July 17, 2019

VIA EMAIL

Alberta Securities Commission
Autorité des marchés financiers
British Columbia Securities Commission
Financial and Consumer Services Commission (New Brunswick)
Financial and Consumer Affairs Authority of Saskatchewan
Manitoba Securities Commission
Nova Scotia Securities Commission
Nunavut Securities Office
Ontario Securities Commission
Office of the Superintendent of Securities, Newfoundland and Labrador
Office of the Superintendent of Securities, Northwest Territories
Office of the Yukon Superintendent of Securities
Superintendent of Securities, Department of Justice and Public Safety, Prince Edward Island

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Re: CSA Proposed Amendments to National Instrument 21-101 *Marketplace Operation* and Proposed Changes to Companion Policy 21-101CP *Marketplace Operation* ("Proposed Amendments")

Dear Sirs/Mesdames:

Nasdaq CXC Limited ("Nasdaq Canada" or "we") welcomes the opportunity to provide comments on the Canadian Securities Administrator's ("CSA") proposed amendments to National Instrument 21-101 Marketplace Operation ("NI 21-101" or the "Instrument") and to Companion Policy 21-101CP Marketplace Operation ("21-101CP" or the "Companion Policy").

We commend the CSA on the Proposed Amendments and taking preliminary action to reduce burden where appropriate. We agree that the volume of breadth of reporting requirements for marketplaces have expanded considerably over time and that existing requirements need to be reconsidered with respect to their contribution to regulatory burden balanced against their contribution to effective oversight. While we recognize many proposed changes will help reduce burden there are several others that will increase it. Where new requirements have been proposed we believe their intended regulatory objectives needs to be weighed against their cost.

With this balance in mind, we have made several recommendations regarding the systems requirements and reporting obligations for marketplaces included in the Proposed Amendments while also including recommendations for other changes we believe will result in further burden reduction.

Systems Requirements

- Limit reporting requirements of security incidents to only ***material*** securities incidents;
- Leave the current principles based requirement for a qualified party for the purposes of the internal systems reviews so that an Independent Audit Department that can present evidence that it is free of conflicts does not become ineligible;
- Change the independent system review ("ISR") requirement from an annual requirement to a bi-annual requirement for an operating marketplace that has not experienced a material systems issue in the previous twelve-month period.

Reporting obligations:

- Leave the existing minimum period for fee changes at seven business days to avoid unnecessary delays for proposed fees that do not raise regulatory issues;
- Maintain the existing 60-day reporting requirement for exchanges that are not reporting issuers in new section 4.3;
- Eliminate items 4 through 7 of Part A – General Marketplace Information and Part B – Market Activity Information Elimination for equity marketplaces in the Form 21-101F3 ("Form F3").

Other Changes

- Introduce an exemption framework for foreign ATSs trading foreign listed and/or traded securities;
- Apply a flexible approach to the marketplace notification requirement in accordance with Staff Notice 21-107.

A. SYSTEMS RELATED REQUIREMENTS

I. Reporting of Non Material Security Incidents

We support the CSA's increased focus on marketplace capabilities to address cyber-resiliency. The proposed requirement for marketplaces to establish and maintain information technology controls for cyber-resiliency in section 12.1(a)(ii) will codify an existing expectation important to protecting the markets infrastructure and in turn investors. We understand that broadening the definition of "security breach" to "security incident" will capture a material event where a breach may not necessarily have occurred and see potential value in these events being reported to the regulator.

Nonetheless, marketplace reporting requirements for security incidents should be limited to only material security incidents to avoid creating burden disproportionate to the value that reporting of non-material information will provide. The proposed definition of a security incident includes events that actually or **potentially** jeopardizes the confidentiality, integrity or availability of a marketplace system or auxiliary system.[1] Using this definition, any intruder attack that is blocked by a firewall will be defined as a security incident and will need to be reported under the new reporting requirement in subsection 12.1(d). Requiring

[1] Proposed subsection 2.1 of Section 14.1 of 21-101CP.

reporting of all non-material security incidents on a quarterly basis in the Form F3 is over-inclusive, will tend to obscure the most important risks, and will potentially distract regulators from identifying and addressing the most serious risks to the markets and investors.

