



June 4, 2012

Via email: comments@osc.gov.on.ca

Ontario Securities Commission
20 Queen Street West
Toronto, ON M5H 3S8

Attn: Secretary of the Commission

Dear Sirs & Mesdames:

**Re: Maple Group Acquisition Corporation – Draft Recognition Order Notice
and Request for Comment**

Royal Bank of Canada (“RBC”) is pleased to provide the following comments with respect to the above noted matter. Unless specifically defined in this letter, capitalized terms shall have the meanings ascribed to them in the Commission’s Notice. We refer to the Proposed Recognition Order for Maple Group, TMX Group and TSX as the Draft Recognition Order (“DRO”). We refer to the Proposed Recognition Order for CDS as the “CDS DRO”.

A. EXECUTIVE SUMMARY

RBC appreciates the logic of the proposed Maple transaction and the potential for the transaction to provide benefits to our clients and Canada in general. We are supportive of the transaction largely in the form that has been negotiated with the Commission and (as we understand it) with the Bank of Canada. However, RBC, as both a representative for retail and institutional investors and as one of the most significant participants in the Canadian capital markets has some concerns that warrant further consideration. To summarize, our key concern is that the Maple transaction will require a significantly different approach to the regulation of fees and fee models in Canada in order to compensate for the removal of effective competition for trading venues and the transformation of CDS into a profit-making venture. Our comments address existing fairness issues as well as elements that should protect fairness in the future. More specifically:

- By starting the process of fee regulation with the existing TSX fee model and fee schedule, the already embedded excess costs and structural challenges of the TSX model are perpetuated.
- Similarly, starting the regulation of market data fees with the existing model and TSX fee schedule fails to recognize the excess costs and structural deficiencies of the provision of market data in Canada.

- The governance rules for CDS, TSX and Maple are broad and thoughtful. However, we believe that adjustments are warranted to further ensure that market participants will not be disadvantaged by the approach and that the concerns of such participants and regulators concerned with the stability of the market infrastructure are considered.
- To provide comfort and certainty to the market, more clarity is needed on how the Commission will exercise its new role as a fee regulator. This includes both guidelines for assessment of fee models and levels as well as the requirement to substantially increase the capacity and capability of the Commission to fulfill this new role.

We offer up our suggestions to the Commission in the interest of ensuring that the benefits of the transaction can be equitably shared between the retail and institutional investors of Canada and the members of Maple.

While RBC has provided a number of detailed suggestions and comments (including a number of strictly technical proposed amendments), the most critical recommendations include:

1. The Commission should not accept the existing trading fee model of the TSX (the “maker-taker” model) without a near-term detailed review of both the model and the existing fee levels. Pending such a review, the Alpha fee levels should be used as the basis of interim regulated pricing.
2. The Commission should not accept the current market data pricing schedule and fee model of the TSX and pending a near-term detailed review, should utilize the Alpha market data pricing model as a base for interim regulated pricing. The TSX should not be allowed to charge for both Alpha and TSX data after closing.
3. The Commission should provide for Market Participants Advisory Committees (“MPACs”) for the TSX as well as CDS, with similar mandate and membership criteria. Bank of Canada should have an ability to observe meetings of such MPACs.
4. All fee changes for the TSX should be subject to similar public comment periods as is provided for “material rules” of CDS.
5. The Commission should recognize the very substantial increase in its capacity and capability that will be required in order to make it an effective regulator of market structure and fees. These Orders give the Commission a very detailed and “real-time” role as a price regulator and its staffing must be commensurate with the new role that it will be undertaking¹.

Accordingly, from the perspective that, in future, market participants will rely on the Commission, the other Securities Commissions and the Bank of Canada to regulate market activities appropriately. RBC has reviewed the DRO and CDS DRO and is providing its comments. Section B of this submission provides an overview of RBC, while sections C and D provide the general context for RBC’s comments. In Section E, we provide specific comments on the most material elements of the DRO and CDS DRO and in Section F we set out those additional elements that RBC believes must be incorporated to effectively mitigate the concerns of retail and institutional investors and protect the public interest.

B. OVERVIEW OF RBC

RBC is Canada’s largest bank by assets and market capitalization. RBC provides investment services to over 2.7 million Canadians through a wide variety of channels (including retail banking and 3rd party brokerage), service points and products. It has over \$1 trillion in total assets under administration and management for individual Canadians,

¹ RBC recognizes that the Maple Proposal is likely to proceed on the basis that the regulatory regime governing equity trading, listing, market data and clearing and settlement will mitigate any significant public interest concern now or in the future. RBC also recognizes that among the consequences of the enhanced regulatory regime proposed by the DRO and the CDS DRO is the displacement of the application of the *Competition Act* to the activities subject to the areas covered by the DRO and CDS DRO moving forward. Unless the Commissioner of Competition obtains remedies providing the Competition Bureau with a role in the regulation of the subjects of the DRO and CDS DRO, the jurisdiction of the Commissioner of Competition to challenge the regulated activities of listing venues, trading venues, market data providers and clearing & settlement firms will be significantly limited once the DRO and CDS DRO are finalized and operative. Participants will rely upon the Commission, the other securities commissions and the Bank of Canada to regulate these activities appropriately.

institutions, pension plans and foreign parties and is the largest provider in this regard. RBC is the largest retail mutual fund manager, the third largest asset manager for institutional clients, the largest full-service wealth manager and the second largest self-directed wealth provider in Canada.

RBC is one of the largest traders of Canadian equity and debt securities in the world. On a typical day RBC will trade in excess of 125 million Canadian shares and \$3.2 billion of Canadian bonds on behalf of its individual and institutional clients. In addition to its role as adviser and asset manager for Canadians, RBC is also one of the most active participants in raising capital for Canadian companies, institutions and governments. In the last year RBC has participated in capital raising in excess of \$160 billion for corporations in the form of both debt and equity.

