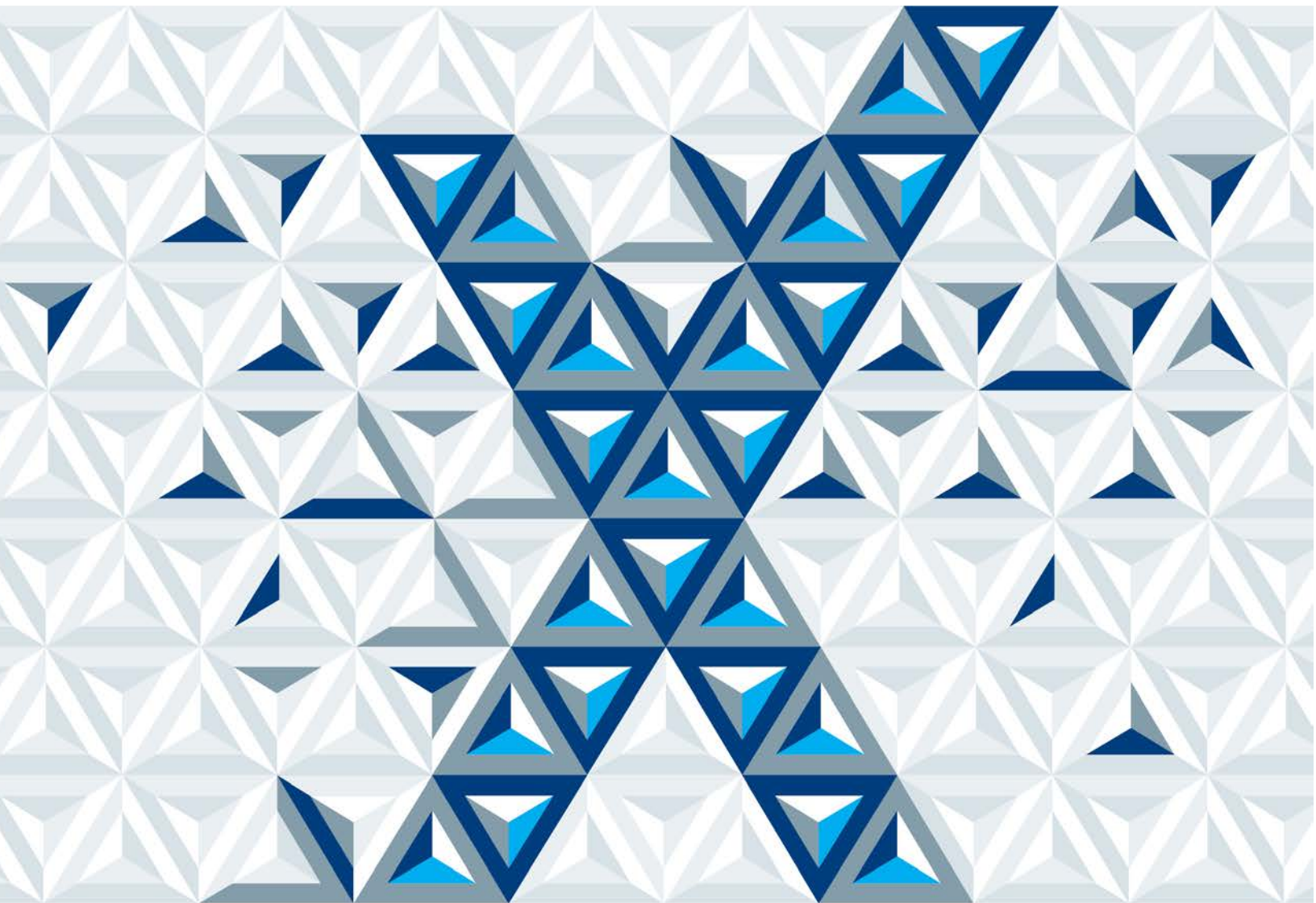


TSX Market Making Program Guide



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Chapter 1 Introduction

Whether referring to a well-known, large cap Canadian company, a junior mining producer or an Exchange Traded Fund (ETF), liquidity is vital to the success of all publicly traded securities in order to attract investment capital and continue to grow. It is the mission of the Toronto Stock Exchange (“TSX”) to power this investment and promote economic growth for clients by promoting a healthy and liquid market for every TSX-listed security. This is achieved through a combination of a globally-recognized marketplace where investors from around the world look to inject capital, a thoroughly entrenched market data distribution network that disseminates critical market information to traders, investment professionals and investors, and a carefully designed market infrastructure that attracts and rewards various market participants that contribute to the quality of the marketplace.

