Note: [01 Oct 2015] – Amendments to NI 21-101. Refer to Annex B of the CSA Notice announcing amendments to NI 21-101 dated 25 Jun 2015.

Amendments to National Instrument 21-101 Marketplace Operation

- 1. National Instrument 21-101 Marketplace Operation is amended by this Instrument.
- 2. National Instrument 21-101 Marketplace Operation is amended by replacing "shall" wherever it occurs with "must".
- 3. Section 1.1 is amended
 - (a) in paragraph (c) of the definition of "government debt security" by adding "in Canada" after "body",
 - (b) in the definition of "information processor" by adding "and, in Québec, that is a recognized information processor" after "Form 21-101F5",
 - (c) in subparagraph (a)(iv) of the definition of "marketplace" by replacing ";" with ";",
 - (d) in the definition of private enterprise by replacing "Accounting" with "Accounting", and
 - (e) by adding the following definition:

"participant dealer" means a participant dealer as defined in Part 1 of National Instrument 23-103 Electronic Trading and Direct Electronic Access to Marketplaces;

4. Section 1.4 is amended

- (a) in subsection (1) by deleting "Alberta and", and
- (b) by replacing "Commodity Futures Act" with "Commodity Futures Act" wherever it occurs.

5. Section 3.2 is amended

- (a) in subsection (1) by replacing "Form" with "applicable form" after "in the manner set out in the",
- (b) by adding the following subsection:
 - (1.1) A marketplace that has entered into an agreement with a regulation services provider under NI 23-101 must not implement a significant change to a

matter set out in Exhibit E – Operation of the Marketplace of Form 21-101F1 or Exhibit E – Operation of the Marketplace of Form 21-101F2 as applicable, or Exhibit I – Securities of Form 21-101F1 or Exhibit I – Securities of Form 21-101F2 as applicable, unless the marketplace has provided the applicable exhibit to its regulation services provider at least 45 days before implementing the change.,

- (c) in subsection (3) by replacing "Form" with "applicable form" after "amendment to the information provided in the", and
- (d) by adding the following subsections:
 - (4) The chief executive officer of a marketplace, or an individual performing a similar function, must certify in writing, within 30 days after the end of each calendar year, that the information contained in the marketplace's current Form 21-101F1 or Form 21-101F2, as applicable, including the description of its operations, is true, correct, and complete and that the marketplace is operating as described in the applicable form.
 - (5) A marketplace must file an updated and consolidated Form 21-101F1 or Form 21-101F2, as applicable, within 30 days after the end of each calendar year..
- 6. Paragraph 4.1(1)(c) is amended by adding "unmodified" before "auditor's report".
- 7. Section 5.1 is amended by replacing ";" with "," wherever it occurs.
- 8. Section 5.7 is amended by deleting an additional space after "not".
- 9. Section 5.10 is amended
 - (a) in subsection (1) by replacing ";" with "," wherever it occurs, and
 - (b) by adding the following subsections:
 - (1.1) Despite subsection (1), a marketplace may release a marketplace participant's order or trade information to a person or company if the marketplace
 - (a) reasonably believes that the information will be used solely for the purpose of capital markets research,
 - (b) reasonably believes that if information identifying, directly or indirectly, a marketplace participant or a client of the marketplace participant is released,

- (i) it is required for the purpose of the capital markets research, and
- (ii) that the research is not intended for the purpose of
 - (A) identifying a particular marketplace participant or a client of the marketplace participant, or
 - (B) identifying a trading strategy, transactions, or market positions of a particular marketplace participant or a client of the marketplace participant,
- (c) has entered into a written agreement with each person or company that will receive the order and trade information from the marketplace that provides that
 - (i) the person or company must
 - (A) not disclose to or share any information with any person or company if that information could, directly or indirectly, identify a marketplace participant or a client of the marketplace participant without the marketplace's consent, other than as provided under subparagraph (ii) below,
 - (B) not publish or otherwise disseminate data or information that discloses, directly or indirectly, a trading strategy, transactions, or market positions of a marketplace participant or a client of the marketplace participant,
 - (C) not use the order and trade information, or provide it to any other person or company, for any purpose other than capital markets research,
 - (D) keep the order and trade information securely stored at all times,
 - (E) keep the order and trade information for no longer than a reasonable period of time after the completion of the research and publication process, and
 - (F) immediately inform the marketplace of any breach or possible breach of the confidentiality of the information provided,