RBC is also a leading provider of securities services to Canadians through RBC Dexia. RBC Dexia processed more than 13 million securities transactions in 2011.

RBC is an active participant in most elements of the over the counter and listed derivative trading markets, both for client hedging activity as well as for its own hedging needs. RBC is also an active participant in the Canadian repo market, and the most active participant in the Canadian securities lending and borrowing market.

RBC was a founding sponsor of Alpha in May of 2007 and currently owns 13.8% of the equity interests in the group. RBC, along with eight leading Canadian financial institutions, established Alpha with the aim of increasing the country's securities trading efficiencies and making the Canadian marketplace more competitive both nationally and globally. Alpha has been the leading alternative trading system for Canadian securities and a data distribution plant for Alpha ATS market data. To quote from the Alpha website: "Established for the Industry, by the Industry, Alpha Group focuses on increasing liquidity, reducing the cost of trading and providing innovative services leveraging its unique expertise operating models and technological capabilities".

RBC also holds directly and indirectly a 13.8% interest in CDS. CDS was formed in 1970 to create a centralized depository service and an electronic clearing and settlement system. CDS now handles in excess of 413 million domestic and 55 million cross-border securities trades annually. RBC is also an active supporter of the category credit rings, participant funds and collateral pools that provide the CDS risk management architecture. RBC provides a daily average of \$6.2 billion in intraday liquidity to cover both its own and third party business in CDS, backing out affiliates and subsidiaries that would total approximately \$1.5 billion. RBC represents 31% of the daily average for all banks and in excess of 50% of the third party support.

We are therefore confident that the clients of RBC have a very significant interest in the outcome of this landmark decision by the Commission. And RBC, as both a representative for these millions of Canadians and one of the most significant participants in the Canadian capital markets, is keenly interested in maintaining the integrity of the infrastructure surrounding the Canadian capital markets. Canadian capital markets have been a model of stability and this is a testament to the market structure that has been developed and enhanced over the last decade.

C. CONTEXT FOR COMMENTS

1. Alpha – Trading, Listing and Market Data

Alpha was formed because its shareholders, which include 6 of the 13 Investors, clearly recognized the significant value that competition would bring to Canada’s capital markets. When RBC and these six Investors (CIBC World Markets Inc., National Bank Financial Inc., TD Securities Inc., Scotia Capital Inc., Desjardins Securities Inc. and Canada Pension Plan Investment Board) established Alpha in 2007, it was done in order to:

- reduce trading costs while maintaining the highest standards of operational efficiencies and “best execution” obligations;
- monetize the benefit of the order flows and services the founders provided to Canadian capital markets; and
- participate in a flexible, Canadian dealer-driven response to current market structures.

This rationale for Alpha was aptly summarized by Alpha’s Chief Executive Officer Jos Schmitt in the March 2011 hearings of the Ontario Legislative Select Committee that was struck to review the proposed combination of TMX Group and London Stock Exchange Group plc (the “Select Committee Hearings”), as he confirmed that Alpha was established to bring “...credible competition to the TMX, which, after its demutualization in April 2000, became a de facto monopoly with all typical behaviors that you could expect from a monopoly” (emphasis added).

By almost any definition, Alpha has contributed to the efficient operation of Canada’s capital markets. At the Select Committee Hearings Mr. Schmitt also submitted that the competitive pressure brought to bear by its entry resulted in a reduction in trading costs in Canada, a considerable increase in liquidity in Canadian listed securities, and an increase in innovation.

(a) Trading

The structure of the Canadian securities market is unique in that the large Canadian intermediaries, including most of the Investors, have the capacity to direct a substantial proportion of their order flow to a particular venue while still adhering to best execution obligations under section 5.1 of the Universal Market Integrity Rules (“UMIR”). The bank shareholders of Alpha are the largest traders in Canada with RBC Dominion Securities Inc., TD Securities Inc., BMO Nesbitt Burns Inc., CIBC World Markets Inc. and Scotia Capital Inc. collectively accounting for 66.4% of all Canadian equity trading². Alpha was able to successfully enter the equities trading market precisely because the largest players in the system sponsored its entry and directed sufficient business towards it – allowing Alpha to acquire over 20% of the equities trading market. Most of these shareholders are now party to the Maple Proposal – a deal that risks unraveling any benefits that competition, led by Alpha, has brought to Canada’s equity markets.

² Greenwich Associates, Canadian Equity Investors – Canadian Sales Trading and Research Report 2012

In RBC's view, Alpha's entry into the equities trading market in Canada has resulted in increased competition on price, technology and service. In response to Alpha, TMX has reduced make/take spreads – with the make/take spread on TMX's base tier declining by 60% since 2007. That being said, with no regulatory cap on take fees in Canada like in the US, TSX today charges the highest take fees in North America (as high as 0.35 cents per share) and also pays among the highest rebates (as high as 0.32 cents per share) – implying a maximum 0.67 cent spread between takers and makers.

In addition, during this time the structure of the trading industry has become more complex, particularly with the advent of high-frequency trading (“HFT”). TMX Group has taken measures (e.g., rate structures, technology investments and electronic liquidity provider program) to attract HFTs – arguably to the detriment of other traders and, ultimately, retail investors. Essentially TMX has embarked on a strategy of boosting revenues by subsidizing the order flow of HFTs with fees paid by retail investors. RBC believes competition is an insufficient check on the externalities created by the maker-taker model. In fact, a lack of regulatory oversight on maker-taker combined with decimalization, UMIR 5.2 and NI 23-101 constitute, in RBC's view, implicit regulatory endorsement of a fee model that has yet to withstand proper regulatory scrutiny as to its costs and benefits. RBC estimates that trading fee rebates paid through TSX, TSX Venture and Alpha Group alone totaled well in excess of \$300 million in 2011 – with the majority of these funds coming from agency facing institutional and retail networks (takers) and flowing to HFTs (makers). We believe this hidden subsidization for passive liquidity has served to artificially reduce visible quoted spreads and grow absolute volumes. Yet RBC and many other market participants³ have argued that maker-taker has obfuscated actual trading costs, fed an explosion in messaging rates and distorted routing decisions.

