**NOTICE OF PROPOSED NATIONAL INSTRUMENT 23-103 *ELECTRONIC TRADING AND DIRECT ELECTRONIC ACCESS TO MARKETPLACES***

## I. INTRODUCTION

The Canadian Securities Administrators (CSA or we) are publishing a proposed rule, National Instrument 23-103 *Electronic Trading and Direct Electronic Access to Marketplaces* (Proposed Rule) and its related companion policy, 23-103 CP for comment. The Proposed Rule introduces provisions governing electronic trading by marketplace participants and their clients. It also introduces specific obligations for direct electronic access (DEA).[1] DEA does not include retail trading whereby clients access accounts through the internet.

The Proposed Rule would also provide a regulatory regime for DEA.

CSA staff have been working closely with staff of the Investment Industry Regulatory Organization of Canada (IIROC) on the development of the Proposed Rule. IIROC staff have shared their knowledge and expertise regarding many of the issues being raised by electronic trading and we thank them for their valuable contribution.

## II. DISCUSSION

### *1. Evolution of the Canadian Market*

The Canadian equity market has changed dramatically in recent years. It has moved from a single marketplace environment to multiple marketplaces with exchanges and alternative trading systems (ATSs) trading the same securities. As the markets have evolved, technology has also evolved, increasing the speed, capacity and complexity of how investors trade.

In Canada, electronic trading has been used for many years. The Toronto Stock Exchange was one of the first fully electronic exchanges in the world. Over the past few years, the use of technology has proliferated and the introduction of new marketplaces has driven the need by marketplaces to continuously improve technology by making it faster and more efficient and effective to execute trading strategies. Participants are also using strategies and algorithms that are increasingly complex and demand greater investments in technology and capacity by the participant as well as regulators, vendors and marketplaces.

In addition, technology has enabled marketplace participants to facilitate access by their clients to marketplaces. For example, DEA has enabled clients to use their own systems or algorithms to directly send orders to the marketplaces of their choice. In certain instances this trading goes through the systems of a dealer where pre-trade controls are used while in others, orders do not pass through a dealer's systems and no controls are in place. These DEA clients are usually large, institutional investors with regulatory obligations of their own. However, they may be retail clients that have particular sophistication and resources to be able to manage DEA in accordance with the standards set by a participant dealer.[2]

Market events, such as the May 6, 2010 "flash crash" have illustrated that the speed and complexity of trading require a greater focus on controls designed to mitigate the risks of these technological changes. Globally, regulators are looking at the risks associated with electronic trading, including DEA, and are introducing frameworks to address them (see section III.4 below).

### *2. Risks of Electronic Trading*

As stated, the Canadian market has undergone a very rapid evolution in structure. With the proliferation of the use of complicated technology and strategies, including high frequency trading strategies, comes increased risks to the market. These risks are described below.

*(i) Liability Risk*

Liability risk relates to the risk to the market where there is uncertainty as to which party will bear the ultimate responsibility of any financial liabilities, regulatory transgressions or market disruptions incurred through electronic trading. Marketplace participants have indicated that there exists uncertainty in some instances regarding ultimate responsibility in relation to trades occurring pursuant to DEA.

As electronic trading gets faster, there is a greater risk of issues occurring that result in liability. For example, systems failures or the execution of erroneous trades may cause losses or situations where parties are manipulating the market using DEA. There is a need to have clarity as to who will be held responsible for ensuring that these risks are appropriately and effectively controlled and monitored.

*(ii) Credit Risk*

[1] Section 1 of the Proposed Rule defines "direct electronic access" as "the access to a marketplace provided to a client of a participant dealer through which the client transmits orders, directly or indirectly, to the marketplace's execution systems under a marketplace participant identifier without re-entry or additional order management, by the participant dealer".
[2] Section 1 of the Proposed Rule defines "participant dealer" as "a marketplace participant that is an investment dealer".

Credit risk is the risk that a marketplace participant, specifically a dealer, will be held financially responsible for trades that are beyond its financial capability, as well as the broader systemic risk that may result if the dealer is unable to cover its financial liabilities.

The speed at which orders are entered into the market by marketplace participants or DEA clients increases the risk that without controls, trades may exceed credit or financial limits. This may occur because marketplace participants or clients cannot keep track of the orders being entered or because erroneous trades are entered and executed because no controls or a lack of proper controls exist to stop them. Systemic risk may arise if a dealer's failure spreads to the market as a whole.

*(iii) Market Integrity Risk*

Market integrity risk refers to the risk that the integrity of the market and confidence in the market may be diminished if there is a lack of compliance with marketplace and regulatory requirements.

Without the appropriate electronic controls in place, there is a risk of greater violations of regulatory requirements in an environment where trading cannot be monitored manually. This would impact the willingness of investors to participate in the Canadian market.

*(iv) Sub-delegation Risk*

Sub-delegation risk relates to the risk associated with the practice of a DEA client passing on the use of the marketplace participant identifier of the dealer to another entity (sub-delegatee). The main risks with this practice relate to the ability of a marketplace participant to manage the risks it faces in offering DEA to a particular client. This risk may be triggered by the lack of control in identifying the original sender of an order, the inability to ascertain the suitability of the sub-delegatee to be a DEA user or the inability to have recourse against a client in a jurisdiction that does not share information. Insufficient risk control regarding a sub-delegatee could impair a participant dealer or have an adverse effect on market integrity.

