TSX Market Making Program Guide

same competitive bidding process described under the "Competitive Bidding Process" section.

(iii) Other assignment methods:

- a. **Related Instrument Assignments** Certain securities may be classified by the TSX as related instrument assignments which may be directly allocated in accordance with a root security. Related instruments include rights, warrants, subscription receipts, preferred shares, US dollar equivalents or multiple classes of common shares (i.e., classes of with different voting rights, Canadian vs. US resident eligibility), when issued, or essentially any derived product based upon an existing issuer. Debentures and notes are not assigned to Market Makers.
- b. Non-Voluntary Assignments In cases where no eligible competitive bids are submitted on a security, TSX will assign such security to the next Marker Maker based on a round robin allocation method (whereby assignments are made to all eligible Marker Makers in sequence, with the intention that non-voluntary assignments be equally allocated among firms). Market Makers must act in accordance with applicable requirements for all assigned securities of responsibility.
- c. Temporary Assignments Market Makers may be required to assume temporary responsibility for newly listed securities and other security assignments that become available, until such time that those specific securities are permanently assigned to a Market Maker.

2.3 Tier System and the Tier A:B Ratio

TSX categorizes listed securities according to tiers based on the level of trading activity in the securities. Securities that fall into the Tier A category are the most actively traded securities based on the security's average daily value (ADV) traded on TSX in the previous 12 month period (calculated quarterly). The Tier B category covers securities that, on average, trade less actively. The tiers are further divided into sub-tiers, which are also based on levels of trading activity.

Table

Tier	Sub-tier	Description
В	6	
В	7	
В	8	
В	9	
В	10	

TSX allocates securities to f5.7(a[(s)-1.f.52 0.481 629.521,.7(ur)0. 0.481 0548 re f 1dd [(s)-1.7(ec)-1.7(ur)0.7

2.7 Bidding Process for Primary Assignments

- Bids for primary assignments are to be submitted in the standard form prescribed and circulated by TSX within the allotted time. Service level bids must include a Market Maker's commitments in respect of the following:
 - a. Minimum guaranteed fill (MGF) size
 - b. Spread goal for the security.

Bids may also include any additional information a Market Maker wishes to include, such as issuer recommendations or information concerning the trader that would become the Responsible Designated Trader for the security. Bids remain confidential by TSX until the assignment decision is made.

- 2) The TSX Allocation Committee reviews bid and approves assignments. All securities are assigned to bidding firms using the following general criteria (which are listed in no specific order), subject to TSX discretion:
 - a Market Maker's market making experience;
 - a Market Maker's market making performance score average, including the number and proportion of underperforming security assignments at the firm;
 - the substance of the service level bids submitted by a Market Maker;
 - the issuer's recommendation;
 - the strategic focus of the Market Maker;
 - the desirability of maintaining a long-run balance, depth and breadth of Market Makers; and
 - other factors which are likely to contribute to a Market Maker's ability to compete with other liquidity providers, such as the Market Maker's technological capability, market presence, global reach, and lines of business.
- Winning assignments are announced publicly.

2.8 Bidding Process for

e35(d publ)-1.S1.13(p-1.7(head G0 Toa)-5) al. Td ()T

- c. Top of Book Size
- 3) The TSX Allocation Committee reviews and approves assignments. Tier B securities are assigned first in order to establish the total number of Tier A securities each Market Maker is eligible to be assigned. All securities are assigned to bidding firms using the following criteria, subject to TSX discretion:
 - a. The bid with the highest Total Relative Score, calculated as follows:

For each metric, a Relative Score is assigned: 10 points are awarded to the most competitive bid, 0 points are awarded to the least competitive bid, and all bids in between earn a pro-rated number of points based on the difference between the best and worst bid. The Total Relative Score is calculated as the weighted average of all Relative Scores in accordance with the following weightings:

	Spread Goal	% Time at	Top of Book
		NBBO	Size
Tier A Securities	10%	50%	40%
Tier B Securities	50%	25%	25%

Example: Scoring for a Tier A Security

- b. If there is a tie among multiple bids, the firm with the lowest percentage (%) of underperforming securities in the previous 12 months is awarded the assignment. Net new Market Makers having less than one year of history in the Program will by default fall in the 50th percentile of underperformance.
- c. If there is still a tie among multiple bids, TSX will apply its discretion to award the security assignment. Other factors taken in consideration may include,