In order to foster the strongest marketplace possible, the TSX Market Making Program (the “Program”) sets out various obligations and incentives for Participating Organizations willing to interact in our market in the role of a formal TSX Market Maker described within this document. Among these obligations, and a unique feature of the Canadian marketplace, is the Minimum Guaranteed Fill (MGF) facility, which provides guaranteed fills for small-sized orders when liquidity in the Central Limit Order Book (CLOB) is insufficient. This facility is invaluable in an increasingly fragmented trading environment and for smaller companies that struggle with attracting liquidity. The Program also features several carefully designed policies that also promote the long term health and vitality of TSX-listed issuers for their investors and Market Makers.

Currently, every security listed on TSX, with the exception of debentures and notes, may be assigned a Market Maker who has obligations to monitor trading activity in real-time and interact in the market when natural forces may be lacking to promote liquidity and a smooth and orderly market. The primary responsibilities of Market Makers are to augment liquidity and ensure a competitive two-sided market exists on TSX during continuous trading hours, while also providing support for the MGF facility, be present during the market opening, filling odd lots at the Protected NBBO, and reporting unusual behaviour to the appropriate regulators and authorities. A Market Maker’s performance is monitored and assessed on a monthly basis and appropriate actions are taken when underperformance is identified.

Chapter 2 Entering the Program

Terms not defined in “Appendix B - Definitions” have the meanings ascribed to them in the TSX Rule Book.

2.1 Approval Process

A Participating Organization of TSX may apply to become a Market Maker by completing the TSX Market Maker Application. A DEA client accessing TSX through direct electronic access in accordance with National Instrument 23-103 *Electronic Trading and Direct Access to Marketplaces* is not eligible to apply to become a TSX Market Maker.

For an application to be approved, a Participating Organization must demonstrate that it is capable of performing market making activity that is acceptable to the TSX as well as demonstrate that it has sufficient trading desk and operations area support staff. This may include having sufficient technology and system capabilities that will permit it to properly carry out its market making responsibilities.

A Participating Organization that has been approved by TSX to act as Market Maker must execute a TSX Market Maker Agreement.

2.2 Assignment of Securities

There are two Market Maker assignments available for each corporate security - the primary Market Maker assignment and the secondary Market Maker assignment. A Market Maker may not be assigned both the primary and secondary assignments in respect of a security.

Exchange Traded Funds (ETFs) have only a primary Market Maker assignment. Market Makers for ETFs are typically endorsed by issuers in relation to their Designated Broker agreements.

There are several methods for assigning securities to Market Makers:

- (i) **Security specific assignments** apply when new security assignments become available. These circumstances include but are not limited to: a new listing, an issuer request for a Market Maker change, a Market Maker voluntarily relinquishing a security of responsibility, or underperformance of a Market Maker. Security specific assignments are made through the competitive bidding process described under the “Competitive Bidding Process” section.
- (ii) **Competitive rebalance assignments** may occur from time to time on secondary Market Maker assignments at the discretion of TSX. The purpose of this rebalancing process is to balance the allocation of securities across Market Makers while serving to update performance obligations in accordance with changing market conditions. Note that this process is not necessarily intended to equalize the number of security assignments per firm. Competitive rebalance assignments are made through the

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 Market Maker based on a round robin allocation method (whereby assignments are made to all eligible Market 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 1 - Tier Classification of Securities

Tier	Sub-tier	Description
A	1	ADV ≥ \$50 million
A	2	ADV of \$10-50 million
A	3	ADV of \$1-10 million
B	1	ADV < \$1 million. The security list is further divided into deciles according to ADV, with B1 category having the highest ADV and B10 having the lowest ADV
B	2	
B	3	
B	4	
B	5	

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

TSX allocates securities to firms in a manner that maintains, to a reasonable degree possible, a minimum ratio of Tier B securities for each Tier A security across both primary and secondary assignments. ETF securities are excluded from this calculation. The applicable ratio shall be adjusted periodically based on the ratio of the total number of Tier A securities to Tier B securities traded on the TSX. **The current tier A:B ratio is 1:4.** This ratio is important to ensure coverage for all TSX-listed securities while also maintaining a fair allocation of securities across Market Makers.