*(v) Technology or System Risks*

Technology or system risks relate to the possibility for failure of systems or technology and the impact of that failure. The risk arises due to the high degree of connectivity and rapid speed of communication among marketplaces, marketplace participants and DEA client systems required for electronic trading. These inter-connections and the speed at which trading takes place raises concern about the potentially wide-reaching unintended consequences of trading in this type of environment. The potential problems may be due to the impact of systems failures by marketplaces, vendors or clients, lack of capacity, programming errors in algorithms, or erroneous trades. In addition, technology or systems failures that impact the ability of investors to trade or the prices that they receive for execution, introduce the risk of cancellations or variations of trades which would impact investor confidence in the market. This may lead investors, and particularly DEA clients, to trade in other countries.

*(vi) Risk of Regulatory Arbitrage*

The risk of regulatory arbitrage arises if rules relating to electronic trading and DEA across Canada are not addressed in a manner consistent with global standards and in particular with U.S. Securities and Exchange Commission (SEC) rules in this area (either more restrictive or permissive). If Canadian rules are too stringent, then order flow may migrate to jurisdictions with less restrictive requirements. However, if the Canadian rules are too accommodating, then those that want to avoid rules in other jurisdictions may trade in Canada, increasing the risk to the Canadian market.

### *3. Current Regulatory Requirements*

Currently, there are no rules that apply specifically to electronic trading. There are requirements on marketplaces regarding systems requirements[3] and there are general requirements at the IIROC level for business continuity plans for dealers, as well as the requirements under National Instrument 31-103 *Registration Requirements and Exemptions* for a dealer to manage the risks to its business.[4] The only rules in place relating to client trading access are DEA specific rules or policies that are in place at the marketplace level. The main focus of the marketplace DEA rules is to prescribe certain clients that are eligible for DEA (referred to as the "eligible client list"), to require a written agreement between the dealer and the DEA client, to prescribe certain provisions to be included in the written agreement and set out certain system requirements relating to DEA. These rules vary between marketplaces and there is no consistent standard.

## III. DESCRIPTION OF THE PROPOSED RULE

[3] Part 12 of National Instrument 21-101 *Marketplace Operation* (NI 21-101) requires marketplaces, for each of their systems that supports order entry, order routing, execution, trade reporting and trade comparison, to monitor and test systems capacity, review the vulnerability of the systems to threats, establish business continuity plans, perform an annual independent systems review and promptly notify us of any material systems failures.

[4] Subsection 11.1 (b) of NI 31-103 requires registered firms to establish, maintain and apply policies and procedures that establish a system of controls and supervision sufficient to manage the risks associated with its business in accordance with prudent business practices.

Because of the increased risks to the Canadian market described above, the CSA have determined that a regulatory framework is necessary to ensure that marketplace participants and marketplaces are managing the risks associated with widespread electronic trading including high frequency trading.[5] The result is the development of the Proposed Rule, which includes requirements relating to DEA and is discussed in detail below.

Issues associated with DEA have been previously identified by the CSA. In April 2007, the CSA published for comment amendments to National Instrument 23-101 *Trading Rules* (NI 23-101) that in part related to addressing issues associated with direct market access (2007 Proposed Amendments). Among other things, the 2007 Proposed Amendments clarified the obligations of marketplaces, dealers and dealer-sponsored participants when in a DEA relationship, and introduced requirements such as training for dealer-sponsored participants. These amendments were not taken forward but comments received were reviewed and have been summarized in Appendix A of this Notice. We thank all commenters who took the time to respond to our request for comments.

We are proposing the creation of a new national instrument that would expand the scope of the 2007 Proposed Amendments to regulate electronic trading generally in addition to the specific topic of DEA. We are of the view that the expanded scope of the Proposed Rule will more effectively aid in addressing areas of concern brought about by electronic trading discussed below.

In addition to reviewing the comments received, as part of the process to develop the Proposed Rule, CSA staff met with numerous marketplaces, marketplace participants and service vendors to better understand the current DEA landscape and the issues related to electronic trading. Staff enquired about a range of topics including the vetting of clients, the types of trade monitoring employed, the use of automated order systems, and whether sub-delegation was permitted or used. The information gathered has helped shape our perspective as to how to address the risks associated with electronic trading and DEA in particular. We would like to thank all of the participants who met with us and provided their views.

### *1. Requirements Applicable to Marketplace Participants*

The Proposed Rule would impose requirements on marketplace participants[6] that electronically access marketplaces (exchanges and ATSs). The purpose of these requirements is to ensure that marketplace participants have the appropriate policies, procedures and controls in place that ensure that the risks described above are prevented or managed. The requirements apply to all electronic trading whether performed by the marketplace participant or by a client that has been granted DEA and who enters orders using a marketplace participant identifier.

#### *(i) Marketplace Participant Controls, Policies and Procedures*

The Proposed Rule would require a marketplace participant to establish, maintain and ensure compliance with appropriate risk management and supervisory controls, policies and procedures designed to manage the financial, regulatory and other risks associated with marketplace access or providing DEA to clients.[7]

In establishing the risk management and supervisory controls, policies and procedures, a marketplace participant must:

- ensure all order flow is monitored, including automated pre-trade controls and regular post-trade monitoring that are designed to systematically limit financial exposure and ensure compliance with marketplace and regulatory requirements[8];
- have direct and exclusive control over the controls, policies and procedures[9]; and
- regularly assess and document the adequacy and effectiveness of the controls, policies and procedures.[10]

The policies and procedures must be in written form and the controls, which we expect to be electronic, will have to be described in a narrative form that is documented by the marketplace participant.[11]

These requirements would apply to all electronic trading, including but not limited to DEA and would ensure that all orders for which the marketplace participant is responsible are subject to policies, procedures and controls. We have proposed these requirements because in our view, the risks associated with electronic trading through DEA equally arise when the marketplace participant is entering orders electronically. This will limit the financial, regulatory and other risks associated with electronic trading by clients as well as dealers.