An over-inclusive reporting requirement will create significant administrative overhead and regulatory burden that is not proportionate to the incremental value this information will add to effective oversight. The number of events that could potentially jeopardize a system is exceeding large. For example, there are over 250 million intruder attacks on Nasdaq systems blocked by firewalls globally. This is true of any large scale organization and will create similar challenges. Although an electronic record of each attack prevented by a firewall is maintained, generating a report or a log of these events will not only require significant technological resources but also presents challenges transferring files. Given the large number of non-material security incidents that will be required to be reported, we question how this information will be analysed in a meaningful way and what value it provides.

Instead, we propose that the CSA rely on the results of the marketplace internal systems reviews required in subsection 12.2(1) for assurance that marketplaces are effectively managing non-material security incidents. With the introduction of the requirement for marketplaces to establish and maintain information technology controls for cyber resiliency, these controls will be reviewed periodically in each marketplace ISR and an opinion will be given whether or not they have been well designed and are operating effectively. Marketplace security policies and procedures, including policies for materiality determinations and record keeping requirements are reviewed as part of an ISR. If a marketplace ISR report includes a comment that raises concern about how the marketplace is managing security incidents or suggests that there could be potential deficiencies in their Information Security Program, the CSA can conduct individual marketplace reviews to address these concerns. Relying on the ISR reflects an appropriate risk based approach where additional burden is only imposed on marketplaces where a risk has been identified.

II. Vulnerability Assessments

Recognizing the increasing importance of cyber-security controls, we support the new requirement in section 12.1.2 where a qualified party will need to perform appropriate assessments and testing to identify vulnerabilities and measure the effectiveness of a marketplace's information security controls.[2] We want to commend the approach taken by the CSA with regard to who is considered eligible to be a qualified party and permitted to conduct these reviews. Proposed guidance in the Companion Policy allows marketplaces to use either external auditors or third party information system consultants or internal employees of the marketplace or an affiliated entity of the marketplace as long as the qualified party has relevant experience and are not the persons responsible for the development or operation of the system begin tested.[3] This approach recognizes the relevant experience and expertise of the reviewer as the determining factor for eligibility while also avoiding a potential conflict of interest by restricting a person responsible for the development or operation of the systems being tested from serving as a qualified party irrespective of their credentials. It is a benefit to burden reduction to have both internal and external personnel be able to serve as a qualified party as long as they have the required experience.

[2] Proposed section 12.1.2 of the Instrument.
[3] Proposed subsection 3.1 of Section 14.1 of 21-101CP.

III. Systems Reviews

i. Independent Audit Departments Should be Permitted to Conduct ISRs

The expectation for marketplaces to engage an external auditor to conduct marketplace ISRs has resulted in significant costs and burden. The purpose of the proposed amendment to Part 12.1 which requires a qualified external auditor to perform the review, may be to clarify a current CSA expectation, however this expectation has changed over time. Moving from a principles based qualified party requirement to a prescriptive requirement for an external auditor will eliminate the option of having other qualified parties with relevant experience and expertise without conflicts of interest able to conduct reviews. For example, highly qualified Internal Audit Departments with independent reporting lines designed to avoid conflicts of interest will become ineligible. This in turn will result in unnecessary external costs that otherwise could be avoided without compromising the quality of reviews.

When the ISR requirement was first proposed in 2008 the criteria for a qualified party depended on the relevant expertise and experience of the person or company in two areas; information technology and evaluating internal controls in a complex information technology environment (the same criteria is required today). To ensure that qualified parties selected have adequate experience, marketplaces are required to discuss their choice of qualified party with the regulator prior to conducting the review, serving in practice as a pre-approval requirement. Internal Audit Departments with relevant expertise and experience were permitted to serve as qualified parties when the requirement became effective in 2010. For example Instinet LLC's Internal Audit Department was approved by staff to conduct Chi-X Canada ATS Limited's ISR for the time period between 2010 – 2015.

