

## **TSX INC.**

### **NOTICE OF PROPOSED AMENDMENTS AND REQUEST FOR COMMENTS**

TSX Inc. ("TSX") is publishing this Notice of Proposed Amendments in accordance with the "Process for the Review and Approval of Rules and the Information Contained in Form 21-101F1 and the Exhibits Thereto".

Market participants are invited to provide comments on the proposed changes. Comments should be in writing and delivered by August 2, 2016 to:

Carina Kwan  
Legal Counsel, Regulatory Affairs (Equity Trading)  
TMX Group  
The Exchange Tower  
130 King Street West  
Toronto, Ontario M5X 1J2  
Email: [tsxrequestforcomments@tsx.com](mailto:tsxrequestforcomments@tsx.com)

A copy should also be provided to:

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

Comments will be made publicly available unless confidentiality is requested. Upon completion of the review by Commission staff, and in the absence of any regulatory concerns, a notice will be published to confirm Commission approval.

#### **Background to the Proposed Amendments**

Currently, Market on Close ("MOC") market orders and MOC limit orders can be entered into the MOC book from 7:00 a.m. to 3:40 p.m. The difference between the aggregate eligible buy MOC market order and MOC limit order volume and aggregate eligible sell MOC market order and MOC limit order volume for each MOC security is known as the "MOC imbalance". The MOC imbalance is published at 3:40 p.m. Once the MOC imbalance is published, offsetting MOC limit orders can be entered into the MOC book on the opposite side of the MOC imbalance (if the symbol has an imbalance) between 3:40 p.m. and 4:00 p.m.

The price movement extension ("PME") delays the closing call for a MOC security and provides the market with a ten minute opportunity between 4:00 p.m. and 4:10 p.m. to react to a significant movement in what would be the closing price for the MOC security. The PME is only invoked if such price is greater than certain price volatility parameters set by the applicable exchange. The existing MOC facility does not recalculate and rebroadcast the MOC imbalance if the closing call for a symbol is delayed due to the invocation of the PME. Therefore, in cases where the MOC imbalance at 3:40 p.m. is on the opposite side of the MOC imbalance at the start of the PME session, participants are not able to enter MOC limit orders during the PME to offset the MOC imbalance and reduce the price volatility. In addition, participants are currently permitted to cancel

offsetting MOC limit orders submitted between 3:40 p.m. and 4:00 p.m., but they are not permitted to cancel MOC limit orders entered during the PME.

### Proposed Amendments

TSX is proposing the following amendments to the TSX Rule Book to introduce enhancements to the MOC facility operated by TSX (the “Proposed Amendments”):

1. A second MOC imbalance will be calculated and broadcast in the event of a delay of the closing call due to the invocation of the PME.
2. Following the broadcast of the second MOC imbalance, MOC limit orders may be entered in the MOC book on the opposite side of the second MOC imbalance.
3. MOC limit orders that are not included in the first or second MOC imbalance may be cancelled subject to the time constraints set by TSX.

Please see the attached Appendix A for a complete blackline of the Proposed Amendments to TSX Rule 4-902.

#### MOC PME Imbalance Determination

The proposed MOC PME imbalance calculation will operate similarly to the MOC imbalance calculation at 3:40 p.m. but will use the TSX last sale price as the reference price instead of the midpoint of the TSX BBO. Consistent with the functionality of the existing MOC imbalance calculation, MOC market orders (“MOC” orders) and MOC limit on close (“LOC”) orders that are included as part of the PME imbalance calculation may not be modified or cancelled after the publication of the PME imbalance message.

In addition to MOC orders, LOC orders that are priced equal to or more aggressive than the TSX last sale price 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.

*Example - For illustration purposes only – MOC PME Imbalance calculation with MOC and LOC orders*

TSX Last Sale Price: 25.03

MOC Book							
Imbalance eligible	Order Type	Bid Volume	Bid Price	Offer Price	Offer Volume	Order Type	Imbalance eligible
✓	MOC	500,000	MKT	MKT	400,000	MOC	✓
✓	LOC	50,000	25.10	24.97	50,000	LOC	✓
✓	LOC	50,000	25.08	25.00	50,000	LOC	✓

MOC Book							
Imbalance eligible	Order Type	Bid Volume	Bid Price	Offer Price	Offer Volume	Order Type	Imbalance eligible
×	LOC	50,000	25.02	25.02	50,000	LOC	✓
×	LOC	500,000	0.01	25.04	50,000	LOC	×

Buy eligible volume:  $500,000 + 50,000 + 50,000 = 600,000$

Sell eligible volume:  $400,000 + 50,000 + 50,000 + 50,000 = 550,000$

A 50,000 Buy imbalance will be published.

Buy LOC orders at 25.02 and 0.01 do not contribute to the imbalance due to their limit price not being equal or higher than the TSX last sale price.

Sell LOC order at 25.04 does not contribute to the imbalance due to the limit price not being equal or lower than the TSX last sale price.

#### PME Parameters

For purposes of determining whether to invoke the PME, the PME range will be modified to take into consideration a defined number of trading increments from the symbol's last sale price. The PME range will now be defined as the lesser (lower) or greater (higher) of either (i) a defined number of trading increments or (ii) the PME percentage parameter variance from both the VWAP of the last 20 minutes of regular market trading and the last board-lot sale price from the continuous market. This will address issues related to lower priced MOC eligible securities.

#### MOC Imbalance Message

In connection with the Proposed Amendments, an additional MOC imbalance message will be generated for symbols where a PME is triggered at 4 p.m. However, there are no changes planned to the existing message structure.