The Proposed Rule sets out a number of specific controls that the marketplace participant must have. It specifically would require controls or requirements that:

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[5] The Proposed Rule addresses some of the risks of high frequency trading. Other issues, such as the impact of high frequency trading strategies on the market are being examined by some CSA jurisdictions.

[6] Section 1.1 of NI 21-101 defines "marketplace participant" as "a member of an exchange, a user of a quotation and trade reporting system, or a subscriber of an ATS".

[7] Proposed paragraph 3(1)(a).

[8] Proposed subsections 3(2) and 3(3).

[9] Proposed subsection 3(4).

[10] Proposed subsection 3(6).

[11] Proposed paragraph 3(1)(b).

- prevent the entry of orders that exceed appropriate pre-determined credit or capital thresholds,
- prevent the entry of erroneous orders in terms of size or price parameters,
- ensure compliance with applicable marketplace and regulatory requirements on a pre- and post-trade basis,
- limit the entry of orders to securities for which the particular marketplace participant or DEA client is authorized to trade,
- restrict access to trading only to persons authorized by the marketplace participant,
- ensure compliance staff of the marketplace participant receive immediate order and trade information,
- enable the marketplace participant to immediately stop or cancel one or more orders entered by the marketplace participant or DEA client,
- enable the marketplace participant to immediately suspend or terminate any DEA granted to a DEA client, and
- ensure that the entry of orders does not interfere with fair and orderly markets.[12]

We note that under the Proposed Rule, a marketplace participant would be able use the technology of a third party when implementing its risk management or supervisory controls, policies and procedures as long as the third party providing such services is independent of any DEA client of the marketplace participant and the marketplace participant is able to directly and exclusively manage the controls, policies and procedures including the setting and adjustment of filter limits.

*(ii) Allocation of Control over Controls, Policies and Procedures*

The Proposed Rule would require that a marketplace participant maintain direct and exclusive control over its risk management controls, policies and procedures.[13] However, in certain limited situations, we propose to permit a participant dealer to reasonably allocate control over specific risk management and supervisory controls, policies and procedures to another investment dealer that is directing trading to the marketplace participant.[14] This is designed to address situations where the investment dealer may be in a better position to manage the risks associated with its trading because of its proximity to and knowledge of its clients. In addition, it can better manage certain responsibilities such as suitability and "know your client" obligations. The allocation of control is subject to a written contract and thorough and ongoing assessment by the participant dealer with respect to the effectiveness of the controls, policies and procedures of the investment dealer. However, allocating control would not excuse the participant dealer from its general obligations under the Proposed Rule.

*(iii) Use of Automated Order Systems*

The Proposed Rule would impose requirements related to the use of automated order systems.[15] An automated order system is defined as "any system used by a marketplace participant or a client of a marketplace participant to automatically generate orders on a pre-determined basis."[16] Specifically, the Proposed Rule would require that, as part of its risk management and supervisory controls, policies and procedures, a marketplace participant must ensure it has the necessary knowledge and understanding with respect to the automated order systems used by itself or any client. We recognize that much of the detailed information about a client's automated order systems may be considered confidential and proprietary. However this proposed requirement is designed to ensure that the marketplace participant has sufficient information to identify and manage its risks. In addition, automated order systems used by the marketplace participant or its DEA client would need to be appropriately tested before use and regularly tested in accordance with prudent business practices.

As well, the Proposed Rule would require controls that allow the marketplace participant to immediately prevent orders from such systems from reaching a marketplace.[17] This requirement is important so that marketplace participants are able to disable an algorithm or any automated order system that is sending erroneous orders or orders that may interfere with fair and orderly markets.

***2. Requirements Specific to DEA***

The Proposed Rule would impose a framework around the provision of DEA. The CSA are of the view that it is important to institute a consistent framework across marketplaces and marketplace participants for the offering and use of DEA to ensure that risks are appropriately managed. In addition, having a consistent framework reduces the risk of arbitrage among participant dealers providing DEA and also among marketplaces that have different standards or requirements.

The approach we have taken supports the principle that marketplace participants, including participant dealers, are responsible for all orders entered onto a marketplace using their marketplace participant identifier. If a participant dealer chooses to provide its number to a client, it is the participant dealer's responsibility to ensure that the risks associated with providing that number are adequately managed. To do that, a participant dealer must assess its own risk tolerance and develop policies, procedures and controls that will mitigate the risks that it faces. In addition, the participant dealer should be setting the appropriate minimum standards, assessing the appropriate training and ensuring that due diligence is conducted on each prospective DEA client.

*(i) The Provision of DEA*

[12] Proposed subsection 3(3).
[13] Proposed subsection 3(4).
[14] Proposed section 4.
[15] Proposed section 5.
[16] Proposed section 1.
[17] Proposed paragraph 5(2)(c).

