

## TSX INC.

### NOTICE OF PROPOSED AMENDMENTS AND REQUEST FOR COMMENTS

TSX Inc. (“**TSX**”) is publishing this Notice of Proposed Amendments and Request for Comments 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 July 19, 2021 to:

Anastassia Tikhomirova  
Legal Counsel  
TMX Group  
100 Adelaide Street West, Suite 300  
Toronto, Ontario M5H 1S3  
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

TSX is proposing to add three new definitions to **Rule 1-101 of the TSX Rulebook as follows:** TSX Last Ask Price (“**TSX Ask**”), TSX Last Bid Price (“**TSX Bid**”), and TSX Closing Price (“**TSX Closing Price**”), (together, the “**Amendments**”).

The purpose of introducing the TSX Closing Price is to provide market participants with a standardized reference point for all securities and disseminate a closing price for Exchange Traded Funds (“**ETFs**”) that may be more reflective of the ETFs’ NAVs. The purpose of introducing an TSX Bid and an TSX Ask is to provide a more reflective bid/ask value of a security as the spread can widen towards the end of the regular trading session and into the extended trading session.

#### Proposed Amendment

Please see **Appendix A** for a blackline of the Proposed Amendments. The Proposed Amendments and their rationale are outlined in more detail below.

#### Details and Rationale

## *1. Introduction of the defined terms, TSX Closing Price, TSX Bid, and TSX Ask*

Currently, the TSX Rulebook does not define a last bid price, last ask price or a closing price for any security. Instead, it is implied that the last sale price of a security is used to determine the closing price. The last sale price of any security is, depending on the security, either the last board lot sale price in TSX's Market on Close session ("**MOC**") or the last board lot sale for such security. However, if a security is thinly traded, its last board lot sale may have occurred hours or days prior to the close of the current trading day.

The vast majority of ETFs trade infrequently when compared to their underlying basket of securities. For thinly traded ETFs, the last sale price may not always be an accurate reflection of the current Net Asset Value ("**NAV**") for the ETF since, as noted above, the last board lot sale may have occurred hours or days earlier. Bid and ask quotes for thinly traded securities could also be hours or days old. In addition, cancelled orders by ETF market makers could affect the bid and ask quote. TSX seeks to reduce the burden on investors and data vendors by creating a methodology for establishing an TSX Ask, an TSX Bid, and an TSX Closing Price for TSX securities. Disseminating a single new message on the TSX data feeds with these three new data points will allow interested parties to easily and conveniently identify a closing price and the associated closing bid and closing ask. In addition, the proposed methodology will provide for more accurate valuation for thinly traded ETFs and will improve the experience of investors, advisors, dealers, and asset managers when valuing the performance of ETFs.

For ETFs, TSX proposes using a time weighted average price ("**TWAP**") calculation over the last 10 minutes of trading to determine the TSX Last Ask, the TSX Last Bid, and, in the absence of a trade during those last 10 minutes of trading, the TSX Closing Price. Using this methodology would provide an improved reference point for portfolio valuations than a possibly stale last sale price. The TSX Bid and the TSX Ask will provide a realistic tight spread by calculating the time weighted average of bid quotes and ask quotes, respectively.

For securities other than ETFs, the TSX Closing Price will continue to be (a) in respect of a MOC eligible securities, the calculated MOC closing price, and (b) in respect of any other security (other than ETFs), the last board lot sale price of the security on TSX in the regular session. For securities other than ETFs, the TSX Bid and the TSX Ask will be the last posted bid price and ask price, respectively, in the regular trading session.

TSX would calculate, where applicable, and publicly disseminate, the TSX Closing Price, the TSX Bid and the TSX Ask at 4:10pm. In the event of a trade cancellation that would affect the TSX Closing Price, TSX will re-disseminate a revised TSX Closing Price at 5:00pm. The TSX Closing Price, the TSX Bid and the TSX Ask will initially be disseminated on Level 1 Real-time Data Feeds as a single new message type. TSX may, in the future, add the information to other data feeds based on client feedback and demand

## **Calculations and Examples**

### *1. TSX Ask and TSX Bid Calculations*

The TSX Ask and TSX Bid will be determined by using a derived last bid price and a derived last ask price calculated as follows:

- a) If there is a TSX Best Bid and Offer (“**TBBO**”) during the last 10 minutes of the regular trading session, then:
- the TSX Bid will be the TWAP of TSX Best Bid (“**TBB**”) during that time period, and
  - the TSX Ask will be the TWAP of TSX Best Offer (“**TBO**”) during that time period:

<b>Example 1.a</b>				
	Time	TBB	TBO	Duration in seconds
1	3:50:00	10	10.1	312 seconds
2	3:55:12	10.01	10.1	287 seconds
3	3:59:59	10.02	10.1	< 1 second = rounded up to 1 second
		TBB = 10.0048 (TWAP)	TBO = 10.1 (TWAP)	Total duration 600 seconds

- b) if there is no TBBO during the last 10 minutes of the regular trading session, then:
- the TSX Bid will be the last TBB of the current trading day, and
  - the TSX Ask will be the last TBO of the current trading day:

<b>Example 1.b</b>			
	Time	TBB	TBO
1	1:50:00 PM	10	10.1
2	2:15:12 PM	10.01	10.1
3	3:00:00 PM	10.02	10.11
		TBB = 10.02 (Last TBB)	TBO = 10.11 (Last TBO)

## 2. TSX Closing Price Calculation

The TSX Closing Price will be determined as follows:

- a) in respect of an ETF, by using a derived closing price calculated as follows:
- i. if there is a last sale price on TSX (“**TLSP**”) during the last 10 minutes of the regular trading session, the TSX Closing Price will be the TLSP:

Example 2.a.i				
	Time	TBB	TBO	TLSP
1	3:50:00	10	10.1	
2	3:55:12	10.01	10.1	
3	3:57:59			10.1
4	3:59:59	10.02	10.1	
derived closing price = 10.1 from row 3				

- ii. if there is no TLSP during the last 10 minutes of the regular trading session, the TSX Closing Price will be the midpoint of the following two TWAPs:
- TWAP of TBB during the last 10 minutes of the regular trading session, and
  - TWAP of TBO during the last 10 minutes of the regular trading session:

Example 2.a.ii					
	Time	TBB	TBO	TLSP	Duration in seconds
1	3:50:00	10	10.1		312 seconds
2	3:55:12	10.01	10.1		287 seconds
3	3:59:59	10.02	10.1		< 1 second = rounded up to 1 second
		TBB = 10.0048 (TWAP)	TBO = 10.1 (TWAP)		Total duration 600 seconds
derived closing price = Midpoint of TWAP TBB and TWAP TBO = 10.05					

- iii. if there is no TBBO during the last 10 minutes of the regular trading session, the timing of the TLSP and the last TBBO will be evaluated as follows:

Example 2.a.iii		
	Timing of TLSP versus TBBO	Derived closing price will be set to the following value:
1	The TLSP occurs later than the last TBBO	TLSP
2	The last TBBO occurs later than the TLSP	Midpoint of the last TBBO
3	No TLSP during the current trading session	Midpoint of the last TBBO

- iv. if there is no TLSP and no TBBO during the regular trading session for that day,

the TSX Closing Price will be the previous day's TSX Closing Price. If the previous day's TSX Closing Price is not available, the TSX Closing Price will be the previous day's TLSP.

- b) in respect of securities, other than ETFs, by using:
  - i. the calculated MOC closing price for MOC eligible securities, and
  - ii. the LSP for any other security.

### **Expected Date of Implementation**

The three new data points are expected to be initially disseminated and labelled as derived data on TSX data feeds in June of 2021. The Proposed Amendments are expected to be implemented following receipt of regulatory approval and TSX will communicate to market participants that these data points have been relabeled as TSX Closing Price, TSX Bid, and TSX Ask..

### **Expected Impact**

The Amendments are not expected to have a negative impact on the markets. TSX expects that the Amendments will provide a more accurate NAV valuation for pricing of ETFs and portfolios, and may benefit both institutional and retail investors.

In support of TSX's public interest mandate, TSX will apply various mechanisms to help increase transparency, minimize confusion and avoid negative outcomes for investors. TSX will send out a product announcement clarifying the new features and set up discussions with various consumers. The TSX Closing Price, the TSX Bid and the TSX Ask will initially be disseminated on Level 1 Real-time Data Feeds as a single new message type. TSX may, in the future, add the information to other data feeds based on client feedback and demand.

As the Amendments do not impact any trading functionally, their implementation will not necessitate any changes to Investment Industry Regulatory Organization of Canada rules such as the Universal Market Integrity Rules or Member Dealer Rules. The intent of the Amendments is for the new definitions to be used for indicative valuations and not for marking to market or risk analysis.

### **Expected Impact of Proposed Amendment on TSX's Compliance with Ontario Securities Law**

The Proposed Amendment 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.

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

The Amendments are expected to have a positive impact on the market participants, and may add convenience by simplifying the means of consuming this data. The Amendments do not affect or impact participating organizations' trading workflows, and consumption of the new data is not

expected to be a large effort for the market participants. Service vendors would also need to make minor technology changes to consume and display the new information.

**Does the Proposed Amendment Currently Exist in Other Markets or Jurisdictions**

The Amendments are not novel in the Canadian market and NEO currently disseminates a NEO closing price for ETFs.

Outside of Canada, NYSE has a similar solution to address closing prices for ETFs.

**APPENDIX A  
BLACKLINE OF AMENDMENTS TO TSX RULE BOOK**

**PART 1 - INTERPRETATION**

**Rule 1-101 Definitions (Amended)**

[...]

- (2) In all Exchange Requirements, unless the subject matter or context otherwise requires:

[...]

“TSX Closing Price” means:

- a. in respect of an exchange traded fund, a derived closing price calculated in the manner determined by the Exchange.
- b. in respect of securities, other than exchange traded funds, the Last Sale Price.

**Added ( ## ##, 2021)**

“TSX Last Ask Price” means the derived last ask price calculated in the manner determined by the Exchange.

**Added ( ## ##, 2021)**

“TSX Last Bid Price” means the derived last bid price calculated in the manner determined by the Exchange.

**Added ( ## ##, 2021)**

[...]