- (ii) the person or company may disclose order or trade information used in connection with research submitted to a publication if
 - (A) the information to be disclosed will be used solely for the purposes of verification of the research carried out by the person or company,
 - (B) the person or company must notify the marketplace prior to disclosing the information for verification purposes, and
 - (C) the person or company must obtain written agreement from the publisher and any other person or company involved in the verification of the research that the publisher or the other person or company will
 - (I) maintain the confidentiality of the information,
 - (II) use the information only for the purposes of verifying the research,
 - (III) keep the information securely stored at all times.
 - (IV) keep the information for no longer than a reasonable period of time after the completion of the verification, and
 - (V) immediately inform the marketplace of any breach or possible breach of the agreement or of the confidentiality of the information provided, and
- (iii) the marketplace has the right to take all reasonable steps necessary to prevent or address a breach or possible breach of the confidentiality of the information provided or of the agreement.
- (1.2) A marketplace that releases a marketplace participant's order or trade information under subsection (1.1) must

- (a) promptly inform the regulator or, in Québec, the securities regulatory authority, in the event the marketplace becomes aware of any breach or possible breach of the confidentiality of the information provided or of the agreement, and
- (b) take all reasonable steps necessary to prevent or address a breach or possible breach of the confidentiality of the information provided or of the agreement..
- 10. Section 5.12 is amended by deleting ":" after "the marketplace must".
- 11. In the following provisions "key services and systems" is replaced with "key services or systems":
 - (a) Paragraph 5.12(b);
 - (b) Paragraph 5.12(c).
- 12. Paragraph 5.12(e) is amended by deleting "," after "on behalf of the marketplace".
- 13. National Instrument 21-101 Marketplace Operation is amended by adding the following section:
 - 5.13 Access Arrangements with a Service Provider

If a third party service provider provides a means of access to a marketplace, the marketplace must ensure the third party service provider complies with the written standards for access that the marketplace has established pursuant to paragraph 5.1(2)(a) when providing the access services..

- 14. In the following provisions ";" is replaced with ",":
 - (a) Paragraph 6.7(1)(a);
 - (b) Paragraph 6.7(1)(b).
- 15. Section 7.1 is amended by adding the following subsection:
 - (3) A marketplace that is subject to subsection (1) must not make the information referred to in that subsection available to any person or company before it makes that information available to an information processor or, if there is no information processor, to an information vendor..

- 16. Section 7.2 is amended by renumbering it as subsection 7.2(1) and by adding the following subsection:
 - (2) A marketplace that is subject to subsection (1) must not make the information referred to in that subsection available to any person or company before it makes that information available to an information processor or, if there is no information processor, to an information vendor..
- 17. Subsection 8.1(5) is amended by replacing "interdealer" with "inter-dealer".
- 18. Section 8.4 is amended by replacing "interdealer" with "inter-dealer".
- 19. Section 10.1 is amended
 - (a) by adding "," after "disclose",
 - (b) by adding "," after "website",
 - (c) by adding "," after "including",
 - (d) by adding "," after "but not limited to", and
 - (e) by deleting ":" after "information related to".
- 20. In the following provisions ";" is replaced with ",":
 - (a) Paragraph 10.1(a);
 - (b) *Paragraph* 10.1(b);
 - (c) *Paragraph 10.1(c)*;
 - (*d*) *Paragraph* 10.1(*d*);
 - (e) Paragraph 10.1(e);
 - (f) Paragraph 10.1(f).
- 21. Paragraph 10.1(g) is amended by replacing "; and" with ",".
- 22. Paragraph 10.1(h) is amended by replacing "." with ",".