The Maple Proposal effectively eliminates Alpha as a credible and growing counter-balance to TMX and, accordingly, leaves RBC's clients exposed to a system that does not operate in the best interests of retail investors but rather continues to focus on servicing the needs of HFTs. We believe this, in turn, will result in further increase of trade execution costs in Canada.

Accordingly, in our view, price regulation is required to replace the (albeit imperfect) disciplining effect of Alpha. This includes a restructuring of the “maker-taker” model that today provides a substantial subsidy to HFTs, paid for by Canadian institutional and retail investors. Without a restructuring of the “maker-taker” model, we believe this asymmetry will be exacerbated by the Maple Proposal, causing substantial detriment to Canadian retail and institutional investors.

Accordingly, it is critical that any regulatory solution aimed at mitigating the impact of the Maple Proposal include a restructuring of the maker-taker model so as not to unduly prejudice retail and institutional investors.

(b) Listing

In order to enter the listing business a party must first have a trading venue with sufficient liquidity to attract buyers and sellers (as issuers only want to list on venues that have a

³ TD Bank Financial Group, January 11, 2011 submission to the CSA “Re: Joint CSA/IIROC Position Paper 23-405 Dark Liquidity in the Canadian Market”

sufficient level of trading activity). Accordingly, without the Canadian banks' order flow to initially establish and promote the growth of a significant trading venue, no other entrant for listing is likely to emerge and succeed as an effective competitor. For example, Canadian National Stock Exchange has offered competitive listing services since 2004, but has had little effect on the bulk of Canadian listings and, in RBC's view, has had no effect on TMX Group's listing fee schedule.

Prior to the announcement of the Maple Proposal, Alpha publicly announced its intention to become a listing venue, which was approved April 2, 2012. While Alpha's approach to listing may not be focused on the higher risk of TSX and TSXV listings, we believe Alpha's listing activity will have a substantial effect on some listings such as exchange-traded funds and structured products. The Maple Proposal eliminates Alpha as a potential competitor in listing services. The remaining fringe trading venues would have insufficient liquidity to establish a viable listing venue in Canada. Accordingly, the Maple Proposal would effectively foreclose any potential for significant competition in listing services for any security.

RBC would therefore propose that price regulation of listing fees be given a substantial priority by the Commission to ensure that issuers are not paying more than the reasonable cost of the listing infrastructure plus an appropriate margin.

(c) Market Data

The TMX Group has a monopoly with respect to its own market data and a dominant position in the provision of all market data from Canadian trading venues to investors and intermediaries. This is a natural consequence of the existing trading volumes on the TSX combined with the provisions of UMIR that require access to real time data feeds in order to comply with best execution obligations and NI 21-101 that require access to real time data feeds in order to comply with best execution and order protection obligations respectively. Since TMX holds an absolute monopoly with respect to its own data, these fees constitute further economic externalities to the total cost of trading. A recent report commissioned by the Investment Industry Association of Canada ("IIAC") concluded that "in short, qualitative and quantitative analyses show that TMX Group has the ability to exercise monopoly pricing power and that they are using this power. The exchange company is charging broker-dealers and the investing public fees that are well above the cost of consolidating and distributing data"⁴. In RBC's view, the Maple Proposal seeks to extend the TMX Group's reach to its only material rival in Canada, Alpha, thereby further exacerbating the market data cost issues which the industry has raised with Commission on numerous occasions.

Market data is not a generic commodity. In fact, the breadth, depth and complexity of TMX's market data offerings have expanded substantially since 2007. Broker-dealers must of course pay fees for quote data supplied to the substantial number of customers in the retail channel. Further, fees for both Level 1 and Level 2 data supplied to professional traders must be paid – often two and three times per user due to the need to have identical data provided through different applications used by the same user. In Canada, professional Level 1 data charges on the TSX have increased by 27% during the period 2003-2010, while Level 1 fees for the equivalent services in the United States have stayed flat since

⁴ "An Economic Study of Securities Market Data Pricing by Canadian Trading Venues", Securities Litigation and Consulting Group, a Report Commissioned by IIAC, March 8, 2011, Page 66

1994⁵ (primarily as a result of SEC oversight and the lack of evidence to support the argument that costs of distributing market data have increased). During this same period, TMX's market share has gone from roughly 99% of Canadian senior market equity trading to roughly 56% in 2011.

RBC believes that, consistent with industry trends, TMX has used new market data offerings as an enabler for HFT volumes. To combat the vagaries introduced by today's market complexity and HFT activity, broker-dealers acting in the interest of long-term retail and institutional investors have been forced to invest in the same market data solutions as HFTs, including low-latency data, fibre-optics, co-location and the substantial staffing required to navigate and monitor these new complexities and cope with market data outages when they occur. Of course, the costs associated with vendor technology and hardware, managing development cycles, staffing and contingency planning are all magnified for broker-dealers who are focused on serving long-term retail and institutional investors. Naturally, this industry trend is, in and of itself concerning – but even more so in a monopoly dominated market. We believe the implications here should be urgently and carefully considered.

In total, while over the course of the last several years the TMX has reduced the spread on some trade execution fees in response to competition from Alpha, its monopoly on equity market data has allowed it to increase total market data revenues from TSX and TSX Venture from \$86.2 million in 2006 to about \$132.9 million in 2011 – a 54% increase.⁶ RBC believes that TMX's exercise of its market power by raising prices for its market data and instituting pricing policies which increase costs to market participants (e.g., having to report multiple instances, and the introduction of enhancing usage and processing fees) has been motivated (at least in part) at generating revenue to offset lower revenues resulting from competition from Alpha in the equities trading market.