Part of addressing the risks associated with DEA requires participant dealers to conduct due diligence with respect to clients who are to be granted this type of access. This due diligence performed by the participant dealer providing DEA is a critical defence in managing many of the DEA risks outlined earlier and necessitates a thorough vetting of potential clients accessing marketplaces under their marketplace participant identifier. The Proposed Rule establishes that only a participant dealer, defined as a marketplace participant that is an investment dealer, may provide DEA.[18] This is because we consider the provision of DEA to be a trigger for the registration requirements under securities legislation.

The Proposed Rule states that DEA can only be provided to a registrant that is a participant dealer (a marketplace participant that is a registered investment dealer and IIROC member) or a portfolio manager. We propose to preclude exempt market dealers from being able to act as DEA clients because in our view, a dealer that wants DEA should not be able to "opt-out" of the application of the Universal Market Integrity Rules (UMIR) and should be an IIROC member. In other words, this exclusion would prevent regulatory arbitrage. This exclusion would not prevent dealers that are not participant dealers from sending orders to executing dealers; it would only preclude them from using DEA. **We ask for specific feedback on this issue.**

We have not specifically proposed to exclude individuals from obtaining DEA access. It is our view that retail investors should not be using DEA and should be routing orders through order-execution accounts that are offered by discount brokers and subject to specific supervision requirements under IIROC dealer member rules.[19] However, there are some circumstances in which individuals are sophisticated and have access to the necessary technology to use DEA (for example, former registered traders or floor brokers). In these circumstances, we would expect that the participant dealer offering DEA would set standards high enough to ensure that the participant dealer is not exposed to undue risk. It may be appropriate for these standards to be higher than those set for institutional investors. All requirements relating to risk management and supervisory controls, policies and procedures would apply. **We would like specific feedback on whether individuals should be permitted DEA or whether DEA should be limited to institutional investors[20] and a limited number of other persons such as former registered traders or floor brokers.**

*(ii) Requirements Applicable to Participant Dealers Providing DEA*

Minimum Standards

The Proposed Rule would require participant dealers to set appropriate standards that their clients must meet before providing them with DEA.[21] These standards must include that:

- the client has appropriate financial resources,
- the client has knowledge of and proficiency in the use of the order entry system,
- the client has knowledge of and ability to comply with all applicable marketplace and regulatory requirements, and
- the client has adequate arrangements in place to monitor the entry of orders through DEA.[22]

We have not included an "eligible client list" in the Proposed Rule and are of the view that setting minimum standards is more appropriate. This view is consistent with other jurisdictions globally.

Written Agreement

The Proposed Rule would also require that participant dealers enter into a written agreement with each DEA client.[23] The agreement must provide that:

- the DEA client will comply with marketplace and regulatory requirements,
- the DEA client will comply with product limits or credit or other financial limits specified by the participant dealer,
- the DEA client will maintain all technology security and prevent unauthorized access,
- the DEA client will cooperate with regulatory authorities,
- the participant dealer can reject, vary, correct or cancel orders or can discontinue accepting orders,
- the DEA client will notify the participant dealer if it fails to, or expects to fail to, meet the minimum standards set by the participant dealer,
- when the DEA client is trading for the accounts of its clients, the client orders will flow through the systems of the DEA client, and
- when trading for accounts of its clients, the DEA client will ensure that the client meets the standards set by the participant dealer and that there is a written agreement in place between the DEA client and its client.

[18] Proposed subsection 6(1).
[19] IIROC Dealer Member Rule 3200.
[20] An institutional investor may include an "institutional customer" as defined under IIROC dealer member rules or an "accredited investor" as defined under Canadian securities legislation.
[21] Proposed subsection 7(1).
[22] Proposed subsection 7(2).
[23] Proposed section 8.

These requirements set the minimum that the CSA view as necessary to establish a framework within which DEA should be provided. It has been left open to participant dealers to impose additional terms that they deem necessary to manage the risks associated with DEA.

Training for a DEA Client

Prior to providing DEA to a client, the participant dealer would also need to satisfy itself that the prospective DEA client has adequate knowledge with respect to marketplace and regulatory requirements.[24] In assessing the knowledge level of the client, the participant dealer must determine what, if any, training is required to ensure the management of risks to the participant dealer and the market in general, from providing the client with DEA.

Unlike in the 2007 Proposed Amendments, we are not dictating a specific course or courses that a prospective DEA client must take. We are of the view that the participant dealer, in managing its risks, should turn its mind to what level of knowledge is appropriate for a client in order to be granted DEA in the Canadian trading environment. This is consistent with the philosophy that each dealer must assess its own risk tolerance in developing its standards and policies and procedures relating to DEA.

Client Identifiers

In order to identify the specific client behind each trade, the Proposed Rule would also require that each DEA client be assigned a unique identifier that must be associated with every order and would be kept as part of the audit trail.[25] We expect that the participant dealer would work with the various marketplaces to obtain these identifiers, and that each order entered on a marketplace by a DEA client using DEA contains this identifier. Currently, a number of marketplaces track DEA client trading by using unique client identifiers. This requirement imposes the usage of the identifier on all participant dealers.

In addition, the Proposed Rule would require that the participant dealer provide the unique client identifier to all regulation services providers monitoring trading (currently, IIROC).[26] This facilitates IIROC's ability to monitor trading by DEA clients across multiple participants and multiple marketplaces.