2.4 Concentration Limits

Additionally, in order to maintain fair allocation of securities across Market Makers and to mitigate against any over-reliance on any one Market Maker, no Market Maker may have greater than a specified percentage of security assignments within any given tier classification (A1, A2, A3 and B) unless special circumstances apply for which TSX retains ultimate discretion. **The current maximum concentration per tier is 35%** and is measured across all primary and secondary assignments of each firm.

2.5 Minimum Assignments

Market Maker firms are required to maintain a minimum number of security assignments as determined by TSX. **The minimum number of assignments is currently set at 50.** The minimum number may be adjusted or waived from time to time at the discretion of TSX in order to account for market factors.

2.6 Competitive Bidding Process

TSX uses a competitive bidding process to apply clear and objective criteria for security assignments that promote fairness and transparency and are designed to reward the Market Maker that commits to achieving the most favourable performance outcomes.

When a Market Maker security assignment becomes available, TSX publicizes the availability of the assignment through an email notification sent to the Market Maker contact designated by each Market Maker firm. The notice of availability includes details of the requirements for the service level bid. For any securities made available for assignment through the bidding process, Market Makers may bid on either the primary or secondary assignment, provided that the Market Maker is eligible to bid on each assignment. However, a Market Maker may not hold both the primary and secondary Market Maker assignments on any given security.

2.7 Bidding Process for Primary Assignments

- 1) 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.
- 3) Winning assignments are announced publicly.

2.8 Bidding Process for Secondary Assignments

- 1) Firms eligible to bid on secondary assignments (e.g., a firm that does not hold the primary assignment and has not exceeded the threshold for underperformance) may submit their bids within the allotted time. Bids remain confidential by TSX until the assignment decision is made.
- 2) Bids for secondary assignments must include a Market Maker's commitments in respect of the following areas, subject to the published minimum and maximum levels defined in Appendix A - Performance Guidelines
 - a. Spread Goal
 - b. % Time at NBBO

- 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 NBBO	Top of Book Size
Tier A Securities	10%	50%	40%
Tier B Securities	50%	25%	25%

Example: Scoring for a Tier A Security

Broker	Biddable Metrics			Relative Score & Weights			Total Relative Score
	Spread Goal	Top of Book Size	% Time at NBBO	Spread Goal 10%	Top of Book Size 40%	% Time at NBBO 50%	
A	0.05	13,000	90%	10.00	10.00	8.33	9.17 Winner
B	0.05	5,000	90%	10.00	0.00	8.33	5.17
C	0.06	8,000	92%	5.00	3.75	10.00	7.00
D	0.07	7,000	80%	0.00	2.50	0.00	1.00

- 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, but are not limited to: the number and distribution of securities across all Market Makers.
- 4) Winning assignments are announced publicly.

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 two-sided 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

PR Ratio Ranges	Points Awarded
$PR_{\text{stock}} \geq 125\% \text{ of } PR_{\text{tier avg}}$	100
$75\% \leq PR_{\text{stock}} < 125\% \text{ of } PR_{\text{tier avg}}$	75
$50\% \leq PR_{\text{stock}} < 75\% \text{ of } PR_{\text{tier avg}}$	50
$25\% \leq PR_{\text{stock}} < 50\% \text{ of } PR_{\text{tier avg}}$	25
$PR_{\text{stock}} < 25\% \text{ of } PR_{\text{tier avg}}$	0

3. Liquidity Ratio

- Liquidity measures the proportion of trading that occurs within the spread goal. Market Makers achieve a higher score when a higher proportion of value traded is conducted within the spread goal.
- Liquidity Ratio ("LR") = value traded within the spread goal/total value traded

LR Ratio Ranges	Points Awarded
$LR_{\text{stock}} \geq 95\%$	100
$90\% \leq LR_{\text{stock}} < 95\%$	75
$80\% \leq LR_{\text{stock}} < 90\%$	50
$60\% \leq LR_{\text{stock}} < 80\%$	25
$LR_{\text{stock}} < 60\%$	0

3.2 Underperformance – Primary Assignments

Each month, TSX will advise Market Makers of its securities of responsibility that underperformed in the previous month. All securities of responsibility with a score below 60 in the prior three consecutive months will be placed on a probationary list. Securities of responsibility for which the security score has not improved to 60 or greater by the end of the fourth month may be re-assigned to another Market Maker. Exemptions may be made at the discretion of TSX in certain cases. Issuer endorsed Market Makers are still subject to performance measurement, regular reporting and the underperformance policy described in this section. However, TSX may maintain an issuer endorsed assignment at the issuer's request irrespective of underperformance.