23. Section 10.1 is amended by adding the following paragraphs:

- (i) any access arrangements with a third party service provider, including the name of the third party service provider and the standards for access to be complied with by the third party service provider, and
- (j) the hours of operation of any testing environments provided by the marketplace, a description of any differences between the testing environment and production environment of the marketplace and the potential impact of these differences on the effectiveness of testing, and any policies and procedures relating to a marketplace's use of uniform test symbols for purposes of testing in its production environment..
- 24. Subparagraph 11.2(1)(c)(xviii) is amended by replacing ";" with ",".

25. Section 11.2.1 is amended

- (a) in paragraph (a) by deleting "," following "the information required by the regulation services provider",
- (b) in paragraph (a) by adding "and in the manner requested by the regulation services provider," after "in electronic form",
- (c) in paragraph (b) by deleting "," following "under securities legislation", and
- (d) in paragraph (b) by adding "and in the manner requested by the securities regulatory authority" after "in electronic form".

26. Subsection 11.3(1) is amended

- (a) in paragraph (f) by deleting "and",
- (b) in paragraph (g) by replacing "." with ";" after "subsections 13.1(2) and 13.1(3)", and
- (c) by adding the following paragraphs:
 - (h) a copy of any agreement referred to in section 5.10; and
 - (i) a copy of any agreement referred to in paragraph 5.12(c)..

27. Section 12.1 is amended

(a) by replacing "For each of its systems that support" with "For each system, operated by or on behalf of the marketplace, that supports",

- (b) by replacing ";" with "," wherever it occurs,
- (c) in paragraph (c) by deleting "or delay", and
- (d) in paragraph (c) by adding ", delay or security breach and provide timely updates on the status of the failure, malfunction, delay or security breach, the resumption of service and the results of the marketplace's internal review of the failure, malfunction, delay or security breach." after "malfunction".
- 28. National Instrument 21-101 Marketplace Operation is amended by adding the following section:
 - **12.1.1 Auxiliary Systems** For each system that shares network resources with one or more of the systems, operated by or on behalf of the marketplace, that supports order entry, order routing, execution, trade reporting, trade comparison, data feeds, market surveillance and trade clearing, that, if breached, would pose a security threat to one or more of the previously mentioned systems, a marketplace must
 - (a) develop and maintain an adequate system of information security controls that relate to the security threats posed to any system that supports order entry, order routing, execution, trade reporting, trade comparison, data feeds, market surveillance and trade clearing, and
 - (b) promptly notify the regulator, or in Québec, the securities regulatory authority and, if applicable, its regulation services provider, of any material security breach and provide timely updates on the status of the breach, the resumption of service, where applicable, and the results of the marketplace's internal review of the security breach..

29. Subsection 12.2(1) is replaced with:

- (1) A marketplace must annually engage a qualified party to conduct an independent systems review and prepare a report in accordance with established audit standards to ensure that the marketplace is in compliance with
 - (a) paragraph 12.1(a),
 - (b) section 12.1.1, and
 - (c) section 12.4..

30. Paragraph 12.2(2)(b) is replaced with the following:

(b) the regulator or, in Québec, the securities regulatory authority, by the earlier of the 30th day after providing the report to its board of directors or the audit committee or the 60th day after the calendar year end..

31. Section 12.3 is amended

- (a) by replacing subsection (3) with the following:
 - (3) A marketplace must not begin operations before
 - (a) it has complied with paragraphs (1)(a) and (2)(a),
 - (b) its regulation services provider, if applicable, has confirmed to the marketplace that trading may commence on the marketplace, and
 - (c) the chief information officer of the marketplace, or an individual performing a similar function, has certified in writing to the regulator, or in Québec, the securities regulatory authority, that all information technology systems used by the marketplace have been tested according to prudent business practices and are operating as designed.,
- (b) by adding the following subsection:
 - (3.1) A marketplace must not implement a material change to the systems referred to in section 12.1 before
 - (a) it has complied with paragraphs (1)(b) and (2)(a), and
 - (b) the chief information officer of the marketplace, or an individual performing a similar function, has certified in writing to the regulator, or in Québec, the securities regulatory authority, that the change has been tested according to prudent business practices and is operating as designed., *and*
- (c) in subsection (4) by replacing "Paragraphs 12.3(1)(b) and 2(b) do" with "Subsection (3.1) does".
- 32. National Instrument 21-101 Marketplace Operation is amended by adding the following section:

12.3.1 Uniform Test Symbols

A marketplace must use uniform test symbols, as set by a regulator, or in Québec, the securities regulatory authority, for the purpose of performing testing in its production environment..