Trading by DEA Clients

Under the Proposed Rule, we have limited the ability of a DEA client to trade using DEA. Generally, a DEA client may only trade for its own account when using DEA provided by a participant dealer.[27] However, certain DEA clients are permitted to trade using DEA for the accounts of their clients. Specifically, these clients are participant dealers, portfolio managers and any entity that is analogous to these categories which is authorized in a foreign jurisdiction that is a signatory to the IOSCO Multilateral Memorandum of Understanding.[28] Finally, we have proposed that a DEA client cannot pass on its DEA to another person or company.[29]

By proposing that certain DEA clients may trade for the accounts of their clients, we have facilitated certain arrangements currently in place. For example, global dealers often use "hubs" that aggregate orders from various subsidiaries before sending those orders through an affiliate participant dealer. The Proposed Rule would enable foreign affiliates to act as DEA clients, but would require the orders aggregated from other affiliates to pass through their systems before being sent to the participant dealer for execution. What we have prohibited is those foreign affiliates that are not DEA clients from sending orders directly to the participant dealer, with whom they have no contract and no relationship.

We have proposed these limitations because we are of the view that it is inappropriate for DEA clients to sub-delegate their DEA, or allow their clients to trade using DEA and send orders directly to a participant dealer or a marketplace. Doing this exacerbates the risks to the Canadian market and widens the breadth of market access to participants who do not have any incentive or obligation to comply with the regulatory requirements or financial, credit or position limits imposed upon them.

### *3. Requirements Applicable to Marketplaces*

As part of the Proposed Rule, we have proposed requirements on marketplaces relating to electronic trading. Marketplaces, under NI 21-101, are already subject to systems requirements.[30] However, the Proposed Rule would impose additional requirements that:

- require marketplaces to provide a marketplace participant with reasonable access to its order and trade information on an immediate basis,
- ensure that marketplace systems can support the use of DEA client identifiers,

[24] Proposed section 9.
[25] Proposed section 10.
[26] Proposed paragraph 10(2)(a).
[27] Proposed subsection 11(1).
[28] Proposed paragraph 11(2)(c).
[29] Proposed subsection 11(5).
[30] NI 21-101, Part 12.

- ensure that marketplaces have the ability and authority to terminate all or a portion of the access provided to a marketplace participant or DEA client,
- ensure that marketplaces regularly assess and document whether they require any risk management and supervisory controls, polices and procedures to ensure fair and orderly trading,
- ensure that marketplaces regularly assess and document the adequacy and effectiveness of any risk management and supervisory controls, policies and procedures they implement,
- require that marketplaces prevent the execution of orders outside of thresholds set by the regulation services provider or by a recognized exchange or recognized quotation and trade reporting system that directly monitors the conduct of its members or users and enforces requirements set pursuant to subsection 7.1(1) or 7.3(1) respectively of NI 23-101, and
- confirm the process for the cancellation, variation or correction of clearly erroneous trades.

These proposed requirements, along with those in NI 21-101, will serve as another level of protection against the risks of electronic trading including DEA, and will serve to supplement the risk management and supervisory controls, policies and procedures required by the marketplace participant.

*(i) Order and Trade Information*

The Proposed Rule sets out an obligation on marketplaces to provide their participants with reasonable access to their own order and trade information on an immediate basis.[31] We believe this is necessary to enable the marketplace participant to fulfill its obligations with respect to establishing and implementing the risk management and supervisory controls, policies and procedures previously outlined. Specifically, it ensures that the compliance personnel at the participant dealers obtain information regarding DEA client orders and trades so that they can appropriately monitor trading.

*(ii) DEA Client Identifiers*

As mentioned above, some marketplaces currently require orders from DEA clients to be accompanied by a unique client identifier. This requirement would standardize this practice by requiring all marketplaces, whether an exchange or ATS, to be able to support the use of these identifiers.

*(iii) Marketplace Controls Relating to Electronic Trading*

The Proposed Rule would require marketplaces to have the ability and the authority to immediately terminate access granted to a marketplace participant or DEA client.[32] This provision is not intended to provide marketplaces with full discretion to terminate without cause. An example of when this would be used is if it is discovered that an algorithm is sending orders in a "loop". This risks the integrity of the participant dealer as well as fair and orderly trading on that marketplace. The existence of this provision is important to ensure that the marketplace can, if necessary, terminate access so that there is no further damage to the quality of the trading on that marketplace or contagion to the rest of the market.

The Proposed Rule would also require that marketplaces assess what risk management and supervisory controls, policies and procedures are required at the marketplace level in addition to those required by their marketplace participants. This is to ensure that marketplaces do not interfere with fair and orderly markets.[33] These controls, policies and procedures should be assessed on a regular basis (at least annually) to ensure they are adequate and effective.[34] The purpose of this requirement is to ensure that the marketplace is aware of the risk management and supervisory controls required by its participants and assesses whether there are any gaps. Those gaps must be filled by the marketplace by either introducing requirements for its participants or by introducing the controls on its own.

*(iv) Marketplace Thresholds*

The Proposed Rule would also establish the requirement for marketplaces to prevent the execution of orders beyond certain thresholds determined by a regulation services provider or by a recognized exchange or recognized quotation and trade reporting system that directly monitors the conduct of its members or users and enforces requirements set pursuant to subsection 7.1(1) or 7.3(1) respectively of NI 23-101.[35] These marketplace thresholds would be designed to limit the risks associated with erroneous or "fat finger" orders impacting the price of a particular security at the marketplace level, and resulting in a market which is not fair or orderly. This requirement is being proposed as part of the follow-up to the events of May 6, 2010. We are of the view that standardized thresholds across all marketplaces are necessary and that a regulation services provider, where applicable, is in the best position to set those thresholds. We believe that these marketplace thresholds will complement both the IIROC Single Stock Circuit Breaker proposal published in November 2010, and IIROC's existing ability to issue regulatory halts.