3.3 Performance Obligations – Secondary Assignments

Similar to measuring performance of Market Makers with primary assignments, the performance of Market Makers for secondary assignments continue to be measured at the security level without specific focus on the contribution that the Market Maker makes on each security. For each assigned security, Secondary Market Makers must meet the established service levels for all of the following five performance criteria (each, a "Performance Obligation") on a monthly basis in order for the Market Maker to be deemed as performing for that month.

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. Top of Book Size

- This minimum Top of the Book Size represents the minimum number of shares that must be available on any combination of the TSX best bid (TBB), TSX best offer (TBO) or the MGF facility at any given time. It may be distributed between the CLOB and MGF subject to the minimum MGF being met, and one board lot on each side of the CLOB.
- Measured at the security level for CLOB component and the Market Maker directly for the MGF component.
- Average Size = time weighted average of (shares at TBB + shares at TBO + shares available through MGF * 2)
- 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.

4. Liquidity Factor

- This requirement measures the extent to which Market Makers are ensuring the book is lined with reasonable depth such that excessive price gaps do not occur.
- Liquidity Factor = count of CLOB trades within Spread Goal / count of all CLOB trades
- A trade is considered to be within the Spread Goal if the difference in its trade price from the previous trade price is equal to or less than the Spread Goal
- If no trades occur in a month, then the Market Maker will be considered to have passed
- Excludes crosses (when buying broker = selling broker)
- 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.

5. Opening Presence

- Opening presence is intended to measure the degree a market is established ahead of the market opening, which contributes to an orderly price discovery process at the open.
- Market Makers must ensure there is a two-sided market on the security at least 95% of the time between 9:25 AM and 9:30 AM.
- At the end of the month, the system will calculate the percentage of time a two-sided quote is maintained on a security, which will include the time when the quote is locked/crossed during the sum of all 5 minute pre-opening periods that month. In order to be considered a pass, the percentage of time must be equal to or greater than 95%.
- Market Makers must also be available to TSX Market Operations officials to assist in the verification of market prices in the event a stock is exceeding its volatility settings.

In special circumstances such as extreme market volatility or where systems issues interfere with the ability of a Market Maker to reasonably meet its obligations, TSX may use its discretion to adjust performance obligations, either for a particular security or on a market wide basis.

3.4 Underperformance – Secondary Assignments

Secondary Market Makers failing any of the five Performance Obligations will be deemed as underperforming for that month. If a Market Maker is not performing to target on its assignments of related instruments (e.g., preferred shares, warrants, rights), then it may be considered to be underperforming on the root security and the Market Maker risks losing the assignments of the whole stock group.

Table 2 - Impact of Underperformance to Market Makers on Secondary Assignments

Month of Underperformance	Impact to Market Maker
1 st month	Monthly credits for that security revoked for that month, Market Maker rates as per TSX's fee schedule still apply.
2 nd month	Monthly credits for that security revoked for that month, Market Maker rates as per TSX's fee schedule still apply. The security enters the next month's bidding process. Since it will take one month to go through a cycle, this prepares a new Market Maker to assume the assignment, and puts the existing Market Maker on notice that their assignment is at risk of being re-assigned.
3 rd month	Monthly credits for that security revoked for that month, Market Maker rates as per TSX's fee schedule still apply. The assignment is automatically assigned to the new Market Maker for the beginning of the 4 th month. If a period of time has passed between the 2 nd month and re-assignment, then the new Market Maker may adjust its bid subject to TSX's discretion.

If through underperformance, a Market Maker has had one or more securities of responsibility reassigned and begins to have a disproportionate ratio of Tier A and Tier B securities, TSX reserves the discretion to also reassign one or more Tier A securities assigned to that firm.

If a Market Maker has more than a certain threshold of security reassignments due to underperformance in any rolling 12 month period, the firm will not be permitted to bid in any bidding cycles for the following 12 month period. TSX may adjust this threshold with advance notice.

3.5 Requesting Adjustments to Performance Obligations – Secondary Assignments

Performance Obligations for secondary assignments are first established through the competitive bidding process and become the responsibility of the Market Maker once a security is successfully assigned.

