

CSA Staff Notice 21-325

Follow-up on Marketplace Systems Incidents

March 15, 2019

Introduction

The prompt reporting and resolution of material systems failures, malfunctions, delays and security incidents by marketplaces is a critical component of fair and orderly markets for the trading of securities in Canada. Canada's multiple marketplace environment is heavily dependent on the proper functioning of marketplaces' systems. Material systems incidents¹, and the way in which marketplaces address them, can have a significant impact on marketplace participants and investors.

The Canadian Securities Administrators staff (**CSA Staff** or **we**) are committed to the robust oversight of the requirements in respect of the systems that marketplaces use to support, among other things, order entry, order routing, execution, trade reporting, data feeds and market surveillance and the prompt and comprehensive reporting of material systems incidents. Following the service interruption on April 27, 2018 that affected trading on TSX Inc. (**TSX**), Alpha Exchange Inc. (**Alpha**), TSX Venture Exchange Inc. (**TSXV**) and Bourse de Montréal (**MX**) (the **Incident**), CSA Staff undertook a review of the Incident and identified several issues that required further examination and follow up.

This notice discusses the issues identified by CSA Staff during the course of, and as a result of, the Incident, through discussions with the affected marketplaces, market participants and the Investment Industry Regulatory Organization of Canada (**IIROC**), as well as follow-up actions that CSA Staff have taken or intend to take going forward.

CSA Staff Review

We have completed a review of the Incident and specifically examined the steps taken in relation to a marketplace's obligation to report and remediate material systems incidents, including prompt notification to the appropriate regulators, other marketplaces, regulation services providers and marketplace participants.

Together with IIROC staff we gathered information about the trading activity of dealers during and after the Incident and solicited feedback from marketplace participants, information vendors and other marketplaces impacted by the Incident.

Based on our review and the feedback received from marketplace participants, it became clear that the Incident represented an opportunity to examine the current regulatory requirements and guidance in place for marketplaces regarding both reporting of material systems incidents and

¹ Material systems failures, malfunctions, delays or security breaches for each system, operated by or on behalf of a marketplace, that supports order entry, order routing, execution, trade reporting, trade comparison, data feeds, market surveillance and trade clearing.

periodic reporting of systems outages. In addition, our review identified issues regarding the treatment of retail orders in the market during the Incident.

We identified a number of follow-up areas, including:

- Current reporting requirements for marketplace systems incidents;
- Communication to marketplace participants;
- Market on Close facility and alternative closing price calculation; and
- Retail investors' trading activity.

Current Reporting Requirements for Marketplace Systems Incidents

Currently, there are regulatory requirements for reporting by marketplaces of material systems incidents.

Paragraph 12.1(c) of National Instrument 21-101 *Marketplace Operation* (**NI 21-101**) requires marketplaces to promptly notify the securities regulatory authorities of any material systems failures, malfunctions, delays or security breaches for each system, operated by or on behalf of a marketplace, that supports order entry, order routing, execution, trade reporting, trade comparison, data feeds, market surveillance or trade clearing. In addition, marketplaces must also provide timely updates on the status of any failure, malfunction, delay or security breach, the resumption of service and the results of the marketplace's internal review of the incident.

Subsection 14.1(4) of the Companion Policy to NI 21-101 *Marketplace Operation* (**21-101CP**) states that a failure, malfunction or delay is considered to be "material" if the marketplace would, in its normal course of operations, inform or escalate the matter to its senior management responsible for technology. We note that the determination of whether a system failure, malfunction or delay is material ultimately rests with the marketplace itself.

In addition, under subsection 6.3(1) of National Instrument 23-101 *Trading Rules* (**NI 23-101**), if a marketplace experiences a failure, malfunction or material delay of its systems, equipment or ability to disseminate marketplace data, the marketplace must immediately notify:

- (a) all other marketplaces;
- (b) all regulation services providers;
- (c) its marketplace participants; and
- (d) any information processor or, if there is no information processor, any information vendor that disseminates its data under Part 7 of NI 21-101.

As a result of the Incident, we identified the need for additional guidance to be provided regarding the requirement of subsection 12.1(c) of NI 21-101 to "promptly notify the regulators" in the event of a material system failure, malfunction or delay. This guidance, CSA Staff Notice 21-326 *Guidance for Reporting Material System Incidents* (the **Guidance**), discusses the current regulatory requirements and provide additional guidance around the reporting of material systems failures, delays or malfunctions by marketplaces and the appropriate form and content of such notification. This Guidance will be published at the same time as this notice, specifically on March 15, 2019.

Communication to Marketplace Participants

Feedback from marketplace participants coupled with our observations during and after the Incident also identified the need for additional guidance regarding:

- The state of the orders in the books during an incident;
- Whether a pre-open session will be available to marketplace participants in the event of re-opening for trading and the length of such session; and
- The trade reconciliation process, including communication in the event reconciliation issues occur.

We remind marketplaces to be mindful of their obligations under subsection 6.3(1) of NI 23-101 and to ensure that information about the issues identified above will be readily available to marketplace participants at all times.

Market on Close (MOC) Facility and Alternative Closing Price Calculation

Following the Incident, concerns were expressed by market participants about the fact that the MOC auction did not run at the end of the day as well as the use of the last trading price of a security during the regular trading session as the official closing price for that security.

Some market participants suggested that a back-up MOC facility should be considered, while others indicated that the development of a back-up MOC facility may not be an appropriate solution since the cost of developing and maintaining a back-up MOC facility may ultimately exceed the benefits of having one. Also, some market participants suggested that an alternative closing price methodology should be developed and be applied in the event of a material systems incident that ultimately impedes the operation of the MOC facility and the calculation of the closing price.

We understand that TSX staff is currently discussing with market participants the possibility of an alternative closing price methodology that could be applied in the event of a material systems failure, malfunction or delay that would ultimately impede a proper closing price calculation. We will continue to monitor and receive updates about this development.

Retail Investor Trading Activity

Together with IIROC staff, we examined the trading activity on the day of the Incident. That examination and our discussions with dealers revealed that retail trading was impacted the most during the Incident and following the decision not to re-open for the day.

We noted that in some cases retail orders were treated differently from institutional and proprietary orders, not only due to uncertainty regarding the state of the orders in the market, but also because the platforms of certain dealers rely solely on TSX and TSXV market data to provide quotes to their retail clients. The lack of market data from the TSX and TSXV during the Incident precluded retail clients from trading.

We will continue to work with IIROC staff to determine whether and to what extent additional steps or guidance is warranted regarding the treatment of retail orders during market disruption events and the appropriate use of market data. We expect that, in case of a material system failure, malfunction or delay all orders would be treated in a similar manner.

Questions

Please refer your questions to any of the following people:

<p>Christopher Byers Senior Legal Counsel, Market Regulation Ontario Securities Commission cbyers@osc.gov.on.ca</p>	<p>Alina Bazavan Senior Analyst, Market regulation Ontario Securities Commission abazavan@osc.gov.on.ca</p>
<p>Alex Petro Trading Specialist, Market Regulation Ontario Securities Commission apetro@osc.gov.on.ca</p>	<p>Serge Boisvert Analyste en réglementation Direction des bourses et des OAR Autorité des marchés financiers serge.boisvert@lautorite.qc.ca</p>
<p>Sasha Cekerevac Senior Analyst, Market Structure Alberta Securities Commission sasha.cekerevac@asc.ca</p>	<p>Doug Mackay Manager, Market and SRO Oversight British Columbia Securities Commission dmackay@bcsc.bc.ca</p>