.003d [(5.)Tj 0973Tc2.49737**b⇔tBaDe**no/TTifn1it**5-4**lcte0t**10e3**njun**EdJeC5.8dTaDs£rib9t**7o6t7o155eTcu/f**figs**inead**76**ss*A*TeTo\$u**2579**f7a+0t002CS0

Chapter 3 Responsibilities of Market Makers

3.1 Performance Obligations – Primary Assignments

The Performance Obligations of Market Makers with primary assignments will be measured under the following scoring system. Points are awarded to Market Makers for each of the following three performance criteria (each, a "Performance Obligation"), and an overall performance score is calculated based on the average of the three scores, weighted equally. A score of 60 is considered a passing score for the month.

1. Spread Goal Attainment

- Spread goal attainment evaluates to what degree a Market Maker is maintaining a twosided market in a security relative to their spread goal obligation. Market Makers achieve a higher score based on how narrow the natural spread in the market for such security is in relation to the spread goal.
- Spread goal attainment = average time weighted spread ("ATWS") Ratio/Spread Goal ("SG")
- Spread Goals are calculated as the ATWS for the previous 3 months * 2, and are communicated to Market Makers at the beginning of each month.
- Points are awarded as follows:

Spread Ratio Ranges	Points Awarded
ATWS Ratio 50% of SG	125
50% < ATWS Ratio 57.5% of SG	100
57.5% < ATWS Ratio 65% of SG	75
65% < ATWS Ratio 80% of SG	50
80% < ATWS Ratio 110% of SG	25
ATWS Ratio >110% of SG	0

 Demerit points are subtracted from the spread goal attainment score based on the number of spread goal exceptions or the average duration of the spread goal exceptions. A total of 25 demerit points will be deducted for violation of either limit.

2. Participation

- Participation measures the degree to which a Market Maker is trading actively in its securities of responsibility to improve its trading liquidity for the benefit of the marketplace. A higher score is achieved when Market Maker participation is relatively high as compared to the average Market Maker's participation within the associated security tier classification (based on value traded). The calculation excludes block trades and crosses in which the Market Maker did not participate.
- Participation Ratio ("PR") = Market Maker value traded/total value traded

TSX Market Making Program Guide

The specific service levels or parameters for each Performance Obligation are established at the time of security assignment either through the bidding process, or in accordance with Appendix A - Performance Guidelines.

Each month, TSX will provide Market Makers and issuers with performance reports showing the performance of the Market Maker that month. To better assist Market Makers with monitoring their progress, daily performance reports are also available upon request for all securities of responsibility. This provides an early warning if a security is at risk of failing for the month and allows the Market Maker to take corrective action.

In the monthly reports provided to issuers, additional information is provided to show the top liquidity providers and takers for the issuer's security, as well as trade information of the security. These additional metrics are based on publicly disclosed end of day quote and trade data. This information is provided to issuers for informational purposes only and do not affect the Market Maker's monthly performance.

A sample of such reports for illustrative purposes is set out in Appendix C – Performance Reports – Secondary Assignments.

1. Spread Goal

- This requirement measures the cost of transacting immediately, reflecting the degree of liquidity provided on TSX.
- The Spread Goal is the difference between TSX Best Bid and TSX Best Offer, measured in dollar terms (e.g. \$0.03), that the Market Maker needs to maintain
- At the end of the month, the system calculates the percentage of time that the security's Spread Goal was maintained during the sum of all trading hours that month. In order to be considered a pass, the percentage of time must be equal to or greater than 95%.
- Measured during continuous trading hours only (9:30:00 AM 4:00 PM), and excludes periods where a security may be halted, suspended or delayed.

2. % Time at NBBO

- The minimum % of time TSX is at the Protected NBBO requirement is intended to measure the degree of competitiveness of the TSX market, as compared to other protected marketplaces in Canada.
- % Time at NBBO = (average time TSX is at protected NBB per day + average time TSX is at protected NBO per day) / 2
- If there is no protected NBB or protected NBO (meaning there is no quote on any marketplace including TSX), then this will be treated as time that TSX is not at the Protected NBBO.
- Measured during continuous trading hours only (9:30:00 AM 4:00 PM), and excludes periods where a security may be halted, suspended or delayed.