Process for requesting an adjustment:

1. After performing successfully on a security for a minimum period of 3 months, a Market Maker may voluntarily submit the security to the next month's bidding process. Generally a request for adjustment to Performance Obligations may be submitted by Market Makers as a result of the following conditions: a corporate action, a significant and permanent change of business to the issuer that affects its liquidity profile, or another valid reason subject to the discretion of the TSX.
 - a. If a security is entered for re-bidding and no new bids are received, then the existing Market Maker keeps the assignment and is allowed to adjust its Performance Obligations subject to the minimum service levels set out in Appendix A - Performance Guidelines for that security and TSX discretion.
 - b. If a more competitive bid is received, the existing Market Maker has the 'right of first refusal' to match the tightened bid; otherwise, the security will be assigned to the Market Maker with the more competitive bid.

A Market Maker that is underperforming on its Performance Obligations may voluntarily enter this process for adjusting Performance Obligations before the end of the 2nd failing month. Beyond that time, the underperformance policy will apply.

3.6 MGF Facility

The Minimum Guaranteed Fill (MGF) facility is a uniquely Canadian facility designed to benefit investors by providing guaranteed fills at the TSX Best Bid and Offer ("TBBO") when there is insufficient liquidity to provide a complete fill for an investor's order in the Continuous Limit Order Book ("CLOB"), subject to a maximum size. The facility is supported for all TSX-listed securities that have assigned Market Makers. Orders resting in the CLOB will receive priority of fills ahead of MGF fills.

3.6.1 MGF Sizes

Each Market Maker assigned to a security must maintain their individual MGF size at all times throughout market hours. The sum of both Market Makers' MGF sizes ("Total MGF") will be broadcasted as the security's MGF on public feeds. Market Makers may adjust their MGF size electronically intraday by entering their MGF size in total number of shares. If the Total MGF size changes, a public message will notify industry participants in real-time.

Each security is subject to a maximum Total MGF size of 50 board lots. By default, each Market Maker will have an individual maximum MGF size of 25 board lots. At any time, each Market Maker will have the option to increase its individual MGF size up to an amount that is the difference of the individual MGF size of the other Market Maker and 50 board lots. For example, if one Market Maker is at the minimum individual MGF size of 1 board lot, the other Market Maker will have the option to increase its individual MGF size to an amount that is up to 49 board lots. However, in order to maintain the Total MGF size of 50 board lots, a Market Maker's individual MGF size may be adjusted automatically down to the default maximum of 25 board

lots at any time. The following table below shows the effective Total MGF minimum and maximum sizes by security price set by the previous day's close and effective board lot size.

Table 3: MGF Minimum and Maximum Sizes in Shares

Security Price Range	Board Lot Size	Individual MGF Minimum	Individual MGF Maximum*	Total MGF Maximum
\$1 and up	100	100	2,500	5,000
\$0.10 and less than \$1	500	500	12,500	25,000
Under \$0.10	1,000	1,000	25,000	50,000

* Individual MGF Maximum may go up to 49 board lots as long as the Total MGF Maximum stays at 50 board lots (e.g. MM1 MGF = 1 board lot and MM2 MGF = 49 board lots).

3.6.2 MGF Eligibility

Market participants opting to use the MGF Facility will need to pre-qualify a Trader ID as an "MGF-eligible Trader ID", which is a Trader ID used by a participant to enter orders on behalf of Retail Customers only or that is generally intended to be used to enter orders that are MGF-eligible.

To be MGF-eligible, an order must be a disclosed client order and must NOT be:

- 1) Part of a larger (parent) order except if the parent buy (sell) order is equal to or less than the specified MGF-Eligible Order Size; and the client order is sent to execute on the Exchange at the same time as the remainder of the parent order is sent to execute on other marketplaces.
- 2) From a Direct Market Access (DMA) client (unless the DMA client is a broker acting as an "agent" for retail client order flow).
- 3) Generated by a computer algorithm.
- 4) From a customer who is involved in trading the markets directly on an active and continuous daily basis.
- 5) From a U.S. broker-dealer ("U.S. dealer") except when acting behalf of a client of a U.S. dealer.

Currently, the specified MGF-Eligible Order Size is the sum of the best ask (bid) size displayed on the TSX plus the size of the MGF.

