TMX AUSTRALIA EXCHANGE

NBBO Compilation and Validation Policy

1. INTRODUCTION

1.1. Purpose

This document provides a high-level overview of how TMX Australia Exchange, which is the trading name of TMX Australia Exchange Pty Limited (previously Cboe Australia Pty Limited) ("TMX"), compiles the national best bid and offer ("NBBO") and validates Trades with Price Improvement ("TWPI") as defined under the *ASIC Market Integrity Rules (Securities Markets) 2017* ("MIRs").

1.2. Market Operator Obligations

Under MIR 6.1.1(2), a participant is not required to comply with the pre-trade transparency requirements under MIR 6.1.1(1) in relation to a number of exceptions. The exceptions include a TWPI, which is a transaction executed at a price that is higher than the best available bid and lower than the best available offer by one or more price steps, or at the midpoint of these prices, as defined under MIR 6.2.3(1)(a). TMX refers to this type of trade report as "NBBOX". These trades must be reported to an exchange, immediately if executed during continuous trading, or as otherwise provided by MIR 6.3.1.

Under MIR 6.3.4A, a market operator that receives a report of TWPI must have in place arrangements to determine whether the transaction as reported meets the criteria for the TWPI exception. The arrangements must include validation that the price of the reported TWPI meets the price criteria under MIR 6.2.3(1)(a) based on the market operator's calculation of the NBBO at the time the TWPI is reported.

As outlined in the *ASIC Regulatory Guide 172*, in compiling the NBBO, a market operator is expected to:

(a) consider all pre-trade transparent bids and offers from pre-trade transparent order books, irrespective of the size and nature of the order;

(b) compile the data in real time; and

(c) have appropriate systems and controls in place to ensure data is collected and processed in a timely, accurate and reliable manner.

Where a pre-trade transparent order book is open, and any other pre-trade transparent order book does not have bids and offers available for execution, a market operator is expected to determine the by compilation of the bids and offers on those pre-trade transparent order books that are available for execution.

2. NBBO COMPILATION PROCESS

To compile the NBBO in accordance with its regulatory obligations and expectations, TMX creates a hypothetical consolidated order book across TMX and ASX Tradematch to calculate the NBBO on a continuous basis in accordance with the sequence that TMX receives orders and market data from ASX.

If TMX is in a normal continuous trading while ASX Tradematch is not, or if ASX Tradematch has visible executable orders, TMX will determine the NBBO by compiling the visible executable orders on TMX. Conversely, if ASX Tradematch is in a normal continuous trading state and TMX is not, or if TMX has no visible executable orders, TMX will determine the NBBO by compiling the visible executable orders on ASX Tradematch.

If ASX experiences a market outage affecting its ability to disseminate market data, TMX will determine the NBBO based on the visible executable orders on TMX. For further information on outage scenarios, see the TMX Resilience Mechanisms and Disaster Recovery Playbook [insert link].

3. VALIDATION OF NBBOX TRADE REPORTS

As required under the MIRs, TMX validates the price of each NBBOX trade report based on TMX's NBBO calculation at the time TMX receives the trade report.

ASIC acknowledges that the times recorded for a particular TWPI and the relevant NBBO value calculations in a participant's system may, at times, be marginally out of sync with the corresponding times recorded by the market operator receiving a TWPI report. This may result in trade reports for genuine TWPI failing validation within a market operator's systems, leading to the rejection of a report for a TWPI that is otherwise eligible for the exception provided under the MIRs. As a result, TMX applies a small tolerance in the validation process to allow for these potential differences. If the NBBO validation fails, TMX will reject such NBBOX trade reports and inform participants accordingly.

The validation process (including the application of a small tolerance) exists solely for the purpose of TMX's trade report validation and should not be relied upon by participants to satisfy their TWPI obligations under the MIRs. TMX does not publish the value of the tolerance applied or the method by which it is calculated.

The following scenarios illustrate how TMX validates the price of NBBOX trade reports in certain market conditions.

(a) **Standard Bid-Offer Spread:** TMX will accept NBBOX trade reports executed at the mid-point or at valid price steps within the validation range, which is defined by the best available bid less tolerance and the best available offer plus tolerance.

(b) **One-Sided Market:** ASIC considers that where there is no spread because there is only one of a best bid or offer (e.g. the bid is $5.05 and there is no offer), the TWPI exception cannot be used. However, acknowledging that potential misalignment between participant and TMX systems, when there is a one-sided market, TMX will accept NBBOX trade reports executed at the best available price (bid or offer) or at a valid price step within the validation range, which is defined by the best available price plus or minus tolerance.

(c) **Locked Market**: If the NBBO is locked (i.e., when the best available bid and offer prices are the same), TMX will accept NBBOX trade reports executed at the locked price or at a valid price step within the validation range, which is defined by the locked price plus or minus tolerance.

(d) **Crossed Market**: If the NBBO is crossed (i.e., when the best available bid is higher than the best available offer, trade reports will be accepted at the mid-point or at valid price steps within the validation range, which is defined by the mid-point plus or minus tolerance.