NEO Exchange

NEO Trading Functionality Guide

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TABLE OF CONTENTS

1 Introduction

This document contains a description of NEO Exchange ("NEO" or "NEO Exchange") functionality and will be updated as new features become available. Capitalized words not defined here are defined in the NEO Exchange trading policies (the "Trading Policies") and in the case of a discrepancy between this document and the trading policies, the trading policies will apply.

2 Contact Information

The NEO Operations team and the sales team are the two main points of contact for questions or issues relating to trading functionality and solutions. Contact the NEO Operations team for support enquiries and sales team for any questions about our products and services.

CONTACT	PHONE	EMAIL
NEO Operations	(416) 933-5950	Operations@neostockexchange.com
Trading Sales	(416) 933-5955	NEOTradingSales@neostockexchange.com

Support is available Monday through Friday on all trading days as follows:

- Production Support: 07:30 (EST) to 17:30 (EST)

3 Overview

3.1 Trading Books and Crossing Facility

NEO Exchange offers unique functionality in three distinct trading books plus a crossing facility to benefit natural investors. The Exchange trades NEO listed securities and all TSX, TSX Venture Exchange and CSE listed securities. The connection to the trading books is established via FIX Order Entry sessions.

3.1.1 NEO-L

NEO-L is a transparent order book with the following features:

- Make-Take fee model
- Traditional Market-by-Order market data feed
- Matching algorithm that prioritizes NEO Trader orders over Latency Sensitive Trader orders
- Odd Lot and Mixed Lot order support
- Opening and Closing Call support for NEO listed securities
- Long order support (i.e. Good Till Cancel and Good Till Date) support for NEO listed securities

3.1.2 NEO-N

NEO-N offers features common to both transparent and hidden order books as follows:

- Take-Make (inverted) fee model
- Unique Market-by-Price market data feed (aggregating orders by price level), which provides pre-trade anonymity
- Matching algorithm that prioritizes NEO Trader orders over Latency Sensitive Trader orders
- Size-Time priority model, which rewards larger orders that rest in the book for a longer period of time
- A speed bump mechanism that is applied to active Latency Sensitive Trader orders

3.1.3 NEO-D

NEO-D is a fully hidden order book with the following features:

- Take-Make (inverted) fee model
- Matching algorithm that prioritizes NEO Trader orders over Latency Sensitive Trader orders
- Odd Lot and Mixed Lot order support
- Size-Time priority model, which rewards larger orders that rest in the book a longer period of time
- No pre-trade transparency

- Supports a Minimum Acceptable Quantity ("MAQ") order attribute to set the minimum contra order size
- Allows passive orders to determine if they only want to interact with other passive orders, only active orders or both (default)

3.1.4 Crossing Facility

The Crossing Facility supports the execution of Bypass crosses and intentional crosses at the time of order entry in any of the securities traded on NEO Exchange free of charge. See section section 8 for more information.

4 Trading Sessions

4.1   Hours of Operation

NEO listed Securities

Session	NEO-L	NEO-N	NEO-D	Crossing Facility
Pre-Open	7:00AM-9:30AM	N/A	8:00AM-9:30AM	N/A
Opening Call	9:30AM	N/A	N/A	N/A
Continuous Trading	9:30AM-4:00PM	8:00AM-5:00PM	9:30AM-4:00PM	8:00AM-5:00PM
Closing Call	4:00PM-4:05PM	N/A	N/A	N/A
Extended Trading	4:05PM*-5:00PM	N/A	N/A	N/A

*Note, Extended Trading commences at 4:00PM for NEO listed securities not eligible for the closing call.

Other Traded Securities

Session	NEO-L	NEO-N	NEO-D	Crossing Facility
Pre-Open	N/A	N/A	8:00AM-9:30AM	N/A
Continuous Trading	8:00AM-5:00PM **	8:00AM-5:00PM	9:30AM-4:00PM	8:00AM-5:00PM

** The odd lot facility is restricted to the hours of 9:30AM-4:00PM. Odd lot or mixed lot orders sent outside of those hours will be rejected.

4.3   Classification of Trader IDs

A key component for NEO Exchange is the differentiation between Trader IDs as being either a NEO Trader or a Latency Sensitive Trader. Members have the responsibility to certify their Trader IDs as one of these two categories, defined in the trading policies and described below.

A *Latency Sensitive Trader ("LST")* means a trader that uses technology and automated co-located trading strategies. Typically, this includes having a server installed in the same data centre as, or in close proximity to, any Canadian exchange or alternative trading system located in the Greater Toronto Area. A trader type classified as an LST includes any dealer that trades for its own account using co-located automated trading strategies, whether or not a Designated Market Maker ("DMM"). The second type of LST is a DEA Client that accesses markets with proprietary technology, using only dealer-provided pre-trade risk filters, and directs orders to venues without relying on dealers to make the routing decisions. Any type of client flow where the client has no control over which marketplace their orders get routed to is not considered to be LST.

A *NEO Trader* is anyone that is not classified as LST.

5 Trading in NEO-L

5.1   Pre-Open (Opening Call Eligible Securities)

During the pre-open session, market and limit orders can be entered, but will not be executed until the Opening Call. In addition, any previously submitted duration orders (GTD, GTC) saved in the system from the previous day will be available during this session. Market on Close ("MOC"), Limit on Close ("LOC"), and Imbalance Only ("IO") orders may also be entered at this time. See section 9.5.4 for a description of these order types.

5.1.1 Calculated Opening Price ("COP")

The COP and imbalance will be published on the multicast market data feed with each change throughout the pre-open session. IO order quantity is not included as a part of the COP or imbalance calculations. In the event more than one opening execution price is available, the opening price will be determined by the following rules:

  a) The price that maximizes the trade volume;
  b) If more than one price is determined in a), the price that ensures the minimum imbalance; and
  c) If still more than one price is available, the price that is closest to the instrument's previous close.

Calculated Opening Price Example

Previous closing price is 10.35.

The NEO-L order book is as follows:

Buy Order	Buy Size	Buy Price	Sell Price	Sell Size	Sell Order
B1	1300	Mkt	Mkt	1000	S4
B2	100	10.35	10.35	300	S5
B3	300	10.34	10.36	100	S6

Cumulative buy and sell quantities that can be matched at each price level are set out in the table below:

Cumulative Buy Size	Price	Cumulative Sell Size	Matchable Size	Imbalance
1300	10.36	1400	1300	-100
1400	10.35	1300	1300	100
1700	10.34	1000	1000	700

The COP calculation based on the defined rules above would be:

- Applying rule a), the largest volume (1300 shares) would trade at two prices – 10.35 and 10.36
- Applying rule b), both 10.35 and 10.36 would leave the smallest imbalance (100 shares)
- Applying rule c), 10.35 is closest to the previous closing price (10.35)
- Therefore, the COP is 10.35.

5.1.2 Opening Call

At the start of the Opening Call, the orders eligible to trade within the Opening Call will be matched at the COP in the following sequence:

1. Market and Market on Open ("MOO") orders
2. Better priced Limit and Limit on Open ("LOO") orders
3. Limit and LOO orders priced at the COP
4. Imbalance Only ("IO") orders, on the aggressing side

If there are multiple orders within each order type above, they will be executed in Broker / NEO Trader / Time priority.

The board lot portion of a mixed lot order for an eligible security can participate in the Opening Call and be included in the COP and imbalance calculations. The odd lot portion of a mixed lot and strict odd lot orders for eligible securities will be executed following the Opening Call at the start of the Continuous Trading Session at the COP. Any unfilled market orders following the Opening Call will be posted in NEO-L as limit orders at the

COP. Unfilled quantities of any MOO, LOO and IO orders will be cancelled immediately after the Opening Call.

Eligible NEO listed securities may have additional support from the DMM to facilitate the Opening Call and transition into continuous trading. Immediately preceding the Opening Call, the DMM may be given time to assess the overall quality of the book, the imbalance, and the opening price as part of their fair and orderly markets obligation. The DMM may:

a) Proceed with the Opening Call;

b) Enter an IO order to reduce/eliminate an imbalance and then proceed with the Opening Call; or

c) Delay the opening.

In the absence of an instruction by the DMM, the security will be systematically opened according to the NEO Exchange opening procedures.

5.2   Continuous Trading

A tradeable order entered into NEO-L will execute against resting orders in Price / Broker / NEO Trader / Time priority. Any order that is anonymous or jitney will not be considered in broker preference matching.

At a particular price, orders in the NEO-L will be processed in the following sequence:

a) A resting order will be executed in priority to all orders at inferior prices;

b) A visible resting order has priority over a non-visible resting order at the same price at the time of execution; and

c) If multiple resting orders exist at the same price then the priority sequence is as follows:

i.   Any resting orders entered by the same Member (if there are multiple orders, then the sequence is any of its resting NEO Trader orders according to time priority followed by all its other orders in time priority),

ii.   Any resting orders from NEO Trader accounts, according to time priority,

iii.   Any DMM resting orders, according to time priority, subject to the Market Maker Volume Allocation (see section 10.3.1 for more information), then

iv.   All other resting orders according to time priority.

An order in NEO-L will lose its time priority if (a) its visible volume is increased; (b) the price is amended; or (c) the order attribution is amended (to / from anonymous).

All visible orders resting on NEO-L, except odd lot orders, are disseminated on the public market data feed with broker attribution (unless marked anonymous).