Orders that meet any or all of the conditions specified above are **not** considered MGF-eligible and must be marked as such. If the larger (parent) order size is not checked, smaller orders split from that parent order are **not** MGF-eligible and must be marked as such. The parent order, if sent to TSX in its entirety, may be MGF-eligible and will be subject to a TSX MGF order size check, whereby the buy (sell) order size must be less than or equal to the MGF-Eligible Order Size for that security at the time the order is received by TSX to receive a MGF fill. Market participants can bypass this TSX MGF size check by marking each MGF-eligible order to indicate that the parent order has been checked for compliance with the MGF-Eligible Order Size prior to sending the order to TSX.

TSX regularly conducts reviews of MGF order usage to verify and enforce correct usage.

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:
 - 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 "Registered Trader" or "RT") participation is an 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 ("Participation").

Market Makers can electronically turn their Participation on or off independently for each side of the market intraday. When Participation is turned on, TSX will automatically generate participation orders for a Market Maker to trade with a specified percentage of any incoming order that is equal to or less than the size of the Total MGF.

Market Makers may also specify a Maximum Volume Allocation for each security assignment, per side. This is the maximum number of Participation shares that a Market Maker will get filled on, after which TSX will automatically turn Participation off for that security and side. This provides a mechanism to help Market Makers prevent accumulating an excessively large position in a short period of time. The accumulation of Participation shares is reset each time a Market Maker turns Participation on or off.

3.7.1 Allocation of Participation Fills

Market Makers can optionally turn Participation on at their own discretion. If only one Market Maker turns Participation on at a given time, then that Market Maker will be allocated the full

Participation eligible fill (up to 40% of the incoming order, rounded to the nearest board lot¹). If both Market Makers have Participation turned on at a given time, then the total Participation eligible fill remains at 40% of the incoming order, but will be allocated between the two Market Makers on a pro-rata basis based on each Market Maker's individual contribution to the Total MGF size.

For example, assume the following scenario:

- 5000 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 MGF-eligible incoming order for 2500 shares arrives:
 - 1000 shares (40% of 2500 share order) are allocated for Participation, with the balance of 1500 shares filled by the CLOB
 - 400 shares are allocated to Primary Market Maker as a Participation fill (40% of 1000 shares)
 - 600 shares are allocated to Secondary Market Maker as a Participation fill (60% of 1000 shares)

TSX believes that the proportional allocation retains a direct and important balance between obligated liquidity via the MGF and the degree of participation incentive provided to Market Makers.

If the Market Maker has a booked order with time priority over all other booked orders at that price level, the incoming order will trade against that booked Market Maker order at that price level. In cases where there are still remaining allocated Participation shares after the booked order has been filled, the Market Maker would receive a separate fill for the remaining Participation shares. Therefore, the Market Maker will get its full allocated Participation shares.

3.7.2 Participation Option

Participation Option is a feature that allows Market Makers to determine the size of the order that they will participate with when they have participation ON and the other market maker has participation OFF. This can be set on a symbol basis, but applies to both buy and sell side. The options are detailed in the table below.

Note that when a Market Maker has Participation ON, they may also be called upon to guarantee MGF fills for client orders from MGF-eligible Trader IDs marked MGF-NO. The size of these orders depends on the Participation Option chosen (1 & 2 – Total MGF size, 3 – Individual MGF size). If there is only one Market Maker with Participation ON, the size of the MGF fill will be limited to the individual MGF size of the Market Maker that has Participation only.

¹ Except in the case of a 200 share order, the participation amount may be 50% as 100 shares are allocated to CLOB liquidity and 100 shares are allocated to Market Makers.

Table 4: Participation Options

Option	Size of incoming order that can be participated with	% of incoming order that can be participated with	Example: RT1 MGF = 500 (ON); RT2 MGF = 1500 (OFF); Total MGF = 2,000
1	Total MGF size	Total MGF Size, capped at the Individual MGF size	Participate with all orders <= 2000 shares Participation Fill = lesser of (40% of 2,000 = 800, and Individual MGF Size = 500) = 500 shares
2	Total MGF size	Individual MGF Size	Participate with all orders <= 2000 shares Participation Fill = 40% of 500 = 200
3	Individual MGF size	Individual MGF Size	Participate with all orders <= 500 shares Participation Fill = 40% of 500 = 200

3.8 Odd Lot Facility

Market Makers are obligated to maintain an odd lot market at the Protected NBBO for immediately tradeable incoming odd lots. Booked odd lots which become tradeable due to a change in the Protected NBBO will execute at the Protected NBBO.

Odd lot responsibilities will be allocated to both Market Makers based on a round robin allocation methodology (i.e., incoming odd lot orders will alternate between the two Market Makers).