In 2016 staff communicated a new expectation requiring marketplaces to exclusively engage external auditors to conduct their ISRs. Despite the absence of any known issues around the quality or objectivity of ISRs at that time, this new expectation was based on concern about the potential impact to the objectivity of the reviewer caused by a potential conflict of interests created from the use of an internal auditor of an affiliated entity of the marketplace. Mandating the use of external auditors has had two negative outcomes i) the potential for qualified parties with less experience to be able to perform an ISR and ii) imposing significant costs on marketplaces required to contract external auditors. After 2016 Internal Audit Departments were no longer able to conduct reviews irrespective of their experience and expertise (including knowledge of a specific marketplace system they had previously reviewed or of similar systems based on experience). Instead, external auditors were engaged, often with limited experience of marketplace systems and familiarity of the requirements of Part 12 of the Instrument (there are only a limited number of marketplaces in Canada). The expectation that the use of an external auditor would better ensure marketplace compliance with systems requirements did not prove accurate. In 2018 OMEGA ATS entered into a settlement with the OSC acknowledging several areas of non-compliance with Ontario Securities Law related to the operation of its systems despite having used an external auditor to conduct its ISR for the years under review.[4]

Requiring marketplaces to use external auditors has resulted in a significant cost increase for marketplaces. For example the cost for an external auditor to conduct a System and Organization Control for Services Organizations: Controls Relevant to Security, Availability and Confidentiality ("SOC II") Report, (which

[4] https://www.osc.gov.on.ca/documents/en/Proceedings-SET/set_20180921_omega-securities.pdf.

is the preferred audit report by staff) is over $100,000. Allowing for differences in commercial arrangements and reporting standards, the aggregate impact across marketplaces conservatively exceeds $500,000[5] annually. Given the robust systems requirements in Part 12 of NI 21-101 and the limited number of systems issues that have occurred since the introduction of the requirement, these costs do not seem proportionate to the regulatory objective for requiring an external auditor.

We note that concerns about the use of internal parties impacting the objectivity of a reviewer were considered by the SEC when implementing Regulation Systems Compliance and Integrity ("Reg SCI") which included a similar requirement for "qualified personnel" to perform an annual review of SCI systems and SCI security systems. Addressing the importance of objectivity, the Commission stated that "given the requirement that such personnel be "objective," any personnel with conflicts of interest that have not been adequately mitigated to allow for objectivity should be excluded from serving in this role."[6] However, when considering how to address potential for conflicts the SEC did not decide that internal parties were restricted from performing reviews. Instead, a more flexibility approach was taken where "SCI reviews can be performed by personnel of the SCI entity or an external firm, provided that such personnel are, in fact, objective and, as required by rule, have the appropriate experience to conduct reviews of SCI systems and indirect SCI systems."[7]

The Notice says that the requirement for an external auditor is being proposed to provide consistency with recently proposed changes for clearing agencies in proposed amendments to National Instrument 24-102. We submit that different considerations are appropriate for marketplace and clearing agency requirements because of different roles each play in the capital market including how each contributes to systemic risk. For example, CDSX has been designated a systematically important Financial Market Infrastructure and required to comply with additional regulatory requirements that marketplaces are not subject to. We also note that for clearing agencies, exemptions are contemplated from this requirement: "As contemplated by section 6.1 of the Instrument, we may consider applications for exemption from the requirement to engage a qualified external auditor in certain circumstances, subject to such conditions or restrictions as may be imposed in the exemption."[8] If the CSA is also open to considering an exemption from the new requirement for a qualified Internal Audit Department, it should be noted that the costs for an exemption are not immaterial (in addition to the resources required to prepare an application, the aggregate of regulatory filing fees across jurisdictions today totals $13,626). These costs can be avoided by leaving the existing requirement in place. The CSA will still be in a position to approve selected qualified parties and require external auditors where appropriate while avoiding imposing unnecessary burden by excluding qualified internal auditors with relevant experience from being able to perform reviews. We therefore encourage the CSA to return to its original expectation for a qualified party and not to move forward with the proposed amendment.