In RBC's view, the issues surrounding data fees should be considered as a fundamental part of the DRO and the approval of the Maple Proposal transaction itself. We believe that the proposed merger of Alpha and TMX Group will only exacerbate this issue. The appropriate time and forum to discuss and address such concerns is prior to the approval of the Maple Proposal.

While the Application states that data services will be available on a non-discriminatory and unbundled basis, these proposals do not adequately address the fact that TMX's current data fees are monopolistic, and the Maple Proposal would result in Maple controlling the data services provided by the two main trading venues in Canada. There is no reason to expect that fees will decrease upon completion of the transaction. In fact, we presume that the economic advantage to the proponents may come in part from a continuation of TMX's history of price increases for market data.

⁵Source: PowerPoint Presentation, "An Economic Study of Securities Market Data Pricing by Canadian Trading Venues", commissioned by IIAC, March 8, 2011.

⁶To arrive at the estimated 2011 revenue from TMX's equities business RBC backed out an estimated \$15.7 MM in 2011 revenues from TMX's PC Bond business.

As such, we believe the DRO must provide for a comprehensive solution to the pricing regime for market data in Canada, which will only be exacerbated by the removal of potential data competition through Alpha.

2. CDS

CDS is a critical component to the infrastructure of the financial services markets in Canada, and the markets for Canadian securities worldwide. The critical nature of CDS can be easily seen in the nature and content of the recognition order for CDS provided by the Commission as well as in the formal and informal supervision of CDS provided by the Bank of Canada as well as the Autorité des marchés financiers (“AMF”). The complex and inter-related credit extension pools and the Bank of Canada “lender of last resort” process that makes up the credit assurance for the system has been developed over years to ensure that daily liquidity and credit support is always available.

As a participant owned utility, CDS’s rules and credit rings currently insulate it from almost all losses arising from its operations. As an example, the rules specifically limit the dollar value of claims resulting from errors and omissions by CDS or its staff. CDCC on the other hand is accountable for operational losses as part of the priority allocation of losses as between the CDCC and its participants in the event of a failure of one of its participants. This subjects CDCC to operational discipline in the admission of new participants. As CDS will be a for-profit organization under the Maple Proposal, CDS should be accountable for its performance (i.e. not insulated as it currently is from operational losses) and therefore, the CDS rules regarding priority allocation of losses should be amended accordingly.

Several times over the last few years, there have been proponents of differing business models for CDS, including at least two recent attempts by TMX Group to acquire CDS. In 2005/2006, the shareholders of CDS commissioned a study by Oxford Finance Group, “A Strategic Evaluation of the Canadian Depository for Securities” (“2006 CDS Study”), which provided a wide-ranging assessment of CDS, its shareholders’ perspectives and strategic alternatives, including the possible acquisition by TMX Group. This study provided the background and support for the 2006 re-commitment of the CDS shareholders to the existing business model and ownership structure of CDS. In 2010 the CDS shareholders again considered a TMX Group acquisition proposal and rejected any transfer of ownership or control to TMX Group.

RBC participated actively in the 2006 CDS Study and generally supported the nine conclusions of the study as well as the resolution of all of the CDS shareholders (including the Investors who are also shareholders of CDS) to continue to support and improve CDS in its current ownership and business model. We believe that all of the Investors that are shareholders of CDS shared the same views as RBC in 2006 and 2010. While the reasons for shareholders rejecting previous proposals from TMX Group are varied, RBC believes that several factors were likely important to CDS shareholders at those times:

- (a) Neither the international experience nor the economic analyses performed were conclusive with respect to the value to participants of vertical integration. Purported cost savings were difficult to quantify.
- (b) There appeared to be few imperatives for a change in the business model of CDS from the pure utility approach. While a number of changes in CDS

governance have been made over the last few years, the underlying model has not been found to result in excess costs to users.

- (c) While the current ownership model of CDS is certainly not perfect due to the lack of congruence between some shareholders and users in general, the congruence is better than in an entity that would be controlled by TMX Group.
- (d) The “public utility” nature of the CDS operation supports the provision of credit and liquidity by the banks as they constitute the majority of users. There may have been, and likely remains, some concern by shareholders if (arguably) concessionary bank credit lines were used to support profit making activity.
- (e) Perhaps most importantly, there was (and likely still is) concern with the lack of control that a sale of CDS might entail for the bank participants. The system is so critical to the effective functioning of Canadian capital markets that banks may have apprehension around control models that are more like “user groups” without any direct ability to influence the governance of the entity.
- (f) In the end the combination of a natural monopoly, a critical infrastructure and an unclear monopoly profit model for CDS under TMX Group ownership persuaded all the banks to support the existing model.
- (g) CDS currently has the second lowest clearing costs (behind DTCC) amongst the major clearing and settlement agencies. Most vertical models are substantially more expensive to users.

In the last several years, certain aspects of the infrastructure of Canadian securities have changed. CDCC, a wholly-owned subsidiary of TMX Group, is the prime participant in the listed derivatives business in Canada and has been mandated by the IIAC to provide significant clearing and other services to the repurchase (“repo”) market for fixed income securities.

Under recent Canadian commitments to the G20, a central counterparty clearing organization (“CCP”) is intended to be at the centre of fixed income, foreign exchange and other over-the-counter (“OTC”) derivatives clearing and settlement, reducing systemic and counterparty risk. Canadian participants are currently allowed to access international CCPs. Whether a Canadian CCP will be mandated and built to clear systemically important OTC derivatives such as Canadian dollar interest rate swaps has not been determined. If required, a completely “made in Canada” solution is likely not available in the near term; however, both CDS and CDCC may have roles to play in such a structure.

There are differences in the risk models used by CDCC and CDS. CDS participants select services. Each service is designed with a separate and distinct participant fund with defined risks with no impact on other participant funds (ring fenced). CDCC uses a model that consolidates all risk in a single default model. While there are a number of common participants in each service in CDS, there is no direct correlation between a CDS service and CDCC participants. This potentially introduces new levels of exposure for CDS participants when cross-margining and new services are introduced.