33. Section 12.4 is replaced with the following:

12.4 Business Continuity Planning

- (1) A marketplace must
 - (a) develop and maintain reasonable business continuity plans, including disaster recovery plans, and
 - (b) test its business continuity plans, including disaster recovery plans, according to prudent business practices on a reasonably frequent basis and, in any event, at least annually.
- (2) A marketplace with a total trading volume in any type of security equal to or greater than 10% of the total dollar value of the trading volume in that type of security on all marketplaces in Canada during at least two of the preceding three months of operation must establish, implement, and maintain policies and procedures reasonably designed to ensure that each system, operated by or on behalf of the marketplace, that supports order entry, order routing, execution, trade reporting, trade comparison, data feeds, and trade clearing, can resume operations within two hours following the declaration of a disaster by the marketplace.
- (3) A recognized exchange or quotation and trade reporting system, that directly monitors the conduct of its members or users and enforces requirements set under section 7.1(1) or 7.3(1) of NI 23-101, must establish, implement, and maintain policies and procedures reasonably designed to ensure that each system, operated by or on behalf of the marketplace, that is critical and supports real-time market surveillance, can resume operations within two hours following the declaration of a disaster at the primary site by the exchange or quotation and trade reporting system.
- (4) A regulation services provider, that has entered into a written agreement with a marketplace to conduct market surveillance for the marketplace, must establish, implement, and maintain policies and procedures reasonably designed to ensure that each system, operated by or on behalf of the regulation services provider, that is critical and supports real-time market surveillance can resume operations within two hours following the declaration of a disaster at the primary site by the regulation services provider..

34. National Instrument 21-101 Marketplace Operation is amended by adding the following section:

12.4.1 Industry-Wide Business Continuity Tests

A marketplace, recognized clearing agency, information processor, and participant dealer must participate in all industry-wide business continuity tests, as determined by a regulation services provider, regulator, or in Québec, the securities regulatory authority...

- 35. In the following provisions "and settled" is replaced with "to a clearing agency":
 - (a) Subsection 13.1(2);
 - (b) Subsection 13.1(3).
- 36. National Instrument 21-101 Marketplace Operation is amended by adding the following section:

13.2 Access to Clearing Agency of Choice

- (1) A marketplace must report a trade in a security to a clearing agency designated by a marketplace participant.
- (2) Subsection (1) does not apply to a trade in a security that is a standardized derivative or an exchange-traded security that is an option.

37. Section 14.4 is amended

- (a) in subsection (4) by adding "or changes to an electronic connection" after "in a timely manner an electronic connection", and
- (b) by adding the following subsections:
 - (6.1) If an information processor is operated as a division or unit of a person or company, the person or company must file the income statement and the statement of cash flow of the information processor and any other information necessary to demonstrate the financial condition of the information processor within 90 days after the end of the financial year of the person or company.
 - (7.1) If an information processor is operated as a division or unit of a person or company, the person or company must file the financial budget relating to the information processor within 30 days of the start of the financial year of the person or company.

38. Section 14.5 is amended

- (a) by replacing ";" with "," wherever it occurs, and
- (b) by replacing subparagraph (d)(ii) with the following:
 - (ii) the regulator or, in Québec, the securities regulatory authority, by the earlier of the 30^{th} day after providing the report to its board of directors or the audit committee or the 60^{th} day after the calendar year end, and.

39. Section 14.6 is replaced by the following:

14.6 Business Continuity Planning

An information processor must

- (a) develop and maintain reasonable business continuity plans, including disaster recovery plans,
- (b) test its business continuity plans, including disaster recovery plans, according to prudent business practices and on a reasonably frequent basis and, in any event, at least annually, and
- (c) establish, implement, and maintain policies and procedures reasonably designed to ensure that its critical systems can resume operations within one hour following the declaration of a disaster by the information processor..