[5] Using an estimate of $75,000 per equity marketplace.
[6] Regulation Systems Compliance and Integrity Final Rule p. 350.
[7] Ibid. p. 351.
[8] CSA Notice and Request for Comment – Proposed Amendments to National Instrument 24-102 Clearing Agency Requirements and Proposed Changes to Companion Policy 24-102 Clearing Agency Requirements (2018), 41 OSCB 8193.

ii. Making the ISR a Bi-Annual Requirement

We propose that the ISR requirement should be changed from an annual requirement to a bi-annual requirement for operating marketplaces that have not experienced a material systems issue in the previous twelve-month period. As previously discussed, the costs of an ISR are significant. These costs extend beyond the cost of external auditors and include internal resources for staff to either perform or facilitate the review. With the ISR requirement in place for eight years, marketplaces operating today have already demonstrated compliance with the requirements of sections 12.1 and 12.1.1, developing and maintaining internal and information technology controls for their systems and have had these controls reviewed by qualified parties annually. The ISR therefore has become more of a check box exercise providing little incremental value that can justify its annual cost. Changing the ISR requirement from an annual requirement to a bi-annual requirement will reduce the regulatory burden of the ISR by half while maintaining regulatory oversight of marketplace systems. New marketplaces that have not had a qualified party assess their compliance with Part 12 should be required to conduct an ISR in their first year of operation as a condition of their approval. In addition, marketplaces that experience a significant systems issue raising questions about the design and effectiveness of their controls can also be required to meet the ISR for that year.

B. REQUIREMENTS FOR MARKETPLACE FORMS

I. Fee Changes

The proposed amendment to extend the minimum period required before a marketplace can implement a fee change from seven business days to fifteen business days will result in an unnecessary delay that will increase burden. Fee changes are considered significant changes in section 6.1(4) of CP 21-101 and originally were subject to the minimum 45-day period before they could be implemented. The abridged seven business day requirement, originally proposed in 2011 and currently in place today, was introduced because the CSA recognized that competition between marketplaces required the need for marketplaces to implement fee changes quickly. "The Canadian regulatory authorities recognize that in the current, competitive multiple marketplace environment, which may at times require that frequent changes be made to the fees or fee model of marketplaces, marketplaces may need to implement fee changes within tight timelines."[9] Fee competition between marketplaces has not diminished since 2011. In fact, it has intensified with the advent of more advanced router technology accessible to participants who now can preference different marketplaces with different fees for different subsets of securities. The need for marketplaces to implement fee changes within tight timelines for competitive reasons is as strong as ever today.

Extending the minimum implementation time for a fee change will introduce an unnecessary delay impacting marketplaces' ability to make fee changes quickly. The minimum time before a fee change can be implemented does not mean it can happen without regulatory approval. Where a fee change does not raise any regulatory concern (such as a fee decrease or a fee increases that is within the range of fees already approved for other marketplaces) there is no reason for a further delay. Where a fee change does raise concerns and requires more time to review, an extended review period is already provided under the rule

[9] Subsection 6.1(6) of 21-101CP.

filing protocol.[10] Today it is common practice for a fee proposing to establish a new precedent or employing a novel model to require much longer than seven business days (often weeks) to review and for an approval decision to be made. The proposed amendment therefore will not provide staff any additional review time than is available today. Instead, it will impose an unnecessary restriction on marketplaces when proposing to make trivial fee changes. We therefore urge the CSA not to move forward with the change.

C. FINANCIAL REPORTING

We understand the intention of the new requirement in section 4.3 for recognized exchanges to file interim financial statements within 45 days of the end of the interim period is to remove duplication from similar requirements in exchange recognition orders. However, we note that the new requirement is shorter than the existing requirement today for all exchanges that are not reporting issuers. Nasdaq Canada, Neo Exchange and CSE each currently are required by their recognition orders to provide unconsolidated interim financial statements within 60 days of each quarter. TSX is the only exception, where the requirement is 45 days. Differences in these requirements are based on the TSX being a reporting issuer and needing to comply with the 45-day reporting requirement of Part 4 4.4 of National Instrument 51-102. Given that the policy reasons for requiring public issuers to file interim financial statements (which also must be reported publicly) within 45 days do not apply to private companies we see no reason to hold all exchanges to a more burdensome standard. The existing 60-day requirement should be maintained.