The operations of CDS, the proposed CCP and certain aspects of CDCC appear to be natural monopolies. While competition for such services may be feasible in the very long run, the requirements for regulatory oversight, systems scale and credit support make competition unlikely. RBC could certainly see elements of capital and operating efficiency and risk mitigation by the combination of CDS and the proposed CCP. With CDCC's mandate in the "repo" market, there are obvious synergies here as well. However, it is difficult to see how the conflicting goals of users and shareholders can be reconciled in this process, while still providing lowest cost execution and systemic stability. Furthermore the comments in the Letter from Maple Regarding Changes to Application seem to imply that changes in the membership requirements including adding institutional investors, for both CDS and CDCC, will be required to achieve the suggested margin reductions.

D. RBC'S SPECIFIC COMMENTS ON PROVISIONS OF THE DRO AND CDS DRO

We will focus our specific comments on the provisions of the DRO and CDS DRO under the following general headings:

1. Tradex fee regulation
2. Market Data and listings fees
3. Governance rules
4. Stability of market infrastructure
5. CDS fee regulation
6. Commission capacity building
7. Post acquisition re-assessment

1. Trade Execution ("tradex") Fee Regulation

One of RBC's principal concerns with the elimination of effective competition from the Canadian marketplace is the potential impact on tradex costs. As noted above, RBC believes that Alpha has been an effective force in constraining TMX trading costs and is poised to make further inroads into the TMX fee schedule.

The provisions of sections 8(b), (d) and (e) of the DRO effectively acknowledge that the level of competition in the marketplace after the acquisition of Alpha will not be sufficient to control TMX pricing power with the implication that the market must be controlled to avoid significant prejudice to retail and institutional market participants. Implicitly, the DRO also appears to acknowledge that effective competition is unlikely to emerge in the medium term, despite the removal of the "preferencing" provisions and non-compete obligations of the original Maple agreement.⁷

RBC believes that the fee regulation proposals of the DRO are inadequate to protect retail and institutional investors in Canada. Rather, they are likely to perpetuate the business plan of TMX as an enabler of HFT activity to the detriment of ordinary investors. Several points are noted:

⁷ RBC notes that the comments that it makes with respect to the DRO would apply equally whether or not the Alpha transaction was completed and whether or not Alpha is maintained as a separate venue after the acquisition.

- (a) The basis for regulation of tradex fees is unclear in the DRO. There would appear to be no guidelines provided to the Commission with respect to how any fee proposal will be examined by the Commission and tested for appropriateness. Presumably, the Commission should be interested in whether a particular fee resulted in an unduly high margin for the TMX or whether such a fee resulted in an excess return on capital, but this is not elaborated on in any way that market participants could take comfort in the regulatory process.
- (b) The DRO appears to take the existing fee schedule of the TMX as a base for future fee schedules. However, the Maple transaction is removing Alpha as a competitor and the lower fee schedule currently provided by Alpha will be unavailable to the market. Further, TMX fees may already inherently imply excess returns to capital that would be perpetuated by making the existing fee schedule the floor for future regulated rates.
- (c) While under the terms of the CDS DRO, CDS fees will be subject to review by the relevant Market Participants Advisory Committee (“MPAC”), the regulation of tradex contains no such user input, despite the near monopoly pricing power inherent in the TMX position. RBC believes that such MPACs should also be mandated for all activities of the exchange (tradex, listings and data). While RBC appreciates the potential role of the ROC in this regard, we do not believe that the ROC is sufficient due to the conflicting duties of its members.
- (d) While the DRO provides for a three-year review of the fees and fee models of all regulated Maple marketplaces, the DRO does not provide sufficient guidance regarding the process for assessing the relevancy of any other jurisdiction’s fees against the Canadian marketplace. In the context of today’s rapidly changing markets, three years is far too long a period to go without a comprehensive review of pricing levels.
- (e) Furthermore, section 8(d) of the DRO does not expressly provide that the Commission shall review or pass upon the written report submitted by the recognized exchange and section 8(e) of the DRO only authorizes the Commission to require re-approval of a fee or fee model that has previously been approved by the Commission. This would not appear to extend to the existing TMX fees and fee model and we believe that it should.
- (f) Under the CDS DRO, all fees will be considered a “material rule” and thus filed for public comment as required under section 4 of Appendix A to Schedule B of the CDS DRO. There would appear to be no similar potential for public comment on any changes to tradex fees. We would suggest that Schedule 7 (when completed) provide for such a public comment process.
- (g) The DRO appears to accept at face value the viability of the existing “maker-taker” model as being consistent with the public interest. For the reasons outlined above, RBC contends that this model perpetuates an implicit subsidy paid by institutional and retail investors to HFTs. To date there has been no comprehensive review of the maker-taker model and its implications for the health of Canada’s capital markets. This is unfortunate as the maker-taker

model was undeniably one of the driving motivations behind the creation of Alpha and likewise, we believe it is a critical motivation behind the Maple Proposal. As discussed above, RBC believes any notion that competitive forces are the appropriate check on the externalities created by the maker-taker model to be misguided. We believe it is time for Canadian regulators to resolve to fully assess the costs and benefits of the maker-taker model and that this near-term resolution must be clearly spelled out in the DRO.

- (h) The capacity and capability of the Commission to truly undertake its role as a fee regulator is untested. In order to fulfill the role even as set out in the DRO, the Commission would require significant additional resources to enhance its capacity and capability. Today's market dynamics are extremely complex and rapidly changing, and the Commission will be required to have an intimate familiarity with all aspects of the market in order to adequately fulfill the terms of the DRO. We would expect that this would require a substantial expansion of its budget as well as hiring protocols to ensure that real-time market expertise is retained.
- (i) The role of the Commission with respect to negative externalities of TSX decisions (such as the costs to market participants of the introduction of Quantum XA) should be clarified. By its near-monopoly nature, decisions of the TSX may impose costs on the markets beyond its own price schedule.