40. Section 14.7 is amended

- (a) by replacing "with this Instrument, or other than a securities regulatory authority, unless:" with "with this Instrument or a securities regulatory authority, unless", and
- (b) in subsection (a) by replacing ";" with ",".

41. Section 14.8 is amended

- (a) by deleting ":" after "but not limited to", and
- (b) by replacing ";" with "," wherever it occurs.

42. Form 21-101F1 is amended

(a) by replacing "shall" wherever it occurs with "must",

- (b) by replacing "should" wherever it occurs with "must", and
- (c) under "Type of Filing" by adding "; AMENDMENT No." after "AMENDMENT".
- 43. Exhibit C of Form 21-101F1 is amended by adding "and the Board mandate" after "including their mandates".
- 44. Exhibit D of Form 21-101F1 is amended
 - (a) in paragraph 6 by deleting ":" wherever it occurs,
 - (b) by deleting ";" wherever it occurs, and
 - (c) by adding "," after "private enterprises".
- 45. Exhibit E of Form 21-101F1 is amended
 - (a) by replacing "not be limited" with "is not limited",
 - (b) by replacing "Description" wherever it occurs with "A description", and
 - (c) by adding the following to the end of the exhibit:

The filer must provide all material contracts related to order routing, execution, trade reporting, trade comparison, data feeds, market surveillance and trade clearing..

- 46. Exhibit F of Form 21-101F1 is amended
 - (a) by adding "," after "routing, trading, execution, data", and
 - (b) by adding the following sections:
 - 4. A copy of the marketplace's policies and procedures for the selection of service providers to which key services and systems may be outsourced and for the evaluation and approval of such outsourcing arrangements that are established and maintained pursuant to paragraph 5.12(a) of National Instrument 21-101 *Marketplace Operation*.
 - 5. A description of any conflicts of interest between the marketplace and the service provider to which key services and systems are outsourced and a copy of the policies and procedures to mitigate and manage such conflicts of interest that have been established pursuant to paragraph 5.12(b) of National Instrument 21-101 *Marketplace Operation*.

- 6. A description of the measures the marketplace has taken pursuant to paragraph 5.12(f) of National Instrument 21-101 *Marketplace Operation* to ensure that the service provider has established, maintains and periodically tests an appropriate business continuity plan, including a disaster recovery plan.
- 7. A description of the measures the marketplace has taken pursuant to paragraph 5.12(g) of National Instrument 21-101 *Marketplace Operation* to ensure that the service provider protects the proprietary, order, trade or any other confidential information of the participants of the marketplace.
- 8. A copy of the marketplace's processes and procedures to regularly review the performance of a service provider under an outsourcing arrangement that are established pursuant to paragraph 5.12(h) of National Instrument 21-101 *Marketplace Operation*..

47. Exhibit G of Form 21-101F1 is replaced with the following:

General

Provide:

- 1. A high level description of the marketplace's systems that support order entry, order routing, execution, trade reporting, trade comparison, data feeds, co-location and if applicable, market surveillance and trade clearing.
- 2. An organization chart of the marketplace's information technology group unless otherwise provided as part of the report required by subsection 12.2(1) of the Instrument.

Business Continuity Planning

Please provide a description of the marketplace's business continuity and disaster recovery plans that includes, but is not limited to, information regarding the following:

- 1. Where the primary processing site is located.
- 2. What the approximate percentage of hardware, software and network redundancy is at the primary site.
- 3. Any uninterruptible power source (UPS) at the primary site.
- 4. How frequently market data is stored off-site.

- 5. Any secondary processing site, the location of any such secondary processing site, and whether all of the marketplace's critical business data is accessible through the secondary processing site.
- 6. The creation, management, and oversight of the plans, including a description of responsibility for the development of the plans and their ongoing review and updating.
- 7. Escalation procedures, including event identification, impact analysis, and activation of the plans in the event of a disaster or