Continuous Trading in NEO-L – Trading Example

	The NEO-L order book is as follows:								
Buy Order	Buy Firm	Buy Trader	Buy Size	Buy Price	Sell Price	Sell Size	Sell Trader	Sell Firm	Sell Order
B1	A	LST	100	10.99	11.01	300	LST	B	S1
B2	D	LST	200	10.99	11.01	100	NEO Trader	C	S2
					11.01	400	LST	A	S3
					11.01	200	NEO Trader	A	S4

If Broker A submits, on behalf of a NEO Trader account, order B3 to buy 1000 shares at price of 11.01, the following trade(s) will occur:

- **Trade 1:** 200 @ 11.01 (B3 / S4, due to broker and NEO Trader priority over S1, S2, S3)
- **Trade 2:** 400 @ 11.01 (B3 and S3, due to broker priority over S1, S2)
- **Trade 3:** 100 @ 11.01 (B3 and S2, due to NEO Trader priority over S1)
- **Trade 4:** 300 @ 11.01 (B3 and S1)

5.2.1 Odd-Lot and Mixed-Lot Orders

The NEO Exchange supports execution of odd lot and mixed lot orders on NEO-L. If odd lot orders are tradeable on entry (i.e. at or better than the opposite side of the NBBO), the orders are automatically executed upon entry by the DMM or Odd Lot Trader at the current NBB or NBO. If the odd lot order is a limit order and not tradeable on entry, it will be booked at its limit price and only trade at the NBBO when its limit price moves into the range of the opposite side of the NBBO.

A mixed lot order will be split into a board lot and an odd lot portion upon entry. The odd lot portion of a resting mixed lot order will only trade when the board lot portion is completely filled. The odd lot portion will receive the same price as the last traded price of the board lot portion.

Odd lot orders that are not duration orders (i.e. not GTC, GTD) will be subject to an Odd Lot Expiry time, which is currently set to the end of the Continuous Trading Session. This is to prevent excessive odd lot fills at the end of the trading session.

5.3   Closing Call (Closing Call Eligible Securities)

5.3.1 Participation in the Closing Call

At the end of the Continuous Trading Session, all orders that are ineligible to participate in the Closing Call will expire (i.e. RHO orders) and any remaining orders are eligible to participate in the Closing Call. All previously entered Closing Call eligible orders (MOC,

LOC) entered prior to the Closing Call that have remained hidden until this session will be inserted in NEO-L to participate in the Closing Call.

5.3.2 Calculated Closing Price ("CCP")

The CCP, imbalance direction and size will be continuously published with each change affecting the CCP while in the Closing Call. These changes may include new MOC and LOC orders, as well as amendments or cancellations to existing MOC and LOC orders. In the event that more than one execution price is available, the CCP will be determined by the following rules:

a) The price that maximizes the trade volume;

b) If more than one price is determined in a), the price that will leave the smallest imbalance; and

c) If still more than one price is available, the price that is closest to the instrument's last traded price on NEO Exchange.

Calculated Closing Price Example

Last Sale Price on NEO-L is 10.01.

The NEO-L order book is as follows:

Buy Order	Buy Size	Buy Price	Sell Price	Sell Size	Sell Order
B1	500	Mkt	Mkt	900	S6
B2	100	10.02	9.99	100	S7
B3	1400	10.01	10.00	1000	S8
B4	800	10.00	10.01	200	S9
B5	300	10.00	10.01	900	S10

Cumulative buy and sell quantities that can be matched at each price level are set out in the table below:

Cumulative Buy Size	Price	Cumulative Sell Size	Matchable Size	Imbalance
600	10.02	3100	600	-2500
2000	10.01	3100	2000	-1100
3100	10.00	2000	2000	-1100
3100	9.99	1000	1000	2100

The calculation based on the defined rules above:

- Applying rule a), the largest volume (2000 shares) would trade at two prices – 10.00 and 10.01
- Applying rule b), both 10.00 and 10.01 would leave the smallest imbalance (1100 shares)
- Applying rule c), 10.01 is closest to the last traded price on NEO (10.01)
- Therefore, the CCP is 10.01.

5.3.3 Matching of Orders

The Closing Call for each of the Closing Call Eligible Securities will occur at a randomized time within 30 seconds following the end of the session. At the start of the execution, the side opposite of the indicated imbalance direction will aggress the book. In the absence of an imbalance, the buy side will aggress the sell side.

The orders eligible to trade in the Closing Call will be matched at the CCP in the following sequence:

a) MOC orders,

b) Better priced Limit and LOC orders,

c) Limit and LOC orders priced at the CCP.

If there are multiple orders within each order type above, they will be executed in Broker / NEO Trader / Time priority.

Mixed lot and odd lot orders will not be eligible for entry during the Closing Call. Remaining mixed lot orders during the Continuous Trading Session will have the board lot portion contribute to the Closing Call. Upon execution of the Closing Call, any remaining odd lot orders will expire.

<u>Closing Call Example</u>

The NEO-L order book is as follows:

Buy Ord	Buy TIF	Buy Entry Time	Buy Size	Buy Price	Sell Price	Sell Size	Sell Entry Time	Sell TIF	Sell Ord
B4	MOC	16:00PM	400	Mkt	Mkt	1100	09:30AM	MOC	S1
B1	LOC	08:20AM	200	10.06	10.04	400	15:58PM	LOC	S4
B2	Limit	10:22AM	500	10.05	10.05	100	15:00PM	Limit	S3
B3	LOC	15:58PM	500	10.04	10.05	200	14:30PM	LOC	S2

Cumulative buy and sell quantities that can be matched at each price level are set out in the table below:

Cumulative Buy Size	Price	Cumulative Sell Size	Matchable Size	Imbalance
1100	10.05	1800	1100	-700
1600	10.04	1500	1500	100
1600	10.03	1100	1100	500

An imbalance publication message on the market data feed would be disseminated with the following fields (this is only a subset of the message, please refer to the NITCH specification for additional fields):

Field	Value
Imbalance	100
Imbalance Direction	Buy
Calculated Closing Price	10.04

The auction will occur at a randomized time within 30 seconds starting at 4:05PM and will execute at a price of $10.04 and the following trades would occur:

- **Trade 1**: 400 @ 10.04 (B4/S1)
- **Trade 2**: 200 @ 10.04 (B1/S1)
- **Trade 3**: 500 @ 10.04 (B2/S1)
- **Trade 4:** 500 @ 10.04 (B3/S4)
- Remaining MOC and LOC orders will expire at the conclusion of the Closing Call.

5.3.4 Delayed Closing

In the event of a delayed closing, the Exchange will publish a message containing the affected symbol(s). Following this, new orders, as well as amendments and cancellations, may be entered.

As these orders come in, the CCP will be recalculated. Once the CCP does not exceed established price band parameters, the Closing Call will attempt to complete at the CCP. Where the CCP still exceeds the price band parameters, subsequent attempts will be made at time intervals specified by notice to Members.

In the event that CCP remains outside of the price band parameter, in the final delayed closing extension, the system will determine the allowable price based on closing price threshold ("CPT") range to execute the auction. The execution will follow rules described in section 5.3.2.

Following the execution of the Closing Call where the CPT has come into effect, if there are any remaining orders that would lock or cross the order book, the security will be automatically halted in NEO-L and not transition to the Extended Trading session. The automatic halt does not impact the trading of the security in any other trading book.

Delayed Closing Call Example

The security in the NEO-L goes into the final delayed closing extension, and the order book is as follows:

Buy Ord	Buy TIF	Buy Entry Time	Buy Size	Buy Price	Sell Price	Sell Size	Sell Entry Time	Sell TIF	Sell Ord
B1	Limit	15:58PM	1000	11.10	11.10	500	15:11PM	LOC	S11
B2	Limit	13:20PM	2000	11.10	10.90	500	13:58PM	LOC	S4
B10	Limit	08:22AM	1000	9.00	10.90	700	16:13PM	LOC	S5
					10.50	1500	14:30PM	LOC	S6

Cumulative buy and sell quantities that can be matched at each price level are set out in the table below:

Cumulative Buy Size	Price	Cumulative Sell Size	Matchable Size	Imbalance
3000	11.10	3200	3000	-200
3000	10.90	2700	2700	300
3000	10.50	1500	1500	1500

An imbalance publication message on the market data feed would be disseminated with the following fields (this is only a subset of the message, please refer to the NITCH specification for additional fields):

Field	Value
Imbalance	300
Imbalance Direction	Buy
Calculated Closing Price	10.90

LSP = 10.00 | Price band range (3%): 9.70–10.30 | CPT% (10%): 9.00–11.00

An the end of the final extension interval, the auction will occur at a randomized time within 30 seconds starting at 4:15PM and will execute at a price of $10.90 which is within the CPT % range. The following trades will occur:

- **Trade 1**: 1500 @ 10.90 (S6/B2)
- **Trade 2**: 500 @ 10.90 (S4/B2)
- **Trade 3**: 700 @ 10.90 (S5/B1)
- Remaining MOC and LOC orders will expire at the conclusion of the Closing Call.

5.4 Extended Trading

The Extended Trading Session follows the close for all NEO listed securities, where matching can only occur at the Closing Price. New orders and price amendments are only allowed at that price. Odd lot trading is not supported in this session and while the board lot portion of mixed lots may trade, the odd lot portion will not.

6 Trading in NEO-N

6.1 Continuous Trading

In NEO-N, only IOC and FOK orders entered in NEO-N may interact with resting orders. A tradeable (IOC or FOK) order entered into NEO-N will execute against resting orders in Broker / NEO Trader / Size-Time priority. Any other order entered into NEO-N that would be immediately tradeable upon entry will be cancelled back to the user or repriced if the order attribute is chosen. Furthermore, some IOC/FOK orders are subject to a speed bump (see section 6.3 for more information).