2. Data And Listings

As noted above, RBC, as well as IIAC, has argued that the TMX has used its position and has leveraged the Marketplace Rules to increase its market data and related revenues by approximately 54% over the last five years since the launch of Alpha. The provisions of the DRO with respect to market data are limited and, although not expressly referenced in section 8(b) of the DRO, we presume that further increases in market data fees will be subject to Commission approval under that section. However, the provisions of section 8 of the DRO do not contemplate review and approval of the existing TMX market data fees and therefore the DRO will simply perpetuate the existing fee schedule of the TMX.

The report commissioned by IIAC in 2011 concluded in part that "Canadian regulators would benefit the Canadian investor if they established limits on market data prices... (by) regulating prices for the TMX Group as it is the dominant vendor and there is evidence it is using its monopoly power." In other words, the report concluded that market data pricing from the TMX had already reached unreasonable levels in 2011.

As noted above, market data is not a generic commodity and the implications of it as a product go well beyond a diversified revenue stream for TMX Group. On the contrary, new market data services and related products (co-location, telecom services, etc.) have been used as an enabler of overall trading volumes (and therefore revenues) and we expect this trend will continue. From an industry perspective, the costs associated with coping with the arms race of new market data products go well beyond the market data fees paid directly to the TMX. The costs associated with vendor technology and hardware, managing

development cycles, staffing and contingency planning are all magnified for broker-dealers that are focused on serving long-term retail and institutional investors.

Given the above, RBC believes that the Commission should urgently address the current state of the market data framework in Canada, and the Commission should not wait an additional three years until 2015 for TMX to conduct a review of the data services fee model under Section 8(d)(i).

Similarly, while listing fees are to be regulated under section 8 of the DRO, these fees have been established outside of the context of a competitive market, as Alpha was only granted powers for listing services in April 2012. Again, RBC believes that the three-year review of listing service fees to be conducted in 2015 under section 8(d) (i) of the DRO is far too late. RBC suggests that the Commission review the current listing service fee schedule as soon as possible.

3. Governance Rules

The DRO specifies a wide range of governance provisions for Maple and its affiliates. Generally speaking, RBC is comfortable that these governance provisions can be effective in ensuring that conflicts of interest between Maple and its substantial shareholders can be managed effectively. However, we are concerned that the proposed governance rules may not be effective in also ensuring the proper and cost-effective functioning of the near monopoly position of TMX and CDS in the Canadian market.

RBC believes that directors, once selected by the process set out in the DRO, will owe their primary duty to the corporation (whether it is Maple or one of its affiliates). The ability of such directors to balance this primary responsibility against a much more vague responsibility for the “public interest” is a cause for concern and would benefit from additional clarity.

- (a) We believe that the Commission must be much clearer with the Board of Maple as to its responsibility to the public interest role of Maple. As a regulated near-monopoly, Maple’s responsibilities for the effective and efficient functioning of Canadian markets should be spelled out in much more detail, especially its role in regard to fair and transparent trade execution costs.
- (b) The provisions in the DRO that provide for a single individual director to be a representative of an “independent dealer” are unlikely to provide enough independent scrutiny of Maple from the perspective of unaligned market intermediaries.
- (c) The lack of a mandated MPAC structure for the TMX risks returning to the period after de-mutualization of the TSE when the exchange and market participants ended up in adversarial positions.
- (d) Under other statutes (such as the *Bank Act*), regulated entities are required to belong to and support an Ombudsman service that provides another outlet for customer concerns. Creating such a dispute resolution structure through the DRO would be advantageous.

4. **Stability of Market Infrastructure**

After the completion of the Maple transaction a substantial part of the infrastructure of Canadian capital markets will be under the control of a single for-profit corporation. While the ongoing oversight of the Commission is a comfort to market participants, RBC believes that an ongoing and substantive role for the Bank of Canada and OSFI are also called for. Under the Payment Clearing and Settlement Act, CDS has been designated as an entity subject to Bank of Canada oversight given its systemic importance, and the Bank of Canada currently plays an active role in monitoring CDS's operations. While this role should obviously continue, we would see a role for OSFI to also have some degree of oversight of CDS operations. In addition, we would see a role for both Bank of Canada and OSFI to cooperate with the Commission in the regulation and supervision of the exchange. In order to provide an adequate window for OSFI and the Bank of Canada into the operations of the exchange, they should be represented as observers on the proposed MPACs for both CDS and the TSX.

While the TMX has been the beneficiary of a relatively benign leverage environment (see DRO section 36(c)), RBC is concerned that the extension of such leverage to CDS (CDS DRO section 22.2) is likely inappropriate for a system so fundamental to Canada's capital markets. We can see no reason for CDS to be levered at all, given its critical role in market infrastructure. We suggest that a much more modest leverage limit (say one to one) would be more appropriate for a systemically important market infrastructure such as CDS.

5. **CDS Fee Regulation**

It would appear that the Maple participants have recognized to some degree the potential for CDS fees to be set in such a way that it could adversely affect the Canadian markets. However, RBC believes that the structure provided by the CDS DRO still has issues that should be addressed as noted below.

Recently the CPSS/IOSCO issued recommendations for CCPs and Depositories. The CDS DRO should confirm that these recommendations do not provide a justification for any fee increase for CDS.

- (a) The CDS transactional fee schedule over the last several years has been adjusted downwards on a regular basis as CDS has reacted appropriately to changes in the Canadian marketplace, including rapidly increasing volumes. For example, the Trade Exchange fee for 2012 is 97% below the fee that was in effect for 2006. The Matched Institutional trade fee is 85% below the 2006 level. By regulation of CDS fees on a "per unit" basis, participants will not gain the benefit of further economies of scale as they have over the last several years.
- (b) The CDS fee schedule included in the CDS DRO ignores the rebate system that has typically lowered effective fees to participants below the posted rates.
- (c) As with the regulation of tradex, data and listing fees, the process by which the Commission will assess applications for increased fees and assess the fee situation in 2015 is less than clear and should likely be elaborated by reference to regulated margins or returns on capital.

