order~~	~~200~~	~~10.00~~

Example: RT Participation

Assume the CLOB is as follows:

RT: JOEAVG MGF: 500 Participation: ON

Bid			Offer		
Order 001	300	10.00	10.02	400	Order 002
Order 004	200	10.00	10.02	100	Order 003

If an incoming client order (Order 005) to sell 500 shares @ MKT is entered:
→ Since RT Participation is on, the incoming trade will be allocated 40% to the RT and 60% to the resting CLOB liquidity. The following trades occur:

Buyer	Seller	Qty	Price
Order 001	Order 005	300	10.00
RT	Order 005	200	10.00

Resulting Order Book:

Bid			Offer		
Order 004	200	10.00	10.02	400	Order 002
			10.02	100	Order 003

Example 2: RT Participation

Assume the CLOB is as follows:

RT: JOEAVG MGF: 500 Participation: ON

Bid			Offer		
Order 001 - JOEAVG	300	10.00	10.02	400	Order 002
Order 004	200	10.00	10.02	100	Order 003

If an incoming client order to sell 500 shares @ MKT is entered:
→ Since the RT already has an open order with time priority, the incoming order will trade with the booked order rather than generate a net new Participation order. The following trades occur:

Buyer	Seller	Qty	Price
Order 001 - JOEAVG	Incoming order	300	10.00
Order 004	Incoming order	200	10.00

5.2 TSXV Odd Lot Dealer Program

TSX Venture Odd Lot Dealers provide an automatic immediate fill for incoming ~~tradeable~~tradable odd lots at the best posted price on TSX Venture. Odd lots resting in the TSX Venture odd lot book which later become tradeable due to a change in the best posted TSX Venture price are also automatically filled by the Odd Lot Dealer.

5.3 TSX Alpha Odd Lot Dealer Program

TSX Alpha Odd Lot Dealers provide an automatic immediate fill for incoming ~~tradeable~~tradable odd lots at the ~~best posted price on Alpha Exchange.~~NBBO. Odd lots resting in the TSX Alpha odd lot book which later become ~~tradeable~~tradable due to a change in the ~~best posted Alpha price~~NBBO are also automatically filled by the Odd Lot Dealer at the NBBO.

5.4 Electronic Liquidity Provision (ELP) Program

The TSX ELP program is an innovative rebate program designed to reward electronic liquidity providers that significantly contribute liquidity to the TSX and TSXV markets. Each individual ELP within a Participating Organization or its direct market access customer must be pre-qualified based on its proven experience in conducting high-frequency electronic trading. Once pre-qualified, each direct market access customer of a Participating Organization that undertakes proprietary trading or proprietary traders within a Participating Organization may be assigned a unique ELP-eligible Trader ID. Participation in the ELP program is subject to an ELP subscriber agreement.

The ELP program is only available on the TSX market on a prescribed list of eligible securities published and communicated on the 1st business day of each month.

6 Other Features

6.1 Minimum Ticks

6.1.1 Standard Trading Units

Standard trading units are based on the security's previous day per-share closing price on the TSX or TSX-V:

SECURITY'S CLOSING PRICE	STANDARD TRADING UNITS (BOARD LOTS)
$1 and up	100 shares
$0.10 and less than $1	500 shares
Under $0.10	1000 shares
Convertible Debentures	$1000 face value

*For TSX Alpha ~~and Select markets,~~ the trading unit is set based on the TSX or TSX-V closing price.

Odd Lots

Orders with volume less than a standard trading unit are considered Odd Lot and do not trade in the regular CLOB.

On TSX, TSXV and TSX Alpha, either Registered Traders (RT) or Odd Lot Dealers (OLD) perform auto execution of odd lots. The RT /OLD automatically guarantees a complete fill at the CLOB price for Odd Lot orders priced at or better than the opposite side's CLOB market price. If the Odd Lot order's price is not marketable (or if there is no RT/OLD) the Odd Lot order is displayed in the Odd Lot book and is eligible to trade continuously at its limit price (without regard to the CLOB price) and will trade at that price if an opposite side Odd Lot order is entered with the exact same volume priced at or better than the resting Odd Lot order's price. Odd lots only trade as "Fill or Kill" which means partial fills are not accepted. It is possible for the Odd Lot book to display orders with overlapping prices when resting odd lot orders can match on price but not on volume.

~~TMX Select does not support odd lots. If an odd lot order is sent, it will be rejected.~~

Mixed Lots

An order that is mixed (with both a board lot and odd lot portion) is effectively split into two separate orders at the time of entry. The board lot portion trades normally in the CLOB and the odd lot portion is treated as an odd lot order.

6.1.2 Standard Trading Price Increments

Standard Trading Price Increments are based on the order's price level:

SECURITY PRICE LEVEL	STANDARD TRADING PRICE PER SHARE (CENTS)
< $0.50/share	$0.005
$0.50 - $1000/share	$0.01
> $1000/share	$0.125

6.2 Trading Controls

6.2.1 Halts

Halts are manually applied and lifted by Trading Services, and notification messages are sent out on all public market data feeds. Securities may be halted or lifted at any time during the trading day, from the Pre-Open until the end of the Extended Trading session.