A tradeable (IOC or FOK) order entered into NEO-N will execute against resting orders in the following sequence:

a) A resting order at a particular price will be executed in priority to all orders at inferior prices;

b) A visible resting order has priority over a non-visible resting order at the same price at the time of execution; and

c) If multiple resting orders exist at the same price then the priority sequence is as follows:

i. Any resting order entered by the same Member (if there are multiple orders, then the sequence is any of its resting NEO Trader orders according to Size-Time priority followed by all of its other orders according to Size-Time priority),

ii. Any resting orders from NEO Trader accounts, according to Size-Time priority,

iii. Any DMM resting orders, according to Size-Time priority, subject to the Market Maker Volume Allocation (see section 10.3.1 for more information), then

iv. All other resting orders according to Size-Time priority (see section 9.2 for more information).

An order in NEO-N will lose its time priority if (a) its visible volume is increased; (b) the price is amended, or (c) the order attribution is amended (to/from anonymous).

All remaining resting orders in the NEO-N will expire at the conclusion of the Continuous Trading Session.

6.2 Market Data Dissemination in NEO-N

NEO-N provides a market-by-price display only, meaning that all orders resting in the NEO-N order book that are priced at or outside the NBBO are disseminated on the public data feed in aggregate, by price level. The volume for each price level is:

a) For non-pegged orders priced outside the NBBO, the aggregate volume of all visible orders at that price level (the hidden portion of iceberg volume is not included); and

b) For orders priced at or inside the NBBO, the aggregate volume of all visible orders at the NBBO, plus the aggregate volume of all tradeable Mid-Point Pegged Orders.

Mid-Point Pegged Orders that are not tradeable are not included in the public market data feed until such time as the market conditions change and the Mid-Point Pegged Order's volume becomes executable, or the price of the order is amended such that it can execute.

Trades executed in NEO-N are disseminated on the public data feed with broker attribution (unless the order was entered as anonymous).

NEO-N Price Display Example

The current NBBO is 10.01 – 10.06.

The NEO-N order book is as follows:

Order	Order Type	Iceberg	Bid Size	Bid Price	Sell Price	Sell Size	Iceberg	Order Type	Order
B6	Midpoint	-	300	10.06	10.06	400	-	Midpoint	S10
B8	Midpoint	-	600	10.03	10.11	100	500	Limit	S9
B7	Limit	-	500	10.01	10.11	100	500	Limit	S13
B1	Limit	1000	200	10.00	10.12	500	-	Limit	S5
B2	Limit	-	500	9.99	10.14	200	1000	Limit	S11
B3	Limit	1000	200	9.99	10.14	400	-	Limit	S12

*Mid-Point Pegged Order B8, due to its price cap of 10.03 will not contribute to the displayed quantity at 10.01 below, as it is not tradeable at the current mid-point.

The market-by-price dissemination will be as follows:

Bid Size	Bid Price	Sell Price	Sell Size
800	10.01	10.11	200
200	10.00	10.12	500
700	9.99	10.14	600

6.3   Speed Bump

All incoming IOC or FOK orders originating from a Trader ID that is classified as LST will be subject to a randomized delay of 3-9 milliseconds. The delay occurs before the order is released into the Exchange system. When the order is released into the Exchange system, it will be executed with any tradeable resting orders. Order cannot be modified or cancelled while subject to the speed bump. No other order types or order operations from any market participant are subject to the speed bump.

7 Trading in NEO-D

7.1   Pre-Open

During the pre-open session, fully hidden Day or RHO dark passive orders can be entered but will not be executed until the start of the Continuous Trading Session. Orders can be amended and / or cancelled during this session.

7.2   Continuous Trading

In NEO-D, orders will execute at the NBBO mid-point in Broker / NEO Trader / Size-Time priority. NEO-D has two classifications for orders: dark passive and dark active orders.

- *Dark passive orders* may be submitted only as Mid-Point or Minimum Price Improvement ("MPI") Pegged Orders and with durations DAY or RHO. Dark passive orders may trade with other dark orders subject to Contra Election identified on order entry by Matching State Participation ("MSP") and Minimum Acceptable Quantity ("MAQ") constraints. Passive orders may trade with incoming active and passive orders immediately on entry and with other resting passive orders upon NBBO updates.
- *Dark active orders* may be submitted as Mid-Point Pegged Orders, limit orders or market orders and must be active only (IOC or FOK). Dark active orders may have a MAQ specified and may trade with resting passive orders.

7.2.1 Contra Election and Minimum Acceptable Quantity Constraints

When trading in NEO-D, Members have the option to place Contra Election constraints on dark passive orders. The Contra Election constraint allows the Member to identify the type of contra order the passive order will interact with: (a) only active orders; (b) only passive orders; or (c) both active and passive orders (options available for MSP).

MAQ constraints can be specified on both active and passive orders and indicate for a particular order the minimum contra order size with which it is willing to trade. Contra orders less than the MAQ size will be ineligible to trade with the order. Only single orders with sufficient quantity to meet the MAQ will be considered (Single Fill MAQ Match Type).

Minimum Acceptable Quantity Trading Example

The current NBBO is 10.05 – 10.06.											
The NEO-D order book is as follows:											
Ord	Brk	MSP	Bid Size	Bid Price	Sell Price	Sell Size	MAQ	MSP	Trd Type	Brk	Ord
B1	B	Act. only	1000	10.04	10.05	1000	-	Act. only	LST	A	S2

						10.05	1500	500	Act. only	NEO Trader	A	S3
						10.05	1000	100	Act. only	LST	B	S4
						10.06	1000	1000	Act. only	LST	A	S5

If Broker B submits, on behalf of a NEO Trader account, active IOC dark order B6 to buy 4000 shares, with MAQ (1000) at market price, the following trade(s) will occur:
- **Trade 1:** 1000 @ 10.055 (B6/S4; S4 fulfills MAQ and has broker priority over S2, S3, S5)
- **Trade 2:** 1500 @ 10.055 (B6/S3; S3 fulfills MAQ and has NEO Trader priority over S2)
- **Trade 3:** 1000 @ 10.055 (B6/S2)
- B6 cannot trade with S5 as it does not fulfill its MAQ, thus remaining volume is cancelled.

7.2.2 Dark Order Matching (Active to Passive Orders)

Trades will execute at or within the NBBO in a manner consistent with UMIR dark rules. A tradeable dark active order entered into NEO-D will execute against dark passive orders in the following sequence:

a) A resting order at a particular price will be executed in priority to all orders at inferior prices; and

b) If multiple resting orders exist at the same price then the priority sequence is as follows:

  i. Any resting orders entered by the same Member (if there are multiple orders, then the sequence is any of its resting NEO Trader orders according to Size-Time priority followed by all its other orders according to Size-Time priority, provided none of the orders is a jitney order),

  ii. Any resting orders from NEO Trader accounts, according to Size-Time priority, then

  iii. All other resting orders, according to Size-Time priority (see section 9.2 for more information).

Within each of the priority tiers above, orders will only trade if they fulfill the Contra Election and MAQ constraints of the contra order with which they are interacting.

7.2.3 Dark Order Matching (Passive to Passive Orders)

Dark passive orders can trade with other dark passive orders immediately on entry if both Contra Election and MAQ constraints are fulfilled. The trades between two dark passive orders will follow the same trading priority sequence outlined in section 7.2.2.

Dark passive orders resting in the NEO-D order book that become executable at the mid-point or at one tick increment more aggressive than the NBBO, or one-half of a tick

increment if the NBBO spread is only one tick increment following an NBBO update, will match with other resting dark passive orders using the same trading priority sequence outlined in [section 7.2.2](#), buy side passive orders (sequenced in time priority) will aggress sell side passive orders.

NEO-D Trading Example 1

The current NBBO is 9.03 – 9.05.

The NEO-D order book is as follows:

Ord	Brk	Tdr Type	MSP	Bid Size	Bid Price	Sell Price	Sell Size	MSP	Trd Type	Brk	Ord
B1	B	LST	Act. only	1000	9.04	9.05	1000	Pas. only	NEO Trader	B	S3
B2	B	LST	Act. Only	1000	9.02						
B4	A	LST	Both	1000	9.04						
B5	A	NEO Trader	Both	1000	9.04						
B6	C	NEO Trader	Both	1000	9.04						
B7	A	NEO Trader	Pas. only	1000	9.05						

*Orders in NEO-D order book are sorted based on time priority on entry.

If Broker A submits, on behalf of a NEO Trader account, active IOC dark order S8 to sell 6000 shares at market price, the following trade(s) will occur:

- **Trade 1**: 1000 @ 9.04 (S8/B5; B5 has broker and NEO Trader priority over B4, B6 and B1)
- **Trade 2**: 1000 @ 9.04 (S8/B4; B4 has broker priority over B6 and B1)
- **Trade 3**: 1000 @ 9.04 (S8/B6; B6 has NEO Trader priority over B1)
- **Trade 4:** 1000 @ 9.04 (S8/B1)
- Remaining quantity of S8 is cancelled

Note that S8 did not trade with B2 as B2 is not tradeable at the current mid-point (due to price cap). Also, S8 did not trade with B7 as B7 will only interact with passive orders in NEO-D.

If, subsequently, the NBBO changes to 9.04 – 9.06, the following trade(s) will occur:

- **Trade 5:** 1000 @ 9.05 (B7/S3)

The current NBBO is 9.00 – 9.04.