3.

TSX Market Making Program Guide

3.6.3 Allocation of MGF Fills

MGF-eligible orders may receive a fill up to the Total MGF size for that security if the TSX CLOB does not have sufficient visible liquidity at the NBBO. MGF orders receiving a fill will be allocated between the primary and secondary Market Maker according to a pro-rata allocation based on each Market Maker's individual contribution to the Total MGF size, rounded to the nearest board lot.

For example, assume the following scenario:

- 500 shares available in the CLOB
- Total MGF = 2500 comprised of:
 - Primary Market Maker's MGF = 1000 (40% of the Total MGF)
 - Secondary Market Maker's MGF = 1500 (60% of the Total MGF)
- An incoming MGF-eligible order for 2500 arrives:
 - o 500 shares are filled by orders in the CLOB, leaving a balance of 2000 shares
 - 800 shares are allocated to the Primary Market Maker as a MGF fill (40% of 2000 shares)
 - 1200 shares are allocated to the Secondary Market Maker as a MGF fill (60% of 2000 shares)

3.7 Participation

From time to time, while providing Market Making services, it may be important for Market Makers to create or offset a position quickly in order to protect against losses inherent in performing this function. Responsible Designated Trader (also referred to as "

Autofill to the AuctionRT, such that the AuctionRT's net position as a result of all MOC odd lots will never be greater than an oddlot.

For more information on odd lots, please see the <u>TSX Order Types & Functionality Guide</u> available on the TSX website.

3.9 Assistance to Issuers and Other Market Participants

Market Makers through their responsibilities may develop experience trading a particular security and are encouraged to use this knowledge to help educate and inform issuers of general trading activity. TSX encourages issuers and Market Makers, at their discretion, to communicate on a mutually agreed upon schedule. Such communication may generally consist of trading activity, trends, publicly-disclosed liquidity events, general observations or commentary of the market.

As a reminder, TSX Market Makers are not entitled to,Td [(She m)3.DC 0.0a, gener115 0 Td [(tr)0.7(adi ().E

3.11 Designated Market Maker Contact

Market Makers are responsible for designating an individual within the firm to manage the Market Maker's market making responsibilities and be the primary contact with TSX with respect to the Market Maker's security assignments (the "Designated Market Maker Contact"). The Designated Market Maker Contact or his or her back-up must be available during trading hours. The responsibilities of the Designated Market Maker Contact include:

- 1) Managing security assignments
- 2) Managing performance obligations
- Notification to TSX regarding any new Responsible Designated Traders or changes to Responsible Designated Traders for any assigned securities

3.12 Responsible Designated Trader

Market Makers are responsible for appointing an Approved Trader within the firm to perform the requirements described in the Responsibilities of Market Makers section (the "Responsible Designated Trader"). The Approved Trader designated by the Market Maker must have sufficient experience to effectively perform the market making responsibilities. The Market Maker must notify the Exchange of the name and Trader ID of such individual at the time the security is assigned to the Market Maker. Such Trader ID of the Responsible Designated Trader will be used when assigning auto fills resulting from the MGF facility, Participation, and Odd Lot facility, in addition to any fee incentives.

3.13 Market Maker Fees

For more information, please refer to the Trading Fee Schedule on the TSX website.

Appendix B - Definitions

CLOB means the TSX Central Limit Order Book.

DEA client has the meaning set out in National Instrument 23-103 Electronic Trading and Direct Access to Marketplaces.

Maximum Volume Allocation means the maximum volume a Market Maker can accumulate in Participation fills, as set by the Market Maker.

Participation means the optional feature that enables Market Makers to "participate in" (i.e., trade against) a fraction of incoming orders by receiving priority of execution within the CLOB in their assigned securities, as described in the section Participation.

Appendix C – Performance Reports – Secondary Assignments

The following is a sample of the performance reports provided to issuers on a daily and monthly basis. This sample is provided for illustrative purposes only and the format and content of the performance reports are subject to change at the sole discretion of TSX. .

For more information on the specific metrics7