*(v) Clearly Erroneous Trades*

[31] Proposed section 12.
[32] Proposed subsection 14(1).
[33] Section 14 of proposed Companion Policy 23-103CP.
[34] Proposed subsection 14(2).
[35] Proposed section 15.

We are of the view that the combination of controls required by the Proposed Rule should prevent many erroneous trades from occurring. However, we have included an additional requirement whereby a marketplace must have the capability to cancel, vary or correct a trade on its own, or where instructed to do so by its regulation services provider.[36] The Proposed Rule would also establish the circumstances under which a marketplace may cancel, vary or correct a trade, if that marketplace has retained a regulation services provider. Specifically, the marketplace may cancel, vary or correct a trade when:

- instructed to do so by its regulation services provider,
- the cancellation, correction or variation is requested by a party to the trade, consent is provided by both parties to the trade and the regulation services provider is notified, or
- the cancellation, correction or variation is necessary to correct a systems issue in executing the trade, and permission to cancel, vary or correct the trade has been obtained from the regulation services provider.

Additionally, the marketplace must have reasonable policies and procedures that clearly outline the processes by which that marketplace will cancel, correct or vary a trade, and these policies and procedures must be publicly available. [37]

### *4. Other Jurisdictions*

In developing the Proposed Rule, we have closely reviewed a number of international initiatives such as Rule 15c3-5, *Risk Management Controls for Brokers or Dealers with Market Access*, adopted by the SEC in November 2010[38], the final report prepared by the International Organization of Securities Commissions' (IOSCO) Standing Committee, *Principles for Direct Electronic Access to Markets* published in August 2010[39] (IOSCO DEA Report), the Australian Securities and Investments Commission (ASIC) *Consultation Paper 145: Australian Equity Market Structure: Proposals*[40], and the European Commission *Review of the Markets in Financial Instruments Directive* (MiFID) published in December of 2010.[41]

The IOSCO DEA Report sets out principles intended to be used as guidance for jurisdictions that allow or are considering allowing the use of DEA. They include minimum financial standards for DEA clients, the establishment of a legally binding agreement between the marketplace participant providing market access and the DEA client, and the existence of effective controls to manage the risks associated with electronic trading at both the marketplace and marketplace participant level. The requirements in the Proposed Rule are in line with the principles established by IOSCO.

In the U.S., Rule 15c3-5 requires brokers or dealers with access to trading on a marketplace including those providing DEA, to implement risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory and other risks of this business activity. This rule effectively prohibits broker-dealers from providing unfiltered access to any marketplace.

In Australia, the ASIC Consultation Paper 145 is similar to the Proposed Rule in that it would require a market participant providing DEA to ensure that clients meet minimum standards with respect to financial resources, and proficiency with regulatory requirements and the use of systems. Additionally, there are similarities surrounding the use of automated order systems, in that they both establish requirements for participants and participant dealers to ensure that the use of such systems do not interfere with fair and orderly trading, and that all automated order systems used by the participant or a client of the participant are appropriately tested and that the nature of the systems are appropriately understood.

The European Commission's review of MiFID proposes requirements for automated trading, defined as "trading involving the use of computer algorithms to determine any or all aspects of the execution of the trade such as the timing, quantity and price".[42] The review suggests the introduction of requirements for firms involved in automated trading to have robust risk controls to mitigate potential trading system errors, and that regulators be notified of what computer algorithms are employed, including explanations of their purpose and how they function. With respect to DEA, the review recommends that firms which provide "sponsored access" to automated traders would also have in place robust risk controls and filters "to detect errors or attempts to misuse facilities".

## IV. COST-BENEFIT ANALYSIS

For the Ontario Securities Commission's cost-benefit analysis of the Proposed Rule, please see Appendix B – *Cost-Benefit Analysis – Proposed National Instrument 23-103 Electronic Trading and Direct Electronic Access to Marketplaces*.

## V. AUTHORITY FOR THE PROPOSED RULE

[36] Proposed section 16.
[37] Proposed subsection 16(3).
[38] Published at: http://www.sec.gov/rules/final/2010/34-63241.pdf
[39] Published at: http://www.iosco.org/library/pubdocs/pdf/IOSCOPD332.pdf
[40] Published at: http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/cp-145.pdf/$file/cp-145.pdf
[41] Published at: http://ec.europa.eu/internal_market/consultations/docs/2010/mifid/consultation_paper_en.pdf
[42] Published at: http://ec.europa.eu/internal_market/consultations/docs/2010/mifid/consultation_paper_en.pdf at page 15.

In those jurisdictions in which the Proposed Rule is to be adopted, the securities legislation provides the securities regulatory authority with rule-making or regulation-making authority in respect of the subject matter of the Proposed Rule.