#### Entry of offsetting orders during a Price Movement Extension

Only LOC orders will be accepted during a PME. The order side will be restricted to the opposite side of the imbalance (i.e., if there is a buy imbalance, only sell orders will be accepted) and the price must be at or within the Closing Price Acceptance ("CPA") upper and lower bands. Offsetting orders entered during a PME may be cancelled.

#### CPA Parameter

The CPA parameter is used to determine whether or not the Calculated Closing Price ("CCP") at the end of the PME is acceptable.

The existing CPA parameter will allow a 10% variance on either side of the VWAP on TSX of the last 20 minutes of regular market trading and the last board-lot sale price from the continuous

market. The CPA parameter will be changed such that the acceptable limit on the opposite side of the imbalance is equal to the last sale price established in the continuous session. For example, the CPA parameter for a TSX symbol that moved into a PME with a buy side imbalance would be between +10% (off of the VWAP of the last 20 minutes of regular market trading and the last board-lot sale price) and the last sale price from the continuous market.

### **Rationale**

The proposed changes were developed in consultation with the MOC user community to address certain functionality deficiencies related to the PME. These changes will improve the ability of participants to offset MOC imbalances during a PME session. This will, in turn, help reduce the price volatility of MOC securities in closing calls that are delayed due to a PME. In addition, permitting participants to cancel MOC limit orders submitted during the PME will make the MOC facility functionality consistent as between the 3:40 to 4:00 p.m. time period (the “MOC imbalance market state”) and the PME session.

### **Expected Date of Implementation**

The proposed changes are expected to become effective in November 2016.

### **Expected Impact**

As indicated above, TSX is introducing enhancements to its MOC facility in response to customer feedback regarding certain functionality deficiencies related to the PME. The Proposed Amendments will not impact the imbalance calculation at 3:40 p.m. or permitted order entry during the MOC imbalance market state (between 3:40 p.m. and 4:00 p.m.).

TSX expects the Proposed Amendments to improve the functionality of the existing MOC facility and to result in benefits for MOC users and potentially the market as a whole. As these changes will improve the ability of participants to offset MOC imbalances during a PME, the price volatility of MOC securities will be reduced and the closing price formation process of the MOC facility will be improved.

### **Expected Impact of Proposed Amendments on the Exchange’s Compliance with Ontario Securities Law**

The Proposed Amendments and changes to marketplace functionality will not impact TSX’s compliance with Ontario securities law and in particular the requirements for fair access and maintenance of fair and orderly markets. TSX also believes the Proposed Amendments support the maintenance of fair and orderly markets by strengthening the price formation process of the MOC facility.

### **Estimated Time Required by Members and Service Vendors to Modify Their Own Systems after Implementation of the Proposed Amendments**

Since there are no order entry message protocol or feed message protocol changes planned for the proposed MOC changes, we expect any required changes to be minimal and likely limited to the processing of an additional MOC imbalance message for symbols where the PME is invoked.

Functionality will be available in the TMX external test environment prior to production so as to give clients ample opportunity to test any changes.

### **Do the Amendments Currently Exist in Other Markets or Jurisdictions**

The Proposed Amendments do not currently exist in other markets or jurisdictions. We note that imbalance broadcasts are handled differently by different marketplaces. Some marketplaces such as NYSE, NASDAQ and LSE broadcast the imbalance semi-continuously (e.g., NYSE broadcasts every five seconds between 3:45 p.m. – 3:59:55 p.m.).

The additional MOC imbalance calculation and broadcast in the event of a delay of the closing call due to invocation of the PME session is intended to address a specific issue of TSX's MOC facility. In particular, marketplace participants on TSX were unable to offset the imbalance during a PME if the imbalance at 4:00 p.m. was in the opposite direction of the imbalance published at 3:40 p.m. (i.e., if there was a buy side imbalance at 3:40 p.m. and the symbol movement into a PME had an imbalance on the sell side at 4 p.m.). We are therefore proposing to recalculate the imbalance at the time of a PME and only allowing orders in the direction that will offset the imbalance. This proposed change will help reduce the price volatility of MOC securities.

## APPENDIX A

### AMENDMENTS TO THE TSX RULE BOOK

#### 4-902 Market-On-Close

##### (2) MOC Order Entry

- (a) MOC Market Orders and MOC Limit Orders may be entered, cancelled and modified in the MOC Book on each Trading Day from 7:00 a.m. until the time the first MOC Imbalance is broadcast. MOC Market Orders and MOC Limit Orders that are included in ~~the~~any MOC Imbalance broadcast may not be cancelled or modified after ~~the~~that MOC Imbalance is broadcast.
- (b) The MOC Imbalance is calculated and broadcast on each Trading Day at twenty minutes before the closing time and again in the event of a delay of the Closing Call as specified by the Exchange.
- (d) Following the broadcast of ~~the~~a MOC Imbalance, ~~until the closing time on each Trading Day,~~ MOC Limit Orders may be entered in the MOC Book on the contra side of the MOC Imbalance. MOC Limit Orders not included as part of ~~the~~that MOC Imbalance broadcast may be cancelled ~~until the closing time~~subject to established time constraints as specified by the Exchange.
- (e) In the event of a delay of the Closing Call for a MOC Security, MOC Limit Orders may be entered in the MOC Book for such security on the contra side of the subsequent MOC Imbalance for a set period of ~~ten minutes after the closing time.~~time specified by the Exchange. Pursuant to paragraph (d), MOC Limit Orders entered during the delay may ~~not~~ be cancelled during this time period.