The NEO-D order book is as follows:

Ord	Brk	Tdr Type	Ord Type	Bid Size	Bid Price	Sell Price	Sell Size	Ord Type	Trd Type	Brk	Ord
B1	B	LST	MPI	3000		9.05	1000	Mid-point	NEO Trader	B	S3
B2	B	LST	Mid-point	2000							
B4	A	NEO Trader	Mid-point	3000	9.04						
B5	A	NEO Trader	MPI	6000	9.03						
B6	C	LST	MPI	7000	9.00						

*Orders in NEO-D order book are sorted based on time priority on entry.

If Broker D submits, on behalf of a NEO Trader account, active IOC dark order S4 to sell 12000 shares at market price, the following trade(s) will occur:

- **Trade 1**: 3000 @ 9.02 (S4/B4; B4 mid-point order executes first and due to NEO Trader priority over B2)

- **Trade 2**: 2000 @ 9.02 (S4/B2; B2 mid-point order executes over MPI order B1)

- **Trade 3**: 6000 @ 9.01 (S4/B5; B5 has NEO Trader priority over B1)

- **Trade 4:** 1000 @ 9.01 (S4/B1).

7.2.4 Odd Lot and Mixed Lot Trading on NEO-D

The NEO Exchange supports executions of odd lot and mixed lot orders on NEO-D. Only active Dark orders are permitted to be submitted as mixed lot or odd lot orders. If odd lot orders are tradeable on entry (i.e. if the NBB/O is present), the orders are automatically executed upon entry by the DMM or Odd Lot Trader at the current NBB or NBO.

A mixed lot order will be split into a board lot and an odd lot portion upon entry. The odd lot portion of a resting mixed lot order will only trade after the board lot portion is

completely filled. The odd lot portion will trade at the NBB or NBO. In situations where the mixed lot order is not fully filled, odd lot portions will auto-execute in NEO-D.

Odd lot or mixed lot orders are not permitted as duration orders (i.e. not GTC, GTD) on NEO-D.

NEO-D Mixed Lot/Odd Lot Trading Example

The current NBBO is 8.97 – 9.03.

The NEO-D order book is as follows:

Ord	Brk	Tdr Type	Ord Type	Bid Size	Bid Price	Sell Price	Sell Size	Ord Type	Trd Type	Brk	Ord
B1	B	LST	MPI	200		9.03	400	Mid-point	LST	A	S4
B2	A	LST	Mid-point	100							
B3	A	LST	Mid-point	200							
B4	C	NEO Trader	MPI	100							

If Broker A submits, on behalf of a NEO Trader account, active IOC dark order S5 to sell 475 shares at 8.97, the following trade(s) will occur:

- **Trade 1**: 100 @ 9.00 (S5/B2; B2 mid-point order executes first and due to Broker Preference over B1)

- **Trade 2**: 200 @ 9.00 (S5/B3; B3 mid-point order executes first and due to Broker Preference over B1)

- **Trade 3**: 100 @ 8.98 (S5/B4; B4 executes due to NEO Trader priority over B1)

- **Trade 4:** 75 @ 8.97 (S5/None; auto-executed against DMM or Odd Lot Trader at NBB).

8 Trading in Crossing Facility

The Crossing Facility is available to print intentional crosses at or inside the NBBO, without interference from orders resting in NEO-L or NEO-N.

Printing crosses:

a) National, Contigent, Internal and Derivative crosses entered during the Continuous Trading Session must be made at a price that is at or within the NBBO (if one exists), otherwise can trade without an NBBO present. If only one side of the NBBO is present, crosses must priced at or better than the NBB or NBO.

b) Bypass Crosses and specialty price crosses such as Basis, Special Terms and Volume-Weighted Average Price (VWAP) will not be reflected in the NLSP and will not be used in the determination of the Closing Price.

c) Crosses may be submitted with a price up to four decimal places.

d) Any cross that sets the NLSP will also set the Daily Low and Daily High statistics.

e) All cross types support the entry of mixed and odd lot orders with the exception of Bypass Crosses which cannot be of an odd lot quantity.

The following table summarizes the rules of cross types available.

Cross Type	Sets NLSP?	Within NBBO?	Allowed with Bypass?	Allowed as ML / OL
National (default)	Y	Y	Y	Y / Y
Internal	Y	Y	N	Y / Y
VWAP	N	N	N	Y / Y
Basis	N	N	N	Y / Y
Contingent	Y	Y	N	Y / Y
Derivative	Y	Y	N	Y / Y
Bypass	N	N	-	Y / N

*ML / OL = Mixed Lot / Odd Lot

9 Trading Features and Order Types

9.1 Closing Price Definition

For NEO listed securities with a Closing Call, the Closing Price will be set to the price in the Closing Call. If there is no Closing Call execution, the Closing Price will be the National Last Sale Price (NLSP) nearest to 4:00PM.

For NEO listed securities without a Closing Call that are not Exchange Traded Funds ("ETFs"), the Closing Price will be set to the NLSP nearest to 4:00PM.

If there is no trade to set the NLSP for the current day, the Closing Price will be set to the previous day's Closing Price.

9.1.1 Weighted Closing Price for ETFs

For NEO listed ETFs, the Weighted Closing Price is determined by combining the Time-Weighted Average Price NBBO Midpoint ("TWAP midpoint") during the last 15 minutes of trading and the NLSP nearest to 4:00PM. The current weighting of the two prices are as follows:

Time of NLSP	NLSP Weight	TWAP Midpoint Weight
Prior to 3:45pm	0%	100%
3:45 – 4:00pm	100%	0%

I.e. if there is no trade in the last 15 minutes of trading, the Closing Price will be set to the Time-Weighted Average Price NBBO Midpoint ("TWAP midpoint") calculated over that period. If the ETF has traded during that period then the Closing Price will be set to the NLSP nearest to 4:00PM.

If the TWAP midpoint deviates from the NLSP more than the allowable IIROC circuit breaker percentage for that security (or if there is no NLSP for the current day, it will be compared to the deviation percentage from the previous day's close), the closing price will be set to the NLSP (or the previous day's close if no NLSP for the current day).

For all NEO-listed ETFs, NEO publishes a print immediately following the time at which the Weighted Closing Price is available (approximately 4:30 p.m. EST each business day). Such a print is published as a zero-volume trade at the Closing Price. The print is identified as a cross trade type value of "Closing Price Publication", attributed to the NEO Exchange.

Weighted Closing Price Calculation Example

NBBO Update Time	Duration	NLSP Time	NLSP	NBB	NBO	Midpoint	TWAP midpoint
For a NEO listed ETF, below is the summary of the NBBO values and times and NLSP occurrences used for calculation of the Closing Price:							
-	-	15:40PM	19.02	-	-	-	-
15:45PM	5	-	-	19.01	19.06	19.035	-
-	-	15:50PM	18.98	-	-	-	-
15:50PM	7	-	-	18.98	19.02	19.000	-
15:57PM	2	-	-	18.98	19.05	19.015	-
15:59PM	1	-	-	19.02	19.03	-	-
16:00PM	-	-	-	-	-	-	-
(TWAP)				18.992	19.038		19.015

Possible outcomes for this NEO listed ETF at the conclusion of the Continuous Trading Session are as follows:

1) If the ETF security last traded at 3:40:00 and for the remainder only had NBB and NBO quotes, the Weighted Closing Price would be 19.015 (TWAP midpoint).
2) If the ETF security last traded at 3:50:00 and for the remainder had NBB and NBO quotes, the Weighted Closing Price would be 18.98 (NLSP).

9.2   Size-Time Priority

Size-Time trading priority is an allocation methodology utilized in NEO-N and NEO-D to determine the sequence in which orders will trade when there are multiple potential matches at a given price and priority level.

First, if any single resting order can completely fill the incoming order, then that order will trade. If more than one resting order can fill the incoming order completely (or if no resting order can fill it completely), the highest overall Size-Time ranking score among those resting orders will determine which trades first.

The Size-Time ranking is calculated as a weighted average of three different order rankings:

a) the remaining resting order size;
b) the priority timestamp; and
c) the time of the last partial fill.

The weighting used for the calculation is subject to change and will be published by notice to Members.

Size-Time Example

The NEO-N Size-Time ranking, calculated using equal weighting, is as follows:

Priority Time	Time of Last Fill	Remaining Size	Priority Time Rank	Last Fill Rank	Size Rank	Overall S-T Rank
10:13:01	10:13:01	1200	2	1	3	**1**
10:10:28	10:34:28	1100	1	3	4	**2**
10:15:37	10:35:37	1600	3	4	1	**3**
10:15:38	10:35:28	1600	4	5	1	**4**
10:30:50	10:33:20	1000	5	2	5	**5**

The order at the top of the list will have priority.

9.3 Order Protection Rule (OPR)

In accordance with National Instrument 23-101 *Trading Rules* ("NI 23-101"), NEO Exchange supports trading of order types that help ensure order protection upon execution.

9.3.1 Directed Action Order ("DAO")

A DAO is a limit or market order as defined in NI 23-101. Available on NEO-L, NEO-N and NEO-D.