In Saskatchewan, the Proposed Rule is being made under the following provisions of *The Securities Act, 1988* (Saskatchewan (Act):

- Clause 154(1)(f) authorizes the Commission to make regulations prescribing requirements in respect of the disclosure or furnishing of information to the public to the Commission by registrants.
- Clause 154(1)(h) authorizes the Commission to make regulations prescribing requirements in respect of the books, records and other documents to be kept by market participants, including the form in which and the period for which the books, records and other documents are to be kept.
- Clause 154(1)(i) authorizes the Commission to make regulations regulating the listing or trading of publicly traded securities including requiring reporting of trades and quotations.
- Clause 154(1)(k) authorizes the Commission to make regulations regulating exchanges, self-regulatory organizations and clearing agencies;
- Clause 154(1)(l) authorizes the Commission to make regulations regulating trading or advising in securities to prevent trading or advising that it is fraudulent, manipulative, deceptive or unfairly detrimental to investors.
- Clause 154(1)(ii) authorizes the Commission to make regulations requiring or respecting the media, format, preparation, form, content, execution, certification, dissemination, and other use, filing and review of all documents required under or governed by the Act or the regulations and all documents, determined by the regulations to be ancillary to the documents.

## VI. COMMENTS AND QUESTIONS

We invite all interested parties to make written submissions with respect to the proposed National Instrument 23-103 *Electronic Trading and Direct Electronic Access to Marketplaces*.

Please address your comments to all of the CSA member commissions on or before July 8, 2011, as indicated below:

Alberta Securities Commission
Autorité des marchés financiers
British Columbia Securities Commission
Manitoba Securities Commission
New Brunswick Securities Commission
Nova Scotia Securities Commission
Superintendent of Securities, Department of Justice, Government of Northwest Territories
Superintendent of Securities, Yukon
Superintendent of Securities, Nunavut
Superintendent of Securities, Consumer, Corporate and Insurance Services, Office of the Attorney General, Prince Edward Island
Saskatchewan Financial Services Commission
Superintendent of Securities, Government Services of Newfoundland and Labrador
Ontario Securities Commission

c/o John Stevenson, Secretary
Ontario Securities Commission
20 Queen Street West
Suite 1900, Box 55
Toronto, Ontario M5H 3S8
e-mail: jstevenson@osc.gov.on.ca

and

M$^{e}$ Anne-Marie Beaudoin
Corporate Secretary
Autorité des marchés financiers
800, square Victoria, 22e étage
C.P. 246, tour de la Bourse
Montréal, Québec H4Z 1G3
e-mail : consultation-en-cours@lautorite.qc.ca

We cannot keep submissions confidential because securities legislation in certain provinces requires that a summary of the written comments received during the comment period be published.

Questions may be referred to any of:

| | |
|---|---|
| Sonali GuptaBhaya<br>Ontario Securities Commission<br>416-593-2331<br>sguptabhaya@osc.gov.on.ca | Barbara Fydell<br>Ontario Securities Commission<br>416-593-8253<br>bfydell@osc.gov.on.ca |
| Tracey Stern<br>Ontario Securities Commission<br>416-593-8167<br>tstern@osc.gov.on.ca | Kent Bailey<br>Ontario Securities Commission<br>416-595-8945<br>kbailey@osc.gov.on.ca |
| Serge Boisvert<br>Autorité des marchés financiers<br>514-395-0337 ext. 4358<br>serge.boisvert@lautorite.qc.ca | Élaine Lanouette<br>Autorité des marchés financiers<br>514-395-0337 ext. 4356<br>elaine.lanouette@lautorite.qc.ca |
| Meg Tassie<br>British Columbia Securities Commission<br>604-899-6819<br>mtassie@bcsc.bc.ca | Lorenz Berner<br>Alberta Securities Commission<br>403-355-3889<br>lorenz.berner@asc.ca |

April 8, 2011

**Appendix B**

**COST-BENEFIT ANALYSIS**

**PROPOSED NATIONAL INSTRUMENT 23-103 *ELECTRONIC TRADING AND DIRECT ELECTRONIC ACCESS TO MARKETPLACES***

## I. Overview

Trading on Canadian marketplaces has occurred through electronic means, however the Canadian market has evolved substantially in recent years. Technological advancements have increased the complexity of the market and the methods by which market participants can trade or access multiple marketplaces. Trading strategies and speeds have become correspondingly complex. Electronic access to the marketplaces has also been broadly extended with marketplace participants providing direct electronic access (DEA). DEA refers to the process whereby access to a marketplace is provided to clients and these clients transmit orders to the marketplace execution system using the marketplace participant's identifier without additional management by the participant dealer.

Such rapid and complex technological change has resulted in many new risks to the Canadian market. In our view, the regulatory framework for electronic trading must reflect these changes and address these risks. Proposed National Instrument 23-103 *Electronic Trading and Direct Electronic Access to Marketplaces* (Proposed Rule) is designed to align regulatory requirements with the current trading environment to ensure effective regulation and mitigation of these risks.

## II. Costs and Benefits

### Benefits

The Proposed Rule should benefit all market participants including investors, as well as the market as a whole. It is aimed at reducing the risks of electronic trading and enhancing investor confidence in the market by requiring risk management and supervisory controls, policies and procedures designed to manage the risks of both electronic trading and DEA. These controls, policies and procedures would provide for risk checks and filters of orders before they are entered onto marketplaces by marketplace participants or DEA clients.

Requiring marketplace participants to put in place risk management and supervisory controls, policies and procedures, including filters, should reduce both the systemic risk and the risks to individual dealers. In the absence of a robust system of controls, policies and procedures, the entry of one or more erroneous orders in a rapid manner could leave a dealer with substantial financial liabilities in a very short period of time. This credit risk can translate into broader systemic risk if the dealer is unable to cover these liabilities.