D. CHANGES TO FORM 21-101F3

We believe the CSA can more effectively achieve burden reduction with regard to streamlining the reporting requirements in Form F3 by eliminating additional information currently required in the Form F3. Specifically, the information required in items 4 through 7 of Part A – General Marketplace Information and the requirement for Equity Marketplaces in Part B – Market Activity Information of the Form F3 should be removed as this information is either already available to staff, or does not materially contribute to oversight.

Part A – General Marketplace Information

Items 4: a list of amendments in Marketplace Forms that were filed during the quarter and implemented.
Items 5: a list of amendments in Marketplace Forms that were filed during the quarter but not implemented.

Information about amendments made to Form 21-101F1 and Form 21-101F2 ("Marketplace Forms") is available to staff responsible for reviewing marketplace amendments as part of their oversight responsibilities. Marketplaces are required to provide staff with the intended implementation date for a change when an amendment is filed and confirm this date when possible. Staff therefore already has the information requested making the reporting requirement duplicable.

[10] 10(a) of the Protocol provides that Staff will us their best efforts to complete their review of a Fee Changes within seven business days from the date of filing of the proposed fee Change, but can notify the Exchange if they anticipate that their review of the proposed Fee Change will exceed the seven days.

Item 7 – Systems Changes –a brief description of any significant changes to the systems and technology used by the marketplace that support order entry, order routing, execution, trade reporting, trade comparison, data feeds, co-location and if applicable, market surveillance and trade clearing that were planned, under development, or implemented during the quarter.

Marketplaces are required to file amendments to their Marketplace Forms for significant changes and non-significant changes. Significant changes to the systems and technology used by the marketplace that support order entry, order routing, execution, trade reporting, trade comparison, data feeds, co-location and if applicable, market surveillance and trade clearing will generally require filing a significant change.[11] Those that are not significant will be filed as housekeeping changes, again making this information already available.

Part B – Marketplace Activity Information

Section 1 – Equity Marketplace Trading Exchange-Listed Securities

i. Chart 1 – General Trading Activity for Equity Marketplaces Trading Exchange Listed Securities
ii. Chart 2 Crosses – market activity statistics for Intentional, Internal, and Other Crosses
iii. Chart 3 - Order Information
iv. Chart 4 – Most traded Securities
v. Chart 5 – Trading by marketplace participant – repealed

Information requested in charts 1 through 5 is available from IIROC.

vi. Chart 6 – Routing Activities

Information about marketplace routing activity was first introduced when it was common for marketplaces to use a router to route orders to other marketplaces to comply with their Order Protection Rule obligations. Today only two marketplaces offer a routing service and only one uses it for OPR protection purposes. The value of this information is immaterial to effective oversight and should be eliminated.

By removing the requirement for this information to be reported by marketplaces in the Form F3 regulatory burden will be reduced without negatively impacting effective oversight. Should staff believe certain this information or additional information is important, requests can be made on an ad hoc basis consistent with oversight practices today.

[11] Part 6 of CP which describes that changes made to the structure of the marketplace, including procedures governing how orders are entered, displayed (if applicable), executed, how they interact, are cleared and settled and new or changes to order types are always considered significant changes. Changes made to the systems and technology used by the marketplace that support order entry, order routing, execution, trade reporting, trade comparison, data feeds, co-location and, if applicable, market surveillance and trade clearing, including those affecting capacity are also listed as those that may be considered significant changes.

E. OTHER CHANGES

I. Introduce an Exemption Framework for Foreign ATSs Trading Foreign Listed and/or Traded Securities

The requirements for foreign fixed income ATSs considered to be doing business in Canada results in an unnecessary regulatory burden, regulatory duplication, and alienates Canadian participants from being able to access these marketplaces. Canada is almost unique globally in its interpretation of the business trigger for when a foreign marketplace is considered to be doing business. In the case of the U.S. domiciled Nasdaq Fixed Income ("NFI") ATS, which operates in 22 different jurisdictions globally, Canada is the only jurisdiction other than the U.S. where NFI is considered to be doing business, and is required to be regulated like a domestic ATS.