- (d) It should be clearer that the Commission should be responsible for price regulation on all existing services of CDS, not simply core services.
- (e) Given the likely monopoly position of CDS/CDCC with respect to future clearing of OTC derivatives, the CDS DRO should clarify that such new services would be subject to comprehensive price regulation on some standard of margins or returns to capital.
- (f) CDS Rules should be clarified to allow for bilateral or multi-lateral netting of transactions prior to entering into CDS.
- (g) CPSS/IOSCO will dictate minimum capital levels for CDS as it will for CDCC. The CDS DRO should make a statement regarding the maintenance of a minimum capital level.

6. Commission Capacity Building

The Commission has recognized that the Maple Proposal will require “the Commission to provide an enhanced oversight program to ensure that the Commission has all the information and the regulatory tools needed to be able to appropriately address any risks to the public interest represented by the Maple proposal”.

RBC agrees with the Commission’s comments and recommends that the Commission review its staffing levels and hiring policies to ensure that individuals with appropriate expertise and experience in capital markets operations and economics can be attracted and retained.

RBC is concerned, however, that the cost of this additional level of scrutiny be absorbed by Maple and not by market participants through higher fees.

7. Post Acquisition Re-Assessment

Once the Maple Proposal is approved by the required Recognition Orders and by the Competition Bureau, we are concerned about the ability of the Commission to take rapid action in case there are unintended and unanticipated consequences to the transaction.

RBC believes that the DRO and CDS DRO should provide for a post-implementation public review of the functioning of the exchanges and CDS. This could take the form of a triennial open comment period on the Recognition Orders, with the chance for market participants to point out to the Commission where public interests may be affected.

RBC is particularly concerned with the appropriate functioning of CDS and CDCC after the transaction. As noted, the credit and default models of the two organizations are dramatically different. At present, RBC is an active participant in the credit support process for CDS and would likely wish to remain so after the transaction. However, the ability of Maple to develop cross-margining benefits from the association of CDCC and CDS may involve changes in the rules that could result in an unintended consequence of banks being forced to provide credit support and an implicit subsidy to the new owners of CDS. This should be watched carefully in a post-acquisition review.

E. RBC'S RECOMMENDED CHANGES AND ADDITIONS TO THE DRO

RBC's recommended changes and additions to the DRO and CDS DRO are set out below⁸:

1. DRO

- (a) Section 2 of Schedule 2 should be amended to extend the definition of "public interest" for the benefit of both Maple Directors and market participants. RBC believes that such public interest would be enhanced by reference to sections 1 to 11 of Schedule 1 to the DRO.
- (b) Section 6 of Schedule 2 should be amended to clarify that at least one broker-dealer not associated with the Maple Investors should be represented on the board of the exchange.
- (c) Section 8(b) of Schedule 2 should be amended to provide that any proposed new, or amendments to, fees or fee models be published for comment for 30 days prior to the Commission assessing such proposal. This should be included in Schedule 7 once drafted.
- (d) Section 8 of Schedule 2 should be amended to provide specific guidance to the Commission Staff with respect to the framework to be used in the assessment of proposals related to fees or fee models, such as fee increases. RBC believes the framework should include either allowable margins or allowable rates of return on capital.
- (e) Section 8 of Schedule 2 should be amended such that (subject to our comments in (g) and (h) below) Maple is required to file initial applications for existing tradex, market data fees and listing fees for approval by the Commission within three months of closing.
- (f) Section 8(d) of Schedule 2 should be amended such that the triennial report of Maple should be the subject of a specific review and approval by the Commission and should be published by Maple for a 30-day comment period prior to any review by the Commission.

⁸ We note that a number of these suggestions are technical in nature and may simply serve to further clarify the intent of the DRO

- (g) The Commission should, in co-operation with the CSA, publish an interim order and request for comment on maker-taker pricing in Canada which should be explicitly referenced in section 8 of Schedule 2. This interim order and request for comment should:
- (i) consistent with current pricing on Alpha, implement a cap on trading fees (either take or make) of 0.28 cents per share for stocks priced equal to or over \$1 and 0.08 cents per share for stocks less than \$1 for all displayed marketplaces in Canada;⁹
 - (ii) immediately prohibit trading fees to be priced on any other basis than a cents per share measure until the effective date of final guidance issued by the CSA on maker-taker pricing;
 - (iii) be aimed at understanding the motivations for and impacts of the maker-taker pricing model – both intended and unintended;
 - (iv) be released in conjunction with an undertaking to directly engage IOSCO to encourage a better understanding of the implications of maker-taker pricing for global capital markets;
 - (v) subject to comments received, dialogue with other members of IOSCO and the CSA’s own comprehensive review of the costs and benefits of various pricing models, explicitly consider the possibility of:
 - A. further reductions in the caps referred to in (g)(i) above;
 - B. the possibility of pricing mechanisms other than a cents per share measure (referred to in (g)(ii) above) and appropriate related caps;
 - C. fee-fee (a fee for both takers and makers) and fee-free (a fee only for takers with no rebate paid to makers) models.
- (h) The Commission should, in co-operation with the CSA, publish an interim order and request for comment on market data charges that should be referenced in section 8 of Schedule 2. RBC recommends that this interim order and request for comment should:
- (i) implement an interim cap on market data fees not to exceed \$15 for Level 1 access to all senior markets, \$33 for “*Full Book*” (Level 2) access to all Senior markets and \$7.50 for Level 1 access to all Junior markets, \$17 for “*Full Book*” (Level) access to all Junior markets. This is consistent with Alpha’s current pricing model.