~~Alpha has~~TSX and TSXV may employ two types of halts ~~that can be applied to securities: No Matching~~described below, a no matching halt and ~~Full~~a full halt. TSX Alpha will only initiate a full halt.

No Matching Halt

The majority of halts are "No Matching" Halts, and are imposed by Regulators pending news regarding the issuer of the security.

During a No Matching halt, order entry and amendment is allowed, as well as cancels, but there is no matching. When in No Matching halt state, the security behaves as in the Pre-Open Trading session, where the book can be crossed and the indicative auction price is continually calculated based on order activity in the book. A Calculated Opening Price (COP) is broadcasted while the stock is in halt state. When the halt is lifted, an auction similar to the Market Opening takes place, and continuous trading resumes. For examples, please see the Opening Allocation section.

Full Halt

In a full halt, order entry, order amendment and order matching is suspended, however orders may be cancelled.

6.2.2 Freeze Parameters

Freeze limits are established by applying a predetermined price deviation against the most recent reference price (primarily the marketplace's last sale price). Actual freeze limits are kept confidential to protect against abusive behaviour. 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. While the security is frozen, further order entry is prevented and existing orders cannot be cancelled or modified.

When a security freezes, TMX Trading Services staff assesses and determines whether the order will be allowed, and whether to resume trading in the security. The following steps are taken:

1. Call the trader behind the offending order. If the trader confirms the order is not valid, Trading Services will kill the offending order and the resulting CLOB remains the same as it did before the freeze occurred.
2. If the order is still permitted to trade, Trading Services will verify with IIROC before the trade is allowed to go through.

6.2.3 Bid/Ask Limits

Bid/ask tick limits are a TMX Market Quality safeguard available across TSX, TSXV, ~~Select~~ and TSX Alpha that prevents Market or Better Price limit orders from trading deep into the book, thus causing large anomalous price swings. Bid/Ask Tick Limits are configurable across the market based on the

security's quoted price, and apply automatically to market and better price limit orders. This mechanism limits the number of ticks past the best bid price or best ask price an order can trade through. If an incoming tradable order hits the bid/ask limit and still has volume remaining, the remaining volume is booked at the bid/ask limit.

Start Price	0.00	1.00	5.00	50.00	100.00
Equities	0.10	0.25	0.50	1.00	5.00
Debentures	5.00	5.00	5.00	5.00	5.00

6.2.4 Single Stock Circuit breakers

Single-stock circuit breakers are an important tool to help mitigate short-term volatility in the trading of individual stocks. Recent regulatory changes introduced single stock circuit breakers. This means that a five-minute halt of trading in a security will now automatically trigger across all Canadian marketplaces if the price of the security swings 10% or more within a five-minute period.

Initially, SSCBs will apply to all securities included in the S&P/TSX Composite Index, as well as to those exchange-traded funds (ETFs) which are comprised principally of listed securities. All trades executed at more than 5% beyond the price that triggered the SSCB will be cancelled.

6.3 Order Markers

All markets support markers required for regulatory purposes including:

- Insider Account (IA)
- Significant Shareholder (SS)

6.3.1 NCIB Marker

Participating Organizations, when acting as a broker making purchases on behalf of a listed issuer pursuant to a normal course issuer bid, must comply with certain exchange requirements that are imposed on listed issuers. The NCIB marker is used to identify such orders. For more information on NCIB compliance, see the TSX Rule Book Part 6 – Division 5.

6.4 Account Types

All ~~four~~three markets support the following account type markers:

- NC – Non-Client
- IN - Inventory
- CL - Client
- ST – Specialist (RT)
- OT – Options Market Maker
- OF – Options Firm

6.5 Debentures

TSX, TSXV and TSX Alpha support trading in debentures~~, while Select does not~~. Debentures are traded in increments of $1000 face value. Debentures are not assigned to RT's / Odd Lot Dealers therefore odd lot debenture orders are not auto-executed.

6.6 USD-Denominated securities

TSX, TSXV~~, Select~~ and TSX Alpha support trading of securities denominated in USD. USD-denominated securities are identified through the symbology with the security's symbol ending with an ".U" suffix.

6.7 Clearing Arrangements

All transactions executed are reported to CDS Clearing and Depository Services Inc. at day end for clearing and settlement and management of counterparty and settlement risk. The CDS Participant Rules govern the operation of CDS clearing and settlement services, including risk management.

Each PO configures default clearing instructions defined at the firm-wide level. Special clearing instructions can be configured for special traders or trades.

6.7.1 Clearing give-up

Give-up refers to the process where a PO provides special instructions to the TMX to let a trade settle under a different trader ID and/or PO, usually for the purposes of consolidating a derivative position. Contact Trading Services for more information on arranging a give-up.

6.7.2 Special Settlement Terms

Orders may be marked with special instructions for settlement. These orders are traded individually, not in relative priority. A special settlement terms order is displayed in the special settlements terms "book" and can be traded with an order that specifically targets that resting order by specifying its intention to trade by matching the resting order's sequence number. Special settlement terms trades can also be crossed by a broker.