9.3.2 Protect and Reprice Order

A Protect and Reprice order is a limit or market order that will execute to the extent possible at the NBBO before adjusting the price of any residual volume that would trade at a worse price than that available on another marketplace, or unintentionally lock/cross the market. Orders will be re-priced to one trading increment from the opposite side of the NBBO (NBO-1 for buy orders and NBB+1 for sell orders). Available on NEO-L and NEO-N. *Note: on NEO-N, resting orders are not eligible to trade with one another; as a result, these tradeable passive orders will only be re-priced.*

Protect and Reprice Order Trading Example

The current NBBO in NEO-L is 11.15 – 11.17.							
Buy Order	**Buy Size**	**Buy Price**	**Sell Price**	**Sell Size**	**Order Type**	**Sell Broker**	**Sell Order**
B1	100	11.15	11.16	(1000)	Hidden Midpoint	C	S4
B2	100	11.14	11.17	200	Limit	A	S5
B3	300	11.12	11.18	300	Limit	C	S6

If Broker D submits order S7 to sell 500 shares at 11.13, with HandlInst=6 (Protect and Reprice), the following processing will occur:

- **Trade 1:** 100 @ 11.15 (S7/B1)
- NBBO is updated: 11.14 - 11.17
- **Trade 2:** 100 @ 11.14 (S7/B2)
- NBBO is updated: 11.13 – 11.17
- Order S7 will be repriced to 11.14 and booked on the sell side of NEO-L.

9.3.3 Protect and Cancel Order

A Protect and Cancel order is a limit or market order that will execute to the extent possible at the NBBO before cancelling any residual volume that would trade at a worse price than that available on another marketplace, or unintentionally lock/cross the market. Available on NEO-L and NEO-N. *Note: on NEO-N, resting orders are not eligible to trade with one another; as a result, these tradeable passive orders will only be canceled.*

Protect and Cancel Order Trading Example

<table>
<tr><td colspan="9">The current NBBO in NEO-L is 11.15 − 11.17.</td></tr>
<tr>
<th>Buy Order</th>
<th>Buy Size</th>
<th>Buy Price</th>
<th>Sell Price</th>
<th>Sell Size</th>
<th>Order Type</th>
<th>Sell Broker</th>
<th>Sell Order</th>
</tr>
<tr><td>B1</td><td>100</td><td>11.15</td><td>11.16</td><td>(1000)</td><td>Hidden Midpoint</td><td>C</td><td>S4</td></tr>
<tr><td>B2</td><td>100</td><td>11.14</td><td>11.17</td><td>200</td><td>Limit</td><td>A</td><td>S5</td></tr>
<tr><td>B3</td><td>300</td><td>11.12</td><td>11.18</td><td>300</td><td>Limit</td><td>C</td><td>S6</td></tr>
</table>

If Broker D submits order S7 to sell 500 shares at 11.13, with HandlInst=5 (Protect and Cancel), the following processing will occur:

- **Trade 1:** 100 @ 11.15 (S7/B1)
- NBBO is updated: 11.14 - 11.17
- **Trade 2:** 100 @ 11.14 (S7/B2)
- NBBO is updated: 11.13 − 11.17
- Order S7 will be cancelled.

9.4 Self-Trade Prevention

Self-Trade Prevention identifies a trade between two orders originating from the same Member, for the same beneficial owner, based on a unique Self Trade Key set by the user on the order and either cancels the trade or suppresses the trade from the market data feed. NEO Exchange uses the latter approach.

- *Trade no Print* feature allows an incoming order to execute against a resting order from the same Member with a Self-Trade designation and matching Self Trade Keys. However, the trade will not be disseminated on the public market data feed and does not update the last traded price, daily volume, value, or other trading statistics. The trade is sent to the Clearing Corporation for settlement, to facilitate reconciliation.

Self-Trade Prevention applies to unintentional crosses in the Continuous Trading Session only.

The feature is applicable to board lot orders and the board lot portion of mixed lot orders. Available on NEO-L, NEO-N and NEO-D.

Self-Trade Prevention Trading Example

<table>
<tr><td colspan="9">The NEO-L order book is as follows:</td></tr>
<tr>
<th>Buy Order</th>
<th>Buy Broker</th>
<th>Buy STP Key</th>
<th>Buy Size</th>
<th>Buy Price</th>
<th>Sell Price</th>
<th>Sell Size</th>
<th>Sell Broker</th>
</tr>
<tr><td>B1</td><td>A</td><td>-</td><td>600</td><td>10.05</td><td>10.06</td><td>1000</td><td>A</td></tr>
</table>

| B2 | B | 12345 | 900 | 10.05 | 10.06 | 500 | B |
| B3 | B | 1A250 | 1500 | 10.05 | 10.07 | 2200 | C |

If Broker B submits sell order S6 to sell 3000 shares at market price, with Self Trade Key 12345 the following trade(s) will occur:

- **Trade 1:** 900 @ 10.05 (S6/B2; B2 has broker and time priority over B3)
- This trade has matching Self Trade Keys and therefore is not disseminated on the public data feed and does not update any of the trading statistics, including the last sale price)
- **Trade 2:** 1500 @ 10.05 (S6/B3; B3 has broker priority over B1)
- This trade is disseminated on the public feed and sets the last sale price, etc.
- **Trade 3:** 600 @ 10.05 (S6/B1)

9.5   Order Types

NEO Exchange supports a number of order types and attributes. The following table summarizes which order types that are available.

Order Types	NEO-L	NEO-N	NEO-D	Crossing Facility
Limit	Yes	Yes	Yes**	No
Market	Yes	Yes	Yes**	No
Mid-Point Pegged	Yes	Yes	Yes	No
Minimum Price Improvement (MPI)	No	No	Yes****	No
Fill or Kill (FOK)	Yes	Yes	Yes	No
Immediate or Cancel (IOC)	Yes	Yes	Yes	No
Market on Open (MOO)	Yes*	No	No	No
Limit on Open (LOO)	Yes*	No	No	No
Market on Close (MOC)	Yes*	No	No	No
Limit on Close (LOC)	Yes*	No	No	No
Good for Day (Day)	Yes	Yes	Yes	Yes
Good till Time (GTT)	Yes	Yes	No	No
Good till Cancelled (GTC)	Yes*	No	No	No
Good till Date (GTD)	Yes*	No	No	No
Imbalance Only (IO)	Yes*	No	No	No
Regular Hours Only (RHO)	Yes	Yes	Yes	No
Iceberg	Yes	Yes	No	No
Mixed Lot	Yes	No	Yes**	Yes***
Odd Lot	Yes	No	Yes**	Yes***
Directed-Action Order	Yes	Yes	Yes	Yes
Passive Only Re-price	Yes	Yes	No	No
Passive Only Cancel	Yes	Yes	No	No

Protect & Reprice	Yes	Yes	No	No
Protect & Cancel	Yes	Yes	No	No
Short Sale	Yes	Yes	Yes	Yes
Self-Trade Prevention	Yes	Yes	Yes	No
Attributed & Anonymous	Yes	Yes	Yes	Yes
Bypass	Yes	Yes	No	No
Minimum Acceptable Quantity (MAQ)	No	No	Yes	No
Contra Election	No	No	Yes	No
Bypass Cross	No	No	No	Yes
National Cross	No	No	No	Yes
Internal Cross	No	No	No	Yes
Basis Cross	No	No	No	Yes
Contingent Cross	No	No	No	Yes
VWAP Cross	No	No	No	Yes
Derivative Cross	No	No	No	Yes

* Only available for NEO listed securities.
** These order types are only allowed for dark active orders.
*** All cross types support the entry of mixed and odd lot orders with the exception of Bypass Crosses which cannot be of an odd lot quantity.
**** This order type is only allowed for dark passive orders.

9.5.1 Market Order

As defined in UMIR, a market order is an order to be executed upon entry to a marketplace to buy or sell a security at the best ask or bid price. Market orders are available in NEO-L, NEO-N and NEO-D. Any unfilled market orders with a persistent duration (day, etc.) in NEO-L will book at the Last Sale Price.

9.5.2 Limit Order

As defined in UMIR, a limit order is an order to buy or sell a security at a specified maximum or minimum price. Limit orders are available in NEO-L, NEO-N and NEO-D.

9.5.3 Mid-Point Pegged Order

The execution price of Mid-Point Pegged Orders is pegged to the mid-point of the NBBO. The execution price is automatically adjusted in response to changes in the NBBO. These orders are not tradeable if there is no valid NBBO present (i.e., both a bid and an offer are required). Mid-Point Pegged Orders are available for NEO listed securities and Other Traded Securities (TSX, TSX-V and CSE listed securities) on NEO-L, NEO-N and NEO-D. Mid-Point pegged orders are tradeable during continuous trading session in NEO-L, NEO-N and NEO-D which could be outside of 09.30 - 16:00 (see section 4.1 for Trading Hours of both NEO listed and OTS securities).

At the sender's option, pegged orders can be assigned a price that acts as a threshold cap, limiting the price at which the order will trade.

Mid-Point Pegged Order - NEO-L

NEO-L supports Mid-Point Pegged Orders, which are fully hidden. Incoming orders may trade with a Mid-Point Pegged Order and any other resting liquidity. An active Mid-Point Pegged Order may also be used, but can only trade against other Mid-Point Pegged Orders.

Mid-Point Pegged Order – NEO-N

NEO-N supports Mid-Point Pegged Orders, the volume for which is displayed at the NBB (if a buy order) or the NBO (if a sell order).

In NEO-N, only tradeable Mid-Point Pegged Orders' volume will be displayed. If a Mid-Point Pegged Order is not tradeable as a result of its limit price being above (below) the limit price for a buy (sell) order, the volume will not be displayed until such time as the market conditions change or the limit price is amended.