Each day, there will be a designated Market Maker (primary or secondary) that will get the first odd lot fill from the opening, the first odd lot fill in continuous trading, and be responsible for the odd lot from the closing auction. This Market Maker will be designated as the "AuctionRT" for that day.

During the opening, odd lot fills will be divided between the two Market Makers by side. Starting with the AuctionRT, each odd lot fill immediately after the opening will be allocated, at the current protected NBBO price, to the Market Maker that currently has the smaller number of shares at that time for that side.

During continuous trading (post-open session), odd lot fills will be allocated to each Market Makers according to a pre-determined ratio, by side. This ratio is currently set to 1:1.

The odd lots resulting from the closing auction will all be assigned to the AuctionRT for that day. The AuctionRT's net boardlot position as a result of these oddlots will be offset by a MOC

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 [TSX Order Types & Functionality Guide](#) 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, and must not solicit, any private or material information about their securities of responsibility and are responsible for complying with the Universal Market Integrity Rules (UMIR) and the TSX Rule Book. Similarly, issuers must not disclose, offer, or suggest such information, and must understand that Market Makers are not responsible for guaranteeing a minimum or maximum price, and must not falsely generate trading volume.

3.10 Gatekeeper Role

Gatekeeping is the term used for performing a surveillance role on each security and reporting suspicious or unusual behaviour to the Investment Industry Regulatory Organization of Canada (IIROC). Currently TSX Market Makers receive IIROC fee discounts for trades incurred on their securities of assignments in exchange for the gatekeeper function they perform.

IIROC recently published [Administrative Notice 16-0163](#) on July 7, 2016, which covers IIROC Fee Model Guidelines and, among other things, clarifies IIROC's position on the application of the 70% fee discount to trades executed by Market Makers with marketplace trading obligations.

The guidelines state that the number of trades executed by a "Qualified Market Maker" acting in furtherance of its marketplace trading obligations on the listing exchange shall be discounted by 70% for the purposes of calculating the Trade Fee for such Marketplace. For clarity, the discount will not be applied to trades for securities that are not listed on the listing exchange that entered into the trading obligations agreement with the Qualified Market Maker.

As market making functions continue the trend toward electrification, it is important for Market Makers to have capabilities to continue providing this valuable service to the regulators.

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
- 3) 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.

Chapter 4 Exiting the Program

4.1 Release of Securities

Security assignments may be removed by TSX under the following circumstances:

- a) A Market Maker has underperformed in some or all of their Performance Obligations, violated any TSX Rule, or violated any term of the TSX Market Maker Agreement;
- b) The security is subject to a competitive rebalancing process, as described in the Assignment of Securities section, whereby securities may be re-assigned through the Competitive Bidding Process;
- c) A Market Maker undergoes a change in control;
- d) A Market Maker voluntarily submits the assignment to the Competitive Bidding Process. The Market Maker may not, during any 30 day period, discharge one-third or more of the total number of securities assigned to it at the start of such 30 day period.

4.2 Voluntary Exit from the TSX Market Maker Program

Market Makers must provide 60 days' written notice to cease performance of its market making responsibilities and relinquishing all security assignments. The security assignments of Market Makers exiting the Program will be made available in the next scheduled bidding process.

Dealer sponsored security assignments, subject to TSX approval, will be permitted for primary assignments only until further notice.

If a Market Maker is acquired through a merger or acquisition and the acquirer intends to purchase or has purchased the rights to perform the market making function on the assigned securities of the Market Maker, the Market Maker must notify TSX and request TSX's consent to the assignment of the TSX Market Maker Agreement by the Market Maker to the acquirer. If TSX consents to the assignment, the security assignments of the acquirer will be reviewed by TSX and TSX may rebalance the security assignments in accordance with maximum concentration limits, Tier A:B ratio restrictions and TSX discretion.

A Market Maker that has left the Program may not re-apply to become a Market Maker for two calendar years.

4.3 TSX Termination of a Market Maker

TSX may terminate a Market Maker from the Program under conditions outlined in the TSX Market Maker Agreement.

Appendix A - Performance Guidelines

The table below sets out the minimum service levels and maximum bids for assigned securities by category.