⁹ RBC notes that the United States has a cap in place today at 0.30 cents per share and highlights that TSX/TSXV’s current 0.35 cents per share take fee on stocks over \$1 is the highest take fee of its kind in North America. Both under and over \$1, Chi-X Canada currently *charges* (not pays) liquidity providers in Venture stocks 0.08 cents per share. With the exception of the TSX, RBC believes the recommended fee caps will not disturb any current displayed market pricing schemes in Canada but will prevent further increases beyond these limits – giving the CSA time to review make-take pricing. The recommended pricing guidance also explicitly recognizes inverted pricing models as offered by Chi-X (on TSXV stocks) and Omega.

- (ii) ensure that market data fees include full access to all Senior (TSX) and Junior (TSXV) trading venues operated by Maple under a single fee structure going forward (for clarity, market participants should pay one fee to have access to all data for Junior and Senior listed issuers, regardless of what Maple operated venue these securities trade on).
 - (iii) seek to fully understand the value of market data and related technology to different parties as well as to quantify their total costs (direct and indirect), market destabilization risks and the possibility that they may contribute to economic externalities;
 - (iv) examine the possibility that prevailing market data prices in Canada, particularly those of the TSX, may be too high at current levels and seek remedies where applicable;
 - (v) specifically explore the possibility of implementing pricing standards for market data that will aim to achieve cost recovery plus some reasonable return based on observable industry benchmarks;
 - (vi) propose benchmarks, perhaps based on volume traded market share or like measures, which a marketplace should be required to meet prior to charging for market data.
- (i) Schedule 2 should be amended to provide for similar participant committees (MPAC) for the TSX as is provided under section 4.4 of the CDS DRO. OSFI and Bank of Canada should be allowed “observer” status on each such MPAC.
 - (j) Section 36(c) of Schedule 5 should be amended to allow the Commission to lower the ratios in sections 36(c) (i) to (iii) if circumstances warrant.
 - (k) Section 43(g) of Schedule 6 should be amended to require each Maple shareholder to provide to the Commission on a timely basis a summary of orders routed to a Maple exchange as well as orders routed to third party venues.
 - (l) The Commission should add a provision that will require Maple to appoint an Ombudsman for TMX and CDS.

2. CDS DRO

- (a) Section 2 of Schedule B should be amended to further clarify the “public interest” by reference to Parts 1 to 12 of Schedule A.
- (b) Section 4.2(b) of Schedule B should be modified to ensure that at least one broker-dealer that is independent of Maple and its shareholders is represented on the Board of CDS.
- (c) Section 7 of Schedule B should be clarified to ensure that any developing data services, securities lending services or connectivity services of CDS be treated similarly to the fees in Appendix C, and considered as core services.

- (d) Section 7 of Schedule B should be clarified to provide the Commission staff with guidance as to the basis for approval of fee requests such as rate of return on capital or regulated margins.
- (e) Sections 7 and 9 of Schedule B should be clarified such that any future requirements for capital at CDS that may be required to comply with the FMI Principles shall not be considered in any fee setting process by the Commission, but that CDS and CDCC must comply with any minimum capital guidelines under the FMI Principles or other regulation by the Bank of Canada.
- (f) Sections 10.2(b) and (c) of Schedule B should be amended to provide that such self-assessment and third party assessment be made available to the Participants Committee and subsequently published for comment.
- (g) Section 16.2 should be amended to reflect that the receiver of any shared information must agree to be subject to the terms of Section 15.
- (h) Section 19.1 of Schedule B should be clarified to ensure appropriate representation (and the ability to file a minority report) by members of the Participants Committee.
- (i) Section 22.2 of Schedule B should be amended such that both ratios read "1/1". Also notification should be given for anticipation or failure to meet FMI Capital standards.
- (j) Section 24 should reference that CDS Clearing cannot charge a transaction volatility premium (TVP). Also CDS has historically had automatic discounting to the fee schedule upon achieving overall volume thresholds not referenced here. Section 24 should be amended to provide such normal volume discounts.
- (k) Section 24.1 of Schedule B should be amended such that the Commission is required to approve such schedule (or amend it) prior to 90 days from closing.
- (l) Section 29.3 should be expanded to include Participants' data and reflect that the receiver of any shared information must agree to be subject to the terms of Section 15
- (m) The CDS DRO should be amended to provide for regular communication between the Participant Committee and the Commission.
- (n) The CDS DRO should be amended to provide for regular dialogue between the Commission, the Bank of Canada and OSFI with respect to the safety and proper functioning of the clearing system.
- (o) The CDS DRO should be amended to consider the impact of the ownership of CDS on the credit ring process for CDS, including the current provision of credit support by Maple and non-Maple participants, such that no implicit subsidy is realized by Maple.

- (p) Section 2 of Appendix A to the CDS DRO should be modified to clarify that any proposal to introduce a new, or changes to a, service or product would be considered a “Rule” and section 3 should be modified to confirm that any such Rule would be classified as a “material” Rule.
- (q) Section 4 of Appendix B to the CDS DRO should be modified to allow the Commission to exercise judgement on what additional products and services should be considered “clearing and other core CDS services”.
- (r) Section 5 of Appendix B to the CDS DRO should be modified to clarify the basis of allocation of rebates to Participants.
- (s) The fee schedule in Appendix C of the CDS DRO should be modified to allocate pro-rata any rebates that would otherwise have been made for 2012.
- (t) The Commission should mandate that changes to the rules for CDS be made to reflect CDS’s responsibility for risk as a for-profit utility, such that management risks and controls shall not be the responsibility of Participants.
- (u) The Commission should mandate that any new services of CDS (such as security lending) be accomplished on a stand-alone credit ring basis, such that credit facilities provided for clearing and settlement will not be affected by future credit risks undertaken by CDS.
- (v) The Commission should mandate that CDS Rules be modified to allow for bilateral or multi-lateral netting of transactions by third party providers prior to entry into CDS.

RBC appreciates this opportunity to comment and would be pleased to address any questions the Commission may have with respect to or arising from our comments.

Sincerely,



Greg Mills
Officer
Royal Bank of Canada