Mid-Point Pegged Order – NEO-D

See Trading in NEO-D, section 7 for more information.

9.5.4 Minimum Price Improvement Order (MPI)

A minimum price improvement order (MPI) is a pegged order with a price offset of which is automatically adjusted by the Exchange system to one tick increment more aggressive than the NBBO, or one-half of a tick increment if the NBBO spread is only one tick increment.

MPI orders are only available on NEO-D.

See Trading in NEO-D, section 7 for more information.

9.5.5 Duration Orders

Duration order types will determine the amount of time a resting order remains active and executable on NEO-L, NEO-N and NEO-D.

9.5.5.1   Fill or Kill Order ("FOK")

A limit order or market order that is to be filled immediately in full, or cancelled. Available on NEO-L, NEO-N and NEO-D.

Fill or Kill Order Trading Example

The NEO-L order book is as follows:							
Order	Broker	Buy Size	Buy Price	Sell Price	Sell Size	Broker	Order
B1	A	400	4.66	4.67	900	B	S4
B2	C	1000	4.65	4.70	1500	A	S5

B3	B	700	4.65				

If Broker B submits order S6 to sell 2200 shares at 4.60, the following trade(s) will occur:

- No trades occur, as the incoming order cannot be fully filled and therefore is cancelled

If Broker B submits order S7 to sell 2100 shares at market price, following the trading priorities on NEO-L, the following trade(s) will occur:

- **Trade 1:** 400 @ 4.66 (S7/B1; B1 is the best priced order)
- **Trade 2:** 700 @ 4.65 (S7/B3; B3 has broker priority over B2)
- **Trade 3:** 1000 @ 4.65 (S7/B2)

9.5.5.2   Immediate or Cancel ("IOC")

A limit order or market order that is to be filled immediately, in full or in part, with the unfilled quantity cancelled. Available on NEO-L, NEO-N and NEO-D.

Immediate or Cancel Trading Example

The NEO-N order book is as follows:

Order	Broker	Buy Size	Buy Price	Sell Price	Sell Size	Broker	Order
B1	A	400	24.22	24.26	900	B	S4
B2	C	1000	24.22	24.27	1500	A	S5
				24.27	600	C	S6

If Broker B submits order B7 to buy 3100 shares at 24.27, the following trade(s) will occur:

- **Trade 1:** 900 @ 24.26 (B7/S4; S4 is the best priced order)
- **Trade 2:** 1500 @ 24.27 (B7/S5)
- **Trade 3:** 600 @ 24.27 (B7/S6)
- The remainder of B7 is cancelled as it cannot be booked on NEO-N due to its duration

The resulting NEO-N order book is as follows:

Order	Broker	Buy Size	Buy Price	Sell Price	Sell Size	Broker	Order
B1	A	400	24.22				
B2	C	1000	24.22				

9.5.5.3   Market on Open ("MOO") / Limit on Open ("LOO")

A limit or market order that may only participate in the Opening Call. Any unfilled quantity will expire at the conclusion of the Opening Call. Available on NEO-L for NEO listed securities only.

9.5.5.4   Market on Close ("MOC") / Limit on Close ("LOC")

A limit or market order that may only participate in the Closing Call. Any unfilled quantity will expire at the conclusion of the Closing Call. Available on NEO-L for eligible NEO listed securities only.

9.5.5.5   Good for Day Order ("DAY")

A limit order that is valid until it is fully filled or cancelled, and expires at the conclusion of the trading day. Available on NEO-L, NEO-N and NEO-D.

9.5.5.6   Good till Cancelled Order ("GTC")

A limit order that is valid for 90 calendar days, or until it is fully filled or cancelled. Available on NEO-L for NEO listed securities only.

9.5.5.7   Good till Time Order ("GTT")

A limit order that is valid until it is fully filled or cancelled, and expires at a specified time on the day it is entered. Available on NEO-L and NEO-N.

9.5.5.8   Good till Date Order ("GTD")

A limit order that will remain in the book until the end of a user-specified date, not to exceed 90 days. Available on NEO-L for NEO listed securities only.

9.5.5.9   Imbalance Only Order ("IO")

An order that can only execute against opening auction imbalances. Unfilled IO orders will expire at the beginning of Continuous Trading Session. Available on NEO-L for NEO listed securities only.

9.5.5.10   Regular Hours Only ("RHO")

An order that is valid for "regular hours only" and can only be entered during the Continuous Trading Session. Any resting orders marked RHO will expire at 4:00PM and be removed by the system. Available on NEO-L, NEO-N and NEO-D. RHO orders will not participate in Opening and Closing Calls.

9.5.6 Iceberg Orders

A limit order that specifies a total size and a disclosed size. Once the disclosed size is executed in full, another order will be displayed with priority corresponding to the release time, and the hidden quantity will be reduced accordingly. If the iceberg's disclosed size is only partially filled, the order will not lose priority. Available on NEO-L and NEO-N.

Iceberg Order Trading Example

The NEO-L order book is as follows:

Order	Broker	Trader Type	Iceberg Hidden Qty	Buy Size	Buy Price	Sell Price	Sell Size	Broker	Order
B1	B	NEO Trader	600	200	10.15	10.17	600	C	S6
B2	C	LST	800	300	10.15				
B5	A	NEO Trader	600	200	10.15				
B7	A	LST	-	300	10.15				

If Broker A submits order S8 to sell 3000 shares at 10.15, the following trade(s) will occur:

- **Trade 1:** 200 @ 10.15 (S8/B5; B5 has broker and NEO Trader priority over B1, B2, B7)
- **Trade 2:** 300 @ 10.15 (S8/B7; B7 has broker priority over B1, B2)
- **Trade 3:** 200 @ 10.15 (S8/B1; B1 has NEO Trader priority over B2)
- **Trade 4:** 300 @ 10.15 (S8/B2)

The remaining volume of incoming order S8 will continue to trade with the hidden portions of the icebergs in a single execution. Replenished orders will not be disseminated on the public market data feed.

- **Trade 5:** 600 @ 10.15 (S8/B5; B5 has broker and NEO Trader priority over B1, B2)
- **Trade 6:** 600 @ 10.15 (S8/B1; B1 has NEO Trader priority over B2)
- **Trade 7:** 800 @ 10.15 (S8/B2)

9.5.7 Mixed Lot Order

A limit or market order containing at least one board lot and one odd lot. Available on NEO-L and NEO-D only.

9.5.8 Odd Lot Order

A limit or market order containing less than one board lot. Available on NEO-L and NEO-D only.

9.5.9 Passive Only Reprice Order

A limit or market order that is re-priced to one trading increment from the opposite side of the NBBO at the time of entry (NBO-1 for buy orders and NBB+1 for sell orders) and at the time of a price amendment if any portion of the order is tradeable upon entry. Available on NEO-L and NEO-N.

Passive Only Reprice Order Trading Example

The current NBBO in NEO-L is 50.25 – 50.26.							
Buy Order	**Buy Size**	**Buy Price**	**Sell Price**	**Sell Size**	**Order Type**	**Sell Broker**	**Sell Order**
B1	500	50.25	50.25	(400)	Hidden Midpoint	C	S4
B2	1000	50.25	50.26	700	Limit	A	S5

If Broker B submits order B6 to buy 2000 shares at 50.26, with ExecInst=100 (PO re-price), following processing will occur:

- As incoming order B6 cannot be booked (as it is tradeable), it is repriced to 50.25 and booked on the buy side of the NEO-L order book

9.5.10   Passive Only Cancel Order

A limit order that is cancelled at time of entry if any portion of the order is immediately tradeable. Available on NEO-L and NEO-N. *This is the default order handling instruction if a tradeable passive order is entered on NEO-N.*

Passive Only Cancel Order Trading Example

The current NBBO in NEO-L is 50.25 – 50.26.							
Buy Order	**Buy Size**	**Buy Price**	**Sell Price**	**Sell Size**	**Order Type**	**Sell Broker**	**Sell Order**
B1	500	50.25	50.25	(400)	Hidden Midpoint	C	S4
B2	1000	50.25	50.26	700	Limit	A	S5

If Broker B submits order B6 to buy 2000 shares at 50.26, with ExecInst=6 (PO Cancel), the following processing will occur:

- As incoming order B6 is tradeable and cannot be booked, due to its ExecInst it is canceled as it would create a locked NBBO if booked.

9.5.11   Short Sale Order

A limit or market sell order where the Member has indicated that the order quantity is fully or partially to be sold short. Available on NEO-L, NEO-N and NEO-D.

9.5.12   Attributed and Anonymous Orders

A limit order entered into the exchange system is by default attributed, unless marked anonymous by the user. An order must be attributed in order to participate in broker preference matching in NEO-L and NEO-N. In NEO-D, both attributed and anonymous orders may be broker preferred. Orders with special settlement terms must be attributed.

Anonymous Order and Broker Preference Trading Example

The NEO-L order book is as follows:

Buy Order	Buy Size	Buy Price	Sell Price	Sell Size	Order Type	Sell Broker	Sell Order
B7	500	10.24	10.25	(400)	Hidden Midpoint	C	S1
B8	1000	10.23	10.25	700	Limit	A	S2
			10.25	500	Limit	001 (B)	S3
			10.25	600	Limit	B	S4
			10.25	100	Limit	C	S5

If Broker B submits order B9 to buy 1300 shares at 10.25, following trade(s) will occur:

- **Trade 1:** 600 @ 10.25 (B9/S4; S4 has broker priority over S3 as S3 is an anonymous order and does not participate in broker preference matching)
- **Trade 2:** 700 @ 10.25 (B9/S2 due to time priority)

9.5.13 Bypass Order

A limit or market IOC or FOK order that, when marked Bypass, will only execute with visible quantity, skipping any hidden volume, including the non-visible portion of iceberg orders, at a given price level. *Note:* tradeable *Mid-Point Pegged Order's volume in NEO-N will execute against incoming Bypass Orders as the volume is displayed at the NBB or NBO.* Available on NEO-L and NEO-N.