~~Select~~TSX Alpha does not support special settlement terms. Special settlement terms supported on TSX~~, TSXV~~ and ~~Alpha~~TSXV include: Cash, Cash Today, Delayed Delivery, Non-net, and Non-resident. Settlement terms orders will match and trade with each other when the terms on the orders match.

6.8 Erroneous Trade and Trade Amendment Policy

In the event that a PO executes an order in error ("erroneous trade") the PO will be asked to contact the Trading Services desk. The Trading Services desk may, upon request of the PO, contact the other party to the trade to request cancellation of the trade. Both parties to the trade must agree to the trade cancellation or they may elect to contact IIROC for assistance.

In the event of a technical, systems, or access problem that has substantially impaired or impacted access or trading, TMX has the discretion to cancel an impacted trade without the consent of both

parties and will notify IIROC of the decision. Otherwise, TMX cannot unilaterally cancel a trade without the consent of both parties and without consultation with and approval of IIROC.

In the event of a trade that requires a change or amendment to price and/or quantity the PO will contact IIROC for approval. If IIROC approves the amendment, they will then contact the TMX Trading Services Desk to instruct TMX to make the change.

This policy excludes any requests received by IIROC or other securities regulator to cancel or amend a trade.

In the event of a dispute between two PO's, TMX will make available any information required to settle the dispute, subject to any confidentiality restrictions on the disclosure of such information.

6.9 Reports

6.9.1 Daily Diary Files

The TMX Daily Diary files are a set of daily reports generated for each participant and automatically emailed as password protected zipped .txt files following the close of each trading day. These reports include:

- Open Orders By Book – a detailed list of all outstanding open orders from the PO
- Open Order By User ID – a detailed list of all outstanding open orders organized by User ID
- Removed Orders by Book – a list of all cancelled orders during the day
- Removed Orders by User ID – a list of all cancelled orders during the day by User ID
- Diary List By Price – a detailed summary of all trades executed during the day by price
- Diary List By Time – a detailed summary of all trades executed during the day by time

TSX, TSXV, and TSX Alpha support all six reports. ~~Select does not support the Open Orders files as it is a day-only marketplace.~~

6.9.2 Compliance Alerts Reporting System (CARS)

TMX has developed a system that produces daily reports that enable the compliance office of a PO or Member to monitor and track trading infractions and alerts on a post-trade basis. TSX Compliance Alerts Reporting System (CARS) is an invaluable tool for the discerning compliance officer who can use the tool to monitor the trading activity of the firm and to assist in developing strategic action items to deal with the findings. CARS will also demonstrate the firm's proactive stance on compliance to regulators and auditors from other firms.

CARS allows subscribers to select a maximum of seven unique alert monitors and to input their own specific parameter ranges. Subscribers can select from the following alert monitors:

- JTNY (Jitney) - The system will provide a potential front-running alert to find instances within a PO when an order marked "jitney" has traded just ahead of an order marked "client" and the "jitney" order received a better fill price.

- ANON (Anonymous) - The system will provide a potential front-running alert to find instances within a PO when an order marked "anonymous" has traded just ahead of an order marked "client" and the anonymous order received a better fill price.
- CPT (Client Principal Trade) - The system will provide a potential customer/principal trading rule alert to find instances where a "pro" (i.e. Non Client, Specialist, Inventory) trades against a client within a PO without improving the fill price to their client based on the current bid/offer price.
- Restricted Stock - The system will provide restricted stock alerts to detect all trades for restricted stock symbols specified by the PO.
- APTC (Alerts Prior To Close) - The system will provide alerts to detect patterns of potential price manipulation at market close.
- Daily Cross Report - The system will provide a cross report to filter various types of crosses that occurred at either the bid or ask price.
- Daily Close Report - The system will provide a daily closing report to indicate which stock prices the PO has moved up or down at the end of the day.

Each day, the CARS application creates reports which are available on a secured website.

Reports

Reports are generated in CSV file format which allows subscribers to customize the data using various software programs. Reports for TSX~~.~~, TSX Venture and TSX ~~Venture~~Alpha are created and saved as separate files~~. Effective May 1, 2013, separate CARS reports will also be available on Alpha and Select.~~..

Security

Alert/Report parameters will be entered using a secured web browser interface. The reports will be available on a secure website the next business day. All CARS data is secured from external parties and access within TMX will be restricted to defined personnel.

6.10 Fees & Billing

Fees

Each market's fee schedule is available on the TMX website.

Billing

PO's and Subscribers will be provided with an invoice for their account on the 3rd business day at the beginning of each month, which will detail all trading activity and applicable fees for the previous month. These detailed supporting trade files are provided in a .zip file attached to the automatic email delivery of all invoices.

Subscribers are required to participate in a Pre-Authorized Debit Plan or pay through CDS (directly or via a Carrying Broker). Subscribers will also receive via e-mail zipped password protected Billing Reports with the previous month's trade details aggregated by trader, symbol and product.

For further information, please contact your Trading Account Manager
trading_sales@tmx.comtrading_sales@tmx.com