From a regulatory view, in the absence of effective controls, a risk exists that the dealer may also be unaware of the nature of the trading activity taking place using its marketplace participant identifier in a timely manner. The Proposed Rule would thus aid dealers to monitor their own trading as well as that of their clients, and require that the appropriate tools be available to aid in ensuring that activity is in compliance with all regulatory requirements.

Additionally, a lack of controls at the marketplace participant level could expose the entire market to rapid erroneous order flow which could affect the trading activities of a much broader group of participants, and could potentially require the cancellation of trades. Establishing controls, policies and procedures surrounding electronic trading would serve to increase confidence that the market is operating in a fair and orderly manner, by reducing the risks of errant order flow having a significant impact on the trading activities and risks of multiple participants.

The Proposed Rule would put requirements in Canada on a similar level to those in the United States, and would serve to prevent regulatory arbitrage and a migration of risks if Canada is seen as a jurisdiction with significantly less requirements and thus lower costs with respect to mitigation of the risks associated with electronic trading.

The Proposed Rule should also promote fairness by establishing a standard set of rules applicable to all market participants providing DEA, regardless of the marketplace accessed. Some dealers may already have risk systems operational, and by placing this obligation on all participant dealers there will be no competitive or economic advantage to be gained by offering access with no such filters and supervisory controls in place. Additionally, given that no consistent rule framework is currently applied specifically to electronic trading, establishing this set of rules will improve both the integrity and confidence in the market by levelling the playing field and standardizing the obligations so that there are minimum requirements in place applicable for all, no matter where orders are entered.

### Costs

#### (i) Technology and maintenance costs

We recognize that for some participants, the Proposed Rule would likely introduce costs associated with the development and implementation of risk management and supervisory controls, policies and procedures. These costs will vary depending on the

level of existing controls in place, the nature of their business and trading strategies, as well as the business models and strategies of any DEA clients. The costs may involve initial outlays as well as ongoing expenses. They will also vary depending on whether a participant chooses to use an in-house system or those provided by a third party.

There may also be costs to the market in the form of minimal additional latency on some order flow. These additional latency costs will again be dependent on the type of trading strategies in use and whether existing controls and risk management filters already exist. This additional latency may not have a major impact on the business of most participants, except for those relying on ultra low latency connections for particular strategies.

Although we acknowledge these costs, we believe that they are proportionate to the benefits provided to the market as a whole as discussed above. The protection of the integrity of the market, the reduction in both dealer and systemic risks, and the increase in the confidence of individual investors make these costs justifiable.

**(ii) Compliance Costs**

Under the Proposed Rule, marketplace participants would be required to ensure ongoing compliance with the responsibilities imposed. Although some new costs are likely, we expect that many of the compliance requirements would already be in place. As an example we note that currently, all registrants are required under National Instrument 31-103 – *Registration Requirements and Exemptions* (NI 31-103) to manage the risks to their business[43], and we would expect that they would have established policies and procedures related to marketplace access. Any additional costs of compliance would vary depending on the nature of the business or services provided by the individual marketplace participant.

With respect to DEA, we acknowledge there may be increased costs associated with establishing, maintaining and applying appropriate standards before providing DEA to a client. We believe these costs are justifiable given the protections afforded to the market as a whole through the implementation of the Proposed Rule. Participant dealers who choose to provide DEA to clients should be appropriately vetting potential clients and ensuring standards are met on a continuing basis not only to mitigate financial risk to themselves, but also the systemic risks associated with the activities of their clients.

**(iii) Costs to Marketplaces**

The Proposed Rule would among other things, impose upon marketplaces the obligation to prevent the execution of orders from exceeding price and volume thresholds. These thresholds would be set by a regulation services provider monitoring the activities of the marketplace and the trading of securities, or by the marketplace itself if it directly monitors the conduct of its members or users and enforces requirements set pursuant to subsection 7.1(1) or 7.3(1) of National Instrument 23-101 *Trading Rules*.[44]

Some marketplaces in Canada already have such systems in place, while others do not. Additional costs will therefore vary depending on the marketplace in question and whether thresholds already exist.

We believe that price protection thresholds are an important layer of protection for the integrity of our market and for investor protection, and thus the costs associated with implementation are justified. Some marketplaces have already taken steps to ensure they have such protections in place, and we believe the requirements in the Proposed Rule will ensure a level playing field exists amongst marketplaces and ensure there is no competitive advantage to be gained by not offering these controls.

**Conclusion**

We acknowledge the increase in costs for some market participants associated with the Proposed Rule. In our opinion, the benefits associated with the Proposed Rule are proportionate to these costs. Recent market events have illustrated the risks involved with electronic trading, and appropriate rules or controls to mitigate risks will address these concerns. Further, in establishing requirements related to electronic trading and DEA, the responsibility to ensure the efficiency and protection of our markets will be shared by all participants and there will be no advantages provided to those with less stringent controls and policies in place.

[43] NI 31-103 paragraph 11.1(b) states that "A registered firm must establish, maintain and apply policies and procedures that establish a system of controls and supervision sufficient to manage the risks associated with its business in accordance with prudent business practices."

[44] Sections 7.1 and 7.3 of National Instrument 23-101 *Trading Rules* state that a recognized exchange or a recognized quotation and trade reporting system may monitor the conduct of its members and enforce the requirements governing its members either directly or indirectly through a regulation services provider.