Bypass Order Trading Example

The NEO-L order book is as follows:

Order	Broker	Order Type	Iceberg Hidden Qty	Buy Size	Buy Price	Sell Price	Sell Size	Broker	Order
B1	B	Hidden Midpoint	-	(200)	10.16	10.17	600	C	S6
B2	C	Iceberg	800	300	10.15				
B5	A	Iceberg	600	200	10.15				
B7	A	Limit	-	300	10.15				

If Broker B submits order S8 to sell 1000 shares at 10.15, with Bypass=Y, the following trade(s) will occur:

- **Trade 1:** 300 @ 10.15 (S8/B2; B2 will execute ahead of B1 as B1 is hidden and Bypass Orders do not interact with hidden volume)
- **Trade 2:** 200 @ 10.15 (S8/S5)
- **Trade 3:** 300 @ 10.15 (S8/B7). The remaining quantity of S8 is cancelled.

9.5.14 Minimum Acceptable Quantity (MAQ)

See Trading in NEO-D, [section 7](#) for more information.

9.5.15 Contra Election (Matching State Participation "MSP")

See Trading in NEO-D, [section 7](#) for more information.

9.5.16 Cross Types

9.5.16.1 Bypass Cross

An intentional cross entered at an agreed-upon price during the Continuous Trading Session indicating that, at time of submission, all visible better priced order quantity has been executed (via submission of a Bypass order), allowing for printing without interference from any orders on NEO-L and NEO-N.

9.5.16.2 National Cross

An intentional cross entered at an agreed-upon price during the Continuous Trading Session, which at the time of entry is at or within the NBBO.

9.5.16.3 Internal Cross

An intentional cross between two accounts managed by the same portfolio manager, which at the time of entry was at or within the NBBO.

9.5.16.4 Basis Cross

An intentional cross whereby a basket of securities is transacted based on the execution of related exchange-traded derivatives.

9.5.16.5 Contingent Cross

An intentional cross resulting from a paired order placed by the Member on behalf of a client that was contingent on the execution of a different order for the same client with an offsetting volume in a related security.

9.5.16.6 VWAP Cross

An intentional cross executed at a volume-weighted average price of a security.

9.5.16.7 Derivative Cross

A prearranged trade resulting from an order entered on a marketplace by a Participant or Access Person for a particular security to be fully offset by a trade in a related security that is a derivative instrument.

10 Designated Market Maker (DMM) Program

10.1 Overview

The NEO Exchange DMM program establishes a balance between obligations and benefits to achieve meaningful results. The role of the DMM is to provide liquidity for securities trading on NEO Exchange (NEO listed, TSX listed, TSX-V listed, and CSE listed), to assist in maintaining a fair and orderly market and to achieve reasonable price continuity for assigned securities in both NEO-L and NEO-N. All DMMs must be IIROC members trading for their own accounts. DMMs will be monitored, with performance metrics made publicly available to ensure maximum effectiveness of the program.

10.2 DMM Obligations

DMM obligations include two-sided continuous quoting with size and spread requirements over a proportionate assignment of liquid and illiquid securities. This ensures viable economics for market makers and a viable liquidity safety net for those securities that need it the most.

For NEO listed securities, the DMM will also be responsible for facilitating the Opening Call, delayed opening and resumption of trading following a halt for assigned securities.

DMMs must also facilitate the automatic execution of all odd lot orders for their assigned securities. To ensure there is auto-execution of odd lots across most, if not all securities traded on the NEO Exchange, securities may be assigned to an Odd Lot Trader without any quoting obligations.

NEO Listed Corporate Securities >=$1

	Obligations (per Book and per Security)	Base Tier
Quoting	Two-sided quote, X% of time between 9.30am-4.00pm	95%
Size & Spread	Number of board lots (BL) within a maximum spread of X%, minimum 2 BL on each side	4BL, 5%

NEO Listed Corporate Securities <$1

	Obligations (per Book and per Security)	$0.01-$0.09	$0.1-$0.49	$0.50-$0.99
Quoting	Two-sided quote, X% of time between 9.30am-4.00pm	95%	95%	95%
Size & Spread	Number of board lots (BL) within $X spread, minimum 1 BL on each side	4BL, $0.03	4BL, $0.05	4BL, $0.07

NEO Listed ETFs & CEFs

	Obligations (per Book and per Security)	Base Tier
Quoting	Two-sided quote, X% of time between 9.30am-4.00pm	95%
Size & Spread	Number of board lots (BL) within a maximum spread of X%, minimum 2 BL on each side	15BL, 4%

NEO Listed Structured Products

	Obligations (per Book and per Security)	Base Tier
Quoting	Two-sided quote, X% of time between 9.30am-4.00pm	95%
Size & Spread	Number of board lots (BL) within a maximum spread of X%, minimum 2 BL on each side	30BL, 5%

TSX/TSXV/CSE Listed ETFs & CEFs

	Obligations (per Book and per Security)	Tier 1	Tier 2	Tier 3
Quoting	Two-sided quote, X% of time between 9.30am-4.00pm	95%	95%	95%
Size & Spread	Number of board lots (BL) within a maximum spread of X%, minimum 5 BL on each side	50BL, 3%	30BL, 4%	15BL, 5%

TSX/TSXV/CSE Listed Securities (other than ETFs & CEFs) trading >=$1

	Obligations (per Book and per Security)	Tier 1	Tier 2	Tier 3
Quoting	Two-sided quote, X% of time between 9:30AM-4.00PM	95%	95%	95%
Size & Spread	Number of board lots (BL) within a maximum spread of X%, minimum 2 BL on each side	10BL, 1.5%	6BL, 3%	4BL, 5%

TSX/TSXV/CSE Listed Securities (other than ETFs and CEFs) trading <$1

	Obligations (per Book and per Security)	$0.01-$0.09	$0.1-$0.49	$0.50-$0.99
Quoting	Two-sided quote, X% of time between 9.30am-4.00pm	95%	95%	95%
Size & Spread	Number of board lots (BL) within $X spread, minimum 1 BL on each side	4BL, $0.03	4BL, $0.05	4BL, $0.07

See section 11.6 for tier definitions.

10.3 DMM Benefits

10.3.1 Market Maker Volume Allocation ("MMVA")

DMMs are provided with a unique MMVA for their assigned securities on NEO Exchange to help balance their obligations. The MMVA allows the DMM to participate in NEO-L and NEO-N (independently), up to 15% of the daily traded volume versus LST in each book. DMM orders will be given matching priority over LSTs until they reach the 15% maximum allocation, at which time their orders will resume the normal priority sequencing. DMMs will defer their allocation priority when NEO Trader orders reside on the book ahead of the DMMs' orders. When triggered, the priority only applies to the visible portion of their order. Any non-visible volume will trade according to regular matching priorities. The MMVA allocation is executed without order fragmentation which means that the full size of their visible order will move to the top of the queue and trade with the next incoming order if they have not exceeded their 15% allocation.

Failure to meet the obligations (see section 10.2) in relation to a particular security for more than 25% of the trading days in a month will lead to the removal of the MMVA benefit for that security the following month. The MMVA will be reinstated only when the DMM has fulfilled the obligations again for the security for a full month (for 75% of the trading days in the month, at a minimum). If the DMM fails to meet the obligations for 75% of the trading days in a month in an assigned security, the Exchange has the discretion to provide it with a brief grace period to ensure its obligations were met for 75% of the extended period. If the DMM still fails to meet the minimum standard, then the MMVA for the security in question will be turned off for the remainder of the month.

Market Maker Volume Allocation Trading Example

The NEO-L order book is as follows:							
Order	**Buy Size**	**Buy Price**	**Sell Price**	**Sell Size**	**Trader Type**	**Broker**	**Order**
B8	1000	9.99	10.00	2000	NEO Trader	A	S1
			10.00	1000	NEO Trader	B	S2
			10.00	17000	NEO Trader	B	S3
			10.00	17000	LST	B	S4
			10.00	4000	LST	A	S5
			10.00	6000	DMM	A	S6
			10.00	4000	DMM	A	S7

If Broker B submits order B9 to buy 47000 shares at 10.00, the following trade(s) will occur:

- **Trade 1:** 1000 @ 10.00 (B9/S2; S2 has broker priority)

- **Trade 2:** 17000 @ 10.00 (B9/S3; S3 has broker priority)
- **Trade 3:** 17000 @ 10.00 (B9/S4; S4 has broker priority)
- **Trade 4:** 2000 @ 10.00 (B9/S1; S1 has NEO Trader priority)
- **Trade 5:** 6000 @ 10.00 (B9/S6; S6 has MMVA priority as DMM is under allocated)
- **Trade 6:** 4000 @ 10.00 (B9/S7; S7 has MMVA priority as DMM is under allocated).

10.4 Competition for Assignments

DMMs have the ability to compete for assignments in Other Traded Securities (TSX, TSX-V and CSE listed securities). To do so, a DMM must outperform the incumbent DMM across the following two factors:

1. Threshold Pass Rate Factors – which, depending on the type of security, are identical to the existing DMM obligations as outlined in [section 10.2](#) above. A DMM must meet these factors for 75% of the trading days in a month.
2. Competitive Factors – NBBO presence, with passive traded volume used as a tie breaker.