The process of becoming an approved ATS and complying with the Instrument is expensive and often creates competitive disadvantages for these marketplaces in their home jurisdiction. The filing requirements in Part 3 of the Instrument stifles innovation and impedes competition, as it results in delays to product implementation, technological enhancements, and competitive price changes. Where a public notice is required for a significant change, information about the new product or technological enhancement is made available to competitors, creating a significant competitive disadvantage. The Internal System Review is also expensive, and while exemption have recently been granted from this requirement, applications for exemption are expensive in their own right. Finally, the requirement to standardize fees across all Canadian participants does not follow international practice (particularly in the non-equities markets) and what we understand is common practice for Inter Dealer Bond Brokers ("IDBB") in Canada today. This places Canadian participants at a competitive disadvantage to other participants, as they are not able to avail themselves of certain other fee structures available to non-Canadian participants. Taken together, these regulatory limitations represent a substantial obstacle, and a disincentive for foreign ATS's to make their services available to Canadian participants.

The current rules also specifically promote an un-level playing field in the fixed income markets, particularly for foreign ATSs that trade Canadian fixed income securities over foreign fixed income securities. The IDBB designation which exempts an IDBB from the requirements of NI 21-101 (with the exception of the transparency requirements of Part 8) is only available to a marketplace that trades Canadian fixed income securities. This results in greater regulatory requirements and an increased burden for a foreign ATS that trades Canadian fixed income securities as opposed to foreign fixed income securities.

If we are to recognize that these foreign marketplaces are already heavily regulated in their home jurisdictions, requiring compliance with the Instrument creates unnecessary regulatory duplication and inefficiency. In the United States for example, an ATS is required to be an SEC registered broker-dealer and to comply with Regulation ATS. Depending on the asset class in question, there may be further oversight from other regulatory bodies also. We believe that the CSA should exempt foreign marketplaces from domestic regulatory requirements by relying on the regulatory regime of their home jurisdiction, an approach which has already been taken successfully for foreign exchanges, clearing agencies and Swap Execution Facilities. We strongly encourage the CSA to consider these steps for foreign ATSs, and help facilitate access for Canadian participants to these marketplaces.

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II. Application of Staff Notice 21-101

A more flexible approach needs to be taken by the OSC in its interpretation of OSC Staff Notice 21-706 ("SN 21-706"). SN 21-706 provides guidance around the timing for notifications that must be made before a marketplace implements a material change to its systems. Despite 21-706 providing flexibility for Staff to decide what period of time is considered reasonable on a case-by-case basis (generally three months after Commission approval) in practice, SN 21-706 has served to mandate a minimum 90-day period before a marketplace can make any change to its systems ("90-Day Requirement"). Applying the 90-Day Requirement has resulted in an unnecessary delay in product development and deployment by marketplaces creating a minimum 135-day period (45-day requirement to implement a significant change plus the 90-Day Requirement) before a marketplace can introduce a change. This in turn has delayed the ability for participants to use new features to achieve trading objectives and more effectively manage risk, disadvantaged investor protection and created capital market inefficiencies.

The 90-Day Requirement has been applied for all systems changes without consideration about the downstream impact of a change including whether the new feature is optional or necessary for regulatory purposes (requiring all vendors and participants to make changes to their systems to accommodate the change). The interpretation of the SN 21-706 should provide for different requirements for different types of changes. We recommend that the 90-Day Requirement only be applied to new marketplaces when they begin operations and for mandatory changes while a 30-day notification requirement be introduced for non-mandatory changes. Taking this approach will significantly shorten the time for marketplaces to deliver new features to participants to assist achieving their trading objectives.

We thank the CSA for its consideration of these comments and would welcome the opportunity to discuss further our views with staff.

Sincerely,

Nasdaq Canada