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Re: TSX Equities Proposes Changes to TSX Market Making Program

Independent Trading Group (ITG) Inc. ("ITG84") thanks you for this opportunity to comment on the proposed amendments to TSX' Market Making Program. Our specific comments to the issues posed are attached below. We also take this opportunity to briefly outline our core positions summarized as follows:

Executive Summary

ITG84 ***supports*** TSX' efforts to reform its Market Making Program and welcomes the entrance of new participants in the Market Making Program via Secondary assignments, which ought to modernize practices, introduce new technology and greater capital participation with stronger risk management. The intentions are well meaning and sound as the additional commitment of less transitory capital at the quote ought to thicken liquidity at the quote and provide for more meaningful price discovery.

On a practical implementation level we highlight modest concerns and potential solutions in detail to ensure that:

- Limited resources that provide benefits to Primary and Secondary Market Makers are not spread too thinly
- New risks that are not well understood are not introduced. Specifically we need to ensure that the complexity of the program necessitated by a 2-year overlap period; and emergence of similar programs at other market venues do not drive gaming behavior by more sophisticated participants.
- And the commitment of All participants is oriented to the longer term

Otherwise a well-intentioned system may fail on practical implementation and lead the TSX to re-introduce yet another set of reforms to address new weaknesses under industry fatigue in the future. Our key recommendations to manage for implementation of this strategy are summarized as follows:

1. The need to preserve the liquidity of the Primary market maker through **maintaining current incentives**. This ensures that when the program is launched that there is no *Reduction* in liquidity provided by the Primary Market Maker as the Secondary is introduced. That is that the Secondary Market Makers' liquidity needs to augment, not substitute, the Primary's.

2. Manage the Market Making allocation, and incentive development process via a segment-by-segment approach. For example, the needs of a Tier B Preferred security are very different from managing the risk of Tier B Split shares or Multi-class shares. As well, the less attractive segments of the marketplace to trade should be reformed in unison with most attractive trading segments. For example, ETFs In recent years the most attractive segment of the marketplace have been excluded. We request: **a) a moratorium on dealers who managing ETF assignments from participating in Bidding on Secondary assignments** or b) ETFs be open to competition as well.

3. We believe the Initial allocation procedure upon launch is critical. The TSX ought to **balance and rebalance assignment allocation strategically in a round robin format** to manage an orderly process and reduce the high probability of negative unintended consequences for its Initial allocation of Secondary assignments.

4. We recommend **a simple scoring metric** being to: require a certain size at a pre-determined spread a certain % of the time between 930 and before the MOC. Therefore the size criteria and spread maintenance are binary and a simple singular % score can be measured. A back-test of proposed metrics would demonstrate how the scores would have led to security reassignments.

5. Managing the **rollout calendar with greater transparency and guidance on timelines**. This change should be no differently managed than a trading engine release with full transparency on release dates from a regulatory and technology management perspective. Specifically. Technology resources and development work will have to be done on the Market Makers' end to match the code behaviour of an automated system to the proposed performance metrics. The marketplace is not served if bidders are bidding without having built software their software to demonstrate adaptability to the new model. It is not reasonable to expect a build to be finished until these reforms are actually approved. Therefore a reasonable lead time for coding, and testing should be considered before Secondary assignments are made, and this timeline should be backed with a TSX commitment to encourage the investment necessary from its Market Makers.

Response to Request for Comments

Our specific feedback is as follows:

1. Changes to allow more than one Market Maker to be assigned a security

Introduction of Secondary Market Maker & the Strategic Value of Market Making to an Exchange

The values of a Market Maker to the marketplace as a whole are well versed. The marketplace as a whole benefits from continuous permanent liquidity provision, prevention of gapping and the filling of normal course orders. This ensures a fair and orderly market to the common participant seeking to buy and sell securities on an Exchange. But providing these benefits does not come without risk as permanent liquidity provision leaves a Market Maker with the significant risk of writing put and call options on the price of convenience for Marketable orders. Compensating for this risk, market venues confer pricing or informational advantages to Market Makers. The form of these advantages is more important to market quality and the performance and profitability of the Market Maker than is the substantive level of those advantages. This trade-off has generally been the crux of the debate on Market Making programs.