The table below outlines the aforementioned factors, showing the 'Threshold Pass Rate Factors' for securities priced over $1 (non-ETFs and non-CEFs) as an example:

Factors		Tier 1	Tier 2	Tier 3	Details
Threshold Pass Rate Factors* (Same as those who win MMVA benefit)	Quoting	95%	95%	95%	Two sided quote, X% of time between 9:30-4:00
	Size/Spread	10BL 1.5%	6BL 3%	4BL 5%	# of BLs within a maximum spread of X%, minimum 2 BL each side
Competitive Factors* (To win assignment)	NBBO Presence	1. NBBO Presence rounded to the nearest 5% 2. If multiple DMMs are tied on the rounded NBBO Presence, the DMMs' average daily traded passive volume (over the month) will be used as a tie breaker			

*Threshold Pass Rate Factors are monitored across both NEO-L & NEO-N. The NBBO Presence is only measured in NEO-L, but the assignment, if applicable, is won for both NEO-L & NEO-N.

11 Other Features

11.1 Circuit Breakers

NEO Exchange has implemented marketplace thresholds in accordance with IIROC's guidance for the Continuous Trading Sessions. NEO Exchange also generally applies the IIROC thresholds for the Opening Call and any Reopening Call. For NEO listed ETFs, the thresholds applied are available on the NEO Exchange website for both the Continuous Trading session, and the Opening Call.

	Price	Threshold %
All Equity Securities not subject to SSCB	>0.00 to <$0.50	300%
	≥0.50 to <1.00	50%
	≥1.00 to <5.00	30%
	≥5.00 to <10.00	20%
	≥10.00 to <30.00	15%
	≥30.00	10%
All Notes and Debenture Securities	Any price	20%
All ETFs other than Leveraged ETFs	Any price	10%
All Leveraged ETFs	Any price	Multiple of leverage multiplied by 10%
All Securities subject to SSCBs (Excluding ETFs)	Any price	10%

Circuit Breakers Trading Example

IIROC Circuit Breaker % = 10%
NLSP = 10 (lower limit, 9 – 11, upper limit)
Periodic NLSP = 9.75 (lower limit, 8.775 – 10.725, upper limit)

The NEO-L order book is as follows:

Buy Order	Buy Size	Buy Price	Sell Price	Sell Size	Sell Order
B1	100	9.50	9.54	500	S1
B2	200	9.25	9.60	600	S2
B3	100	9.00			
B4	200	8.85			
B5	100	8.75			

If Broker B submits IOC order S3 to buy 1000 shares at 8.00, the following trade(s) will occur:

- **Trade 1:** 100 @ 9.50 (S3/B1)
- **Trade 2:** 200 @ 9.25 (S3/B2)
- **Trade 3:** 100 @ 9.00 (S3/B3)
- **Trade 4:** 200 @ 8.85 (S3/B4)
- The system does not allow the incoming S3 order to execute against B5 as it is outside the lower limit of the periodic NLSP (8.775) even though the price is within the lower limit of the NLSP (recalculated after each trade)

11.2   Single Stock Circuit Breakers

In cases of short term volatility in trading, IIROC's Single Stock Circuit Breakers are in place as an auto trading halt event to further mitigate market volatility.

Circuit breakers are applied to each security that is a constituent of the S&P/TSX Composite Index and each ETF that is composed principally of listed securities. A five-minute halt of trading in a security will be automatically triggered across all Canadian marketplaces if the price of the security swings 10% or more within a five-minute period. All trades executed at more than 5% beyond the price that triggered the SSCB will be cancelled.

11.3   Closing Call Price Bands

The closing call price band and closing price threshold for a given security is as per the table below (see section 5.3.2 for more information).

Price	Threshold %	CPT %
< $0.99	10%	%
> $1.00	3%	10%

11.4   Cancel on Disconnect

A Member can instruct NEO Exchange to cancel all orders in the event that the FIX session those orders were entered through gets disconnected. The functionality can be configured on each FIX session independently.

11.5   Standard Trading Units

The Standard Trading Unit for a given symbol is defined in UMIR as per the table below.

Price	Board Lot
> $1.00	100 shares
Between $0.10 and < $1.00	500 shares
< $0.10	1000 shares

11.6   Standard Trading Price Increments

Price Range	Tick Size
< $0.50	0.005
> $0.50	0.010

11.7   Security Tiers

All securities traded on the NEO Exchange are categorized as belonging to a specific tier. The tier is used to determine the DMM obligations for a security (see section 10.2). All of NEO listed securities will fall into the Base Tier. At the issuers' discretion they can be subject to the Issuer Performance Program where, if the DMM meets Over-Performance Tier obligations, it is eligible for a monthly bonus. The Over-Performance Tier is more

stringent than the Base Tier and defined by the issuer in consultation with the DMM and the Exchange.

For all other traded securities, the tier is determined by the Median Daily Traded Value (MDV) for each security. MDV is calculated based on monthly trading activity across all Canadian marketplaces and the security tiers are revised once per quarter.

TIER	MDV
1	> $10,000,000
2	$1,000,000 - $10,000,000
3	< $1,000,000

Any other traded security that trades less than 100 times per day is automatically put in Tier 3 regardless of MDV.

11.8 Debentures

Debentures are supported on NEO-L, NEO-N and NEO-D and in the Crossing Facility. Debentures are traded in increments of $1000 face value. Odd lot orders are not supported for debentures.

11.9 Trading Halts

NEO Exchange supports two types of halts that can be initiated based on certain external events: (1) No Matching Halt, and (2) Full Halt.

11.9.1 No Matching Halt

During a No Matching Halt, order entry, amendments and cancels for resting orders are allowed, but no trading will occur. When the halt is lifted for trading to resume, the security will transition to a pre-open session where order entry, order amendments and cancellations are allowed. In NEO-L, any orders that can match in the Re-Opening Call (the same as described in section 5.1.2) will be executed, and the remainder of the orders will resume Continuous Trading Session. For NEO-N and NEO-D, only resting / passive orders may be entered until the Continuous Trading Sessions are resumed.

11.9.2 Full Halt

During a Full Halt, order entry, amendments of resting orders and trading are not allowed, although resting orders may be cancelled.

11.10 Drop Copy

Drop copy functionality is designed to facilitate real time monitoring of activity (order and trade activity or trade only) on NEO Exchange through separate FIX session connections. Drop copy sessions are only supported in FIX protocol.

Drop copy session setup is facilitated by the NEO Operations team.

11.11 Special Settlement Terms

Special Settlement Terms ("SST") orders can be submitted and will only interact with orders that have the same settlement terms and if applicable, identical settlement dates.

The following comprise the special settlement terms options:

a) Cash – Trades settle on the current business day;

b) Next Day – Trades settle on the next business day;

c) Future Date – Trades settle on the date provided by the user, which must be greater than the standard settlement term of T+2; or

d) Non-Net – Trades settle in the standard period of three days on a non-net basis.

SST Trading Example

> The SST order book is as follows:
>
> | Buy Order | Buy Size | Buy Price | Sell Price | Sell Size | Order Type/SST | Sell Broker | Sell Order |
> |---|---|---|---|---|---|---|---|
> | B1 | 100 | 11.15 | 11.16 | 1000 | Limit / Next Day | C | S2 |
> | | | | 11.16 | 200 | Limit / Cash | A | S3 |
> | | | | 11.16 | 300 | Limit / Cash | C | S4 |
>
> If Broker C submits order B5 to buy 500 shares at 11.16 with SettlmntTyp=1 (Cash), the following trade(s) will occur:
>
> - **Trade 1:** 200 @ 11.16 (B5/S3; S3 will execute as the terms match)
> - Note, S2 is skipped as the terms do not match and as broker preference matching is not applicable to the SST orders, S4 does not get priority over S3
> - **Trade 2:** 300 @ 11.16 (B5/S4)

11.12 Buy-In Service

In order to support CDS in occurrences where a seller does not deliver shares traded NEO listed securities on the exchange at settlement, NEO has established a process to find other market participants who would like to perform a Buy-In and make immediate delivery of the securities.

On a daily basis, CDS provides a list of securities that have been traded but for which sellers have failed to deliver.

1:30pm – NEO will receive and email the preliminary Buy-In list to market participants who will have the opportunity to submit Buy-In orders to NEO Operations prior to 3:00pm.

2:45pm – NEO will receive and email the final Buy-In list to market participants.

3:20pm – Cut-off time for accepting Buy-In orders. Any market participants that are submitting Buy-In orders must email them to NEO Operations who will manually enter these trades. The price of the trades will be based on the last board lot trade price on NEO before 3:00pm, plus a premium.

Buy-In trades will be disseminated on the NITCH feed between 3:30pm and 3:50pm and NEO Operations will provide transaction confirmations to each market participant during that time. Buy-In trades will not set the NLSP. Trades will be cleared on a trade-by-trade basis by CDS on the same day.

12 References

Reference	Link
NEO Trading Policies	https://www.neo.inc/documents/en/trading-data/neo-trading-policies-20220429.pdf
UMIR Rules	www.iiroc.ca/industry/rulebook/Pages/UMIR-Marketplace-Rules.aspx
IIROC	www.iiroc.ca
IIROC - SSCB	http://www.iiroc.ca/industry/rulebook/Pages/SSC-Breakers.aspx