Category	New Securities	Existing Securities	Max Spread Goal*	Min % of Time TSX at NBBO**	Min TOB Size*** (lesser of ...)	Min Liquidity Factor	Min % of time with Opening Presence
1	Market Cap > \$3 billion	S&P 60 or any security with ADV > 10 M (A1 & A2)	1% of NLSP at the time of bidding	90%	25 board lots or \$25,000 in value	90%	95%
2	Market Cap \$1 - \$3 billion	S&P Completion or any security with ADV >\$1 M (A3)	3% of NLSP at the time of bidding	90%	10 board lots or \$20,000 in value	90%	95%
3	Market Cap \$500 - \$1 billion	All remaining securities (B1-B5)	15% of NLSP at the time of bidding	75%	6 board lots or \$10,000 in value	90%	95%
4	Market Cap \$50 - \$500 -million	All remaining securities (B5+ & >=\$0.10)	30% of NLSP at the time of bidding	75%	2 board lots or \$5,000 in value	90%	95%
5	Market Cap \$0 - \$50 million	All remaining securities (B5+ & <\$0.10)	\$0.095	75%	2 board lots or \$1,000 in value	90%	95%
6	n/a - assigned along with the root	Secondary issues (warrants, rights, etc.) & TSX discretion	-	75%	2 board lots or \$1 in value	-	-

*Spread goals are set in dollar terms, but for purposes of this table, the maximum is defined in percentage terms. The spread goal will never be tighter than \$0.02 for securities priced at or above \$0.50, or \$0.01 for securities priced below \$0.50.

** The max bid accepted for %Time at NBBO is 99.5%. Bids should be entered in half percentage increments (e.g. 95.0%, 95.5%, 96.0%, etc) and will be measured to 1/10th of a percent (0.1%).

*** The max bid accepted for TOB Size Bids is 100 board lots. Bids should be entered in board lot increments.

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.

Performance Obligations means the performance criteria described in the section Responsibilities of Market Makers.

Primary Market Maker means the Market Maker that has the primary assignment on a security.

Protected NBBO means CBBO as defined in the TSX Rule Book.

Secondary Market Maker means the Market Maker that has the secondary assignment on a security.

Related Instrument means rights, warrants, subscription receipts, preferred shares, US dollar equivalents, or multiple classes of common shares (i.e., classes with different voting rights, Canadian vs. US resident eligibility), when issued, or essentially any derived product based upon an existing issuer.

RT means a Registered Trader or Responsible Designated Trader on the Toronto Stock Exchange.

Top of Book (TOB) means the best price level, comprising of the best (highest) bid and best (lowest) offer in the Central Limit Order Book.

Total MGF means the aggregate sum of the MGF sizes contributed by all Market Makers on a security as described in the section MGF Facility.

Trader ID means the trading identifier associated with an Approved Trader.

TSX means Toronto Stock Exchange.

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 metrics included, please see Performance Obligations – Secondary Assignments.



Bombardier Inc.

Primary

Market Maker: Market Maker Firm Name
Contact: Market Maker Name
 416-555-5555
 marketmaker@firm.com

Secondary

Market Maker: Market Maker Firm Name
Contact: Market Maker Name
 416-555-5555
 marketmaker@firm.com

Symbol: BBD.B **View:** Performance

Metric	Actual
Bid/Ask Spread (\$)	\$0.01
% Time at NBBO	100%
Top of Book Size	410,054
Top of Book Size (incl MGF)	400,054
Opening Presence	100%
Liquidity Factor	100% within \$0.05

Symbol: BBD.B **View:** Top Liquidity Providers

Rank	Firm	% Time at NBBO	Time-weighted Avg Spread (\$)	Time-weighted Volume at NBBO
1	Anonymous	90%	\$ 0.01	18,146
2	MERRILL LYNCH CANADA LTD.	84%	\$ 0.02	20,655
3	CIBC WORLD MARKETS INC.	74%	\$ 0.02	32,848
4	TD SECURITIES INC.	72%	\$ 0.02	71,450
5	MORGAN STANLEY CDA LTD.	69%	\$ 0.11	6,187

Symbol: BBD.B **View:** Top Liquidity Takers

Rank	Firm	BUYS		SELLS	
		# Trades	Volume	# Trades	Volume
1	Anonymous	10,609	23,341,200	8,605	19,771,600
2	TD SECURITIES INC.	4,216	12,453,300	4,480	15,749,300
3	CIBC WORLD MARKETS INC.	8,203	11,738,100	13,046	11,942,300
4	RBC CAPITAL MARKETS	3,095	5,263,300	2,141	4,947,000
5	NATL BANK FINANCIAL INC.	1,729	5,542,200	1,422	3,743,700