As well, a Market Maker also has strategic value to a specific Exchange. That is, these compensating incentives, and commensurate scoring mechanisms to ensure that Market Makers fulfill their obligations also have the commensurate characteristic of driving behavior that can benefit a particular Exchange overall and not only the trading of a security on this Exchange. What behavior is TSX trying to motivate? Rather than be circumspect, we believe it is acceptable for the TSX to deliberately try to motivate both the increased Velocity of trading (defined as average daily volume traded / free float) and market share (vs. the United States & Domestically) and attraction of new participants to Canada. These three goals in combination grow the overall marketplace opportunity for participants and consequently market quality through enhanced order flow for liquidity to trade with. These are also worthy and attainable goals that demonstrate value to all participants and Issuers alike, also increasing the value of the Exchanges' market data and listings. We suggest the following plan be addressed to enhance the strategic value of the program:

- Approach the Market Making allocation, and incentive development process via a segment-by-segment approach. Specifically, it is obviated in the Tier A / Tier B methodology that the needs of Market Makers and those who seek their liquidity are radically different. Tier B liquidity is essentially subsidized by the benefits presented in the Tier A opportunities. Yet we also want to highlight that the needs within Tier B are also unique. For example the needs of a Preferred security are very different from managing the risk of Split shares or Multi-class

shares. We highlight a number of different segments across Tier B (Appendix), which could benefit from specific incentives. If all reformed in unison this would present too much complexity, but various individual segments could be approached with targeted incentive models to capture market share and enhance overall market quality. Less attractive segments could be better managed if not fragmented but rather consolidated as packages for those building custom systems to manage their risk. At a minimum this should be considered in the Allocation system.

- While the marketplace will argue that it is sensitive to introducing too many changes and complexity at one time, and while this is a valid point the less attractive segments of the marketplace to trade should be reformed in unison with most attractive trading segments.
    - We specifically note that ETFs have been excluded from the Reform process. In recent years this has been the most attractive segment of the marketplace to trade.
    - ETF Market Makers are pre-dominantly bank-owned and receive these assignments through Issuer endorsement. We find it unfair that single securities, which are predominantly managed by Independent dealers, will be opened to competition (likely from bank owned dealers) without issuer endorsement, while bank-owned dealers will not have competition in their most lucrative segment and can continue to monopolize via issuer endorsement. Bank-owned dealers will use the profitability and scale from their ETF Market Making to leverage gains in their Secondary Market Making, while Independent dealers will not have this reciprocal opportunity to develop scale on an equal opportunity basis.
    - In order to specifically manage for this potential systematic bias and unfairness, we request: a) a moratorium on dealers who managing ETF assignments from participating in Bidding on Secondary assignments or b) ETFs be open to competition as well. More specifically, ITG84 would be delighted to bid on a number of secondary assignments for ETFs along with a wide swath of Tier B assignments.

Reciprocating Partnership – Incentives to Market Makers for Providing this Strategic Value

At first blush the reaction of the community would be that the "value" to the primary Market Maker is diluted by the introduction of a secondary that shares in the pool of benefits including Rebates and Participation rights.

The Primary Market Makers rebate benefits should be maintained at their current level, and be higher than that offered to the Secondary. This ensures that when the program is launched that there is no ***Reduction*** in liquidity provided by the Primary Market Maker as the Secondary is introduced. That is that the Secondary Market Makers' liquidity needs to augment, not substitute, the Primary's.

Over time, as the Primary assignments open up to Secondary participants, Secondary participants (including ITG) who are better will have the opportunity to benefit from becoming the Primary. In the meantime, it is critical to ensure that the Secondary is adding liquidity that is not cannibalistic to the Primary, which would render the program Moot. Secondary Market Makers ought to be successful in augmenting liquidity not solely relying on rebates.

To the extent that Rebate differentials for the Primary remain unaltered, and participation rights are automated via the proposed MGF facility automation changes; the dilution of participation opportunity from introduction of a Secondary could be offset if the TSX is actually able to increase flows that are initially directed to its marketplace.

We are optimistic, as current MGF levels are at the lower end of the permissible range. Automation should allow MGF levels to rise, and the increase of the MGF presented to the marketplace with a secondary, should add to the addressable liquidity that is executed by the TSX.

But the marketplace needs to consequently see an increase in market share, average size of orders coming to the book, and the frequency of retail participating in TSX at a higher level, for both the Primary and Secondary Market Makers to find that this proposal is beneficial in the longer run. TSX needs to deliver on: **automation**, a **healthy rebate model**, and a **fair and robustly considered initial allocation model.**

We highlight the incentives that ought to be introduced or maintained in order to provide macro-business model incentives (as opposed to the trade – level incentives). Specifically:

- Market Making participants should have the right to sell their Primary assignments (via auction) in order to incent investments. More specifically, while the current proposal continues to allow dealer-sponsored assignments on primary names; it is not clear whether the continued model for transferring assignments upon trade desk moves, corporate events, or changes of control will continue to allow Primaries to consider their assignment lists as "intangible assets". This intangible value creation promotes a willingness to invest.
- We are not opposed on Secondary assignments being awarded on a competitive basis, but not all relinquishments should be treated this way. For example a desk may do an admirable job, but a dealer-member may seek to "sell" that business. The desk should continue to be allowed to do that business without being forced to relinquish.
- Providing macro level incentives. For example market data rebates. Market Makers are expected to submit quotes, provide the very liquidity that makes these quotes valuable and yet are necessitated through the automated nature of

the program to consume more expensive direct feeds and co-location facilities. Recognition that Market Makers contribute inputs to the value of these products through a mechanism to reduced fixed communications costs would be welcome.

- Lower cost hedges ought to be introduced. For example, if the Exchange were to award securities based on various segments (for example energy) and it were to provide mechanisms to hedge (via its MX unit) through specific reductions in Options trading costs; overall rebate levels could be lower to the Exchange, but risk management enhanced for Market Makers, translating into better Quotes in both Cash and Derivatives markets.
- There should be no prohibition on a Market Maker trading as a Market Maker on other marketplaces

Specifically Requested Comments on Proposed Changes

2. Changes to the Minimum Guaranteed Fill (MGF) Facility

We applaud and welcome changes to the MGF facility that will allow our systems to adjust MGF values intraday. Specifically the ability to change MGF values, coupled with Participation on/off per side via FIX message. This will allow Market Makers to a) shape their risk profile in a more systemic way; b) introduce anti-gaming logic to those that abuse the MGF and c) dynamically compete between the Primary and Secondary Market Maker.

We agree some reasonable limitation on the # of changes allowed each day will continue to provide transparency to the marketplace.

It is imperative that the new automated capability is introduced contemporaneously with the competitive model.

We do question how TSX intends to maintain consistency across min. MGF between the two Market Makers. Specifically, while Market Makers will be subject to the same minimum and maximum sizes; there is an opportunity for one Market Maker to "free ride" off the capabilities of the other by effectively matching the more sophisticated participation and MGF parameters without developing the software to go into the decision making process.

3. Clarification to the odd lot policy regarding improper use of the odd lot facility

ITG supports the Proposed Amendments which clarify that entering multiple odd lot orders on a specific security from multiple managed or discretionary accounts in connection with a single investment decision will also constitute an improper use of the odd lot facility.

4. Re-organizing the Market Making rule and policy framework

We caution TSX on what appears to be a very complex and automatic methodology for both who gets assignments and how you meet your obligations. The more complex the program, the more it opens itself to be gamed. And the more it can be gamed, the more it favors the participant who is willing to learn the rules of the game. Our comments on the changes to the rule and policy framework revolve around two broad areas – allocations and scoring.

a) Allocations

The formula for choosing Secondary Market Makers is particularly complex. We believe these formulas should be easily to explain and understand to motivate the right behavior amongst traders, Issuer and retail Investors.

Most importantly we believe the Initial allocation procedure upon launch is critical. The TSX ought to balance and rebalance assignment allocation strategically in a round robin format to manage an orderly process and reduce the high probability of negative unintended consequences:

- The riskiest outcome of a "big bang" approach to allocating Secondary assignments is gaming in the bidding process in a manner which crowds out serious, experienced bidders from those that "market" themselves to the Exchange. A formulaic approach incentivizes bidders to provide the best possible, yet potentially unachievable bid, in order to garner as many assignments as possible in order to "crowd out" other participants. Put simply, the best bids are not always the most sustainable; but if core competitors have been excluded from the marketplace by trying to be reasonable and fair in their bids, they will have already been excluded and would be unwilling to participate in future allocations.
- As well, it needs to be very transparent that the quality of bids on Tier A securities are tied to the quality of bids on Tier B's. For example at its most extreme, we question how allocations would occur if a bidder was the "best" on all their Tier A bids, but second on their Tier B bids? What would happen in the converse situation? Likewise if a firm bids for more Tier B's relative to A's, but is second in more of its Tier A bids, should it not follow that it should receive an outsized share of these responsibilities as it is willing to step up? It is highly improbable that the best bid approach will result in a neat and tidy allocation of A's and B's spread across a # of participants.
- A formulaic approach also does not recognize that over the longer-term Market Making firms develop expertise in the various segments mentioned above. For example, our own firms' expertise in Materials, Financials and Preferred securities. The TSX should maintain discretion to allocate according to this expertise.

We suggest a multiple round robin of bidding whereby all initial bids are reduced to 3 bids per security in a closed auction environment. Then each bidder should receive each other bid characteristic they are competing with and be allowed to bid on a second round only if they are bidding on a commensurate quantity of Tier B assignments. They should then be narrowed down to the two best participants, and bidders allocated securities across the basket of securities where they are between the two best.

Winning bids for both Primary and Secondary assignments should always be disclosed such that losers in the bidding know how far off they missed, and what it would take to match in future allocations.

We also recommend participation from the Market Making community on a Market Making allocation committee in order to ensure transparency and fairness in a co-operative and collaborative manner.

As well, we question whether a concentration limit of more than 20% is appropriate. This 20% limit was designed when the TSX had only 1500 securities. With a larger security base a lower concentration limit would still allow Market Makers to achieve a critical mass with 400 names.

Finally, we suggest that non-voluntary assignments should not be equally allocated amongst firms on a rotational basis. Instead it seems like they should be *proportionally* allocated. If an MM has 20% of the voluntary assignments they should get 20% of the involuntary assignments.

b) Scoring Mechanism

We believe that performance measurement incentivizes behavior. Put simply, what gets measured gets managed. If the behavior that TSX is looking for is the highest market quality, an easy to understand definition of market quality is easier to manage. More complex models open themselves up to "gaming". Other marketplaces have similar programs with easy to understand metrics.

For example we recommend a simple scoring metric being to: require a certain size (our bid in the allocation process) at a pre-determined spread a certain % of the time between 930 and before the MOC. Therefore the size criteria and spread maintenance are binary and a simple singular % score can be measured. A simple, easy to understand a communicate measure which most importantly achieves the Exchange's goals.

Notwithstanding, we have specific feedback as follows:

- **Spread goal** - how does TSX know the proposed goal is correct and not too wide or narrow of ATWS? Bids that are too narrow can be just as harmful to the

program as bids that are too wide are to market quality. Narrow bids discourage "fair play" from participants as they are crowded out (see above). The existing scoring mechanism is self-correcting; while the process to ensure that changes in spread goals are fair is not clear.

The following measurement also needs to be managed out of the scoring: "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". The previous trade could have happened 5 hours before and the entire market could have moved. There ought to be a mechanism for dropping stale data from the scoring mechanism.

- **% Time NBBO,** double counts the MGF (i.e. a Market Maker will always be at the best bid/offer with MGF). Measuring this effectively requires a Market Maker to display quotes at the NBBO for non-MGF eligible orders, increasing its liability to the marketplace. On the one hand TSX claims it seeks to promote market quality, but this metric is intended to ensure Market Maker quotes are embedded in routing process, in order to attract orders to TSX. Put simply, market share.

- If this is the case – Market Makers should be rewarded with achieving **Market Share metrics**, which supersede theoretical goals. If a Market Maker has helped maintain market share through the % of time at NBBO, it wouldn't be fair to lose a stock based on metrics that don't reflect actual results (if TSX has 100% share in a name, its market quality is by definition better than that of all of the alternatives).

- **Top of book size**, includes many metrics that are not in the Market Makers' control including, size not attributable to the Market Maker – i.e. all size at the top of book at the TSX, the MGF size.

- The TSX has all the data necessary to provide back tested performance scores to provide proper analysis of how the above scores are fair. TSX ought to present the marketplace and the regulators back-tested performance data to show how the new score would have demonstrated where market quality would be enhanced. As well a back-test would demonstrate how the scores would have led to security reassignments.

- Penalties for underperformance. We understand monthly credits are only rewarded for months where performance passes, even in the current mechanism. It will be imperative that a real-time mechanism to view performance is available to keep track of performance. We understand this is planned. The program should not be launched without this. Otherwise, Market Makers will be at risk without having a view into managing their liability (i.e.

rebates being cancelled)

- Maintaining fairness across the Primary and Secondary model. While we understand that the Primary will have a "shadow" secondary score to assist in their evolution, we also believe it is imperative in the long run to maintain fairness between both Participants and the scoring across them. We believe that the primary and secondary should see each other goals and scores. There is no better replacement for transparency to generate fairness.

Again, most of this feedback is moot, if we revert to a simple scoring system.

This market structure change should be no differently managed than a trading engine release with full transparency on release dates from a regulatory and technology management perspective. Specifically. Technology resources and development work will have to be done on the Market Makers' end to match the code behaviour of an automated system to the proposed performance metrics. The marketplace is not served if bidders are bidding without having built software their software to demonstrate adaptability to the new model. It is not reasonable to expect a build to be finished until these reforms are actually approved. Therefore a reasonable lead time for coding, and testing should be considered before Secondary assignments are made, and this time gap should be backed with a firm commitment to encourage the investment necessary.

Finally, we reiterate that we support the overall strategic goal of TSX to enhance and enhance its Market Making system through the introduction of more competitive elements, and modernization. Our key recommendations around: I) the need to preserve the liquidity of the Primary market maker through maintaining current incentives ii) the introduction of segmentation and dealing with ETFs; iii) an Initial allocation method through a round robin system; iv) a simpler scoring mechanism with back tested results are intended to assist TSX in accomplishing this aim and v) managing the roll-out calendar with great transparency. Ideally, TSX gathers feedback from various participants and makes tactical adjustments to achieve an even better outcome.

Thank you for the opportunity to provide our comments on TSX Proposal. Please feel free to contact us with any questions or requests for clarification.

Sincerely, <digitally signed>

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Appendix A – Possible Segments

Debentures
Energy
ETFs
ETNs
Financials
Interlisted - ARCA
Interlisted - NASDAQ
Interlisted – NYSE
Interlisted – Non - composite
Leveraged ETFs / ETNs
Multi-class securities
Non-Interlisted TSX Composite Names
Preferreds
Receipts
Rights
Securities trading under $<1
Securities trading over $>100
Telecommunications
TSXV Graduates
Units
USD denominated Securities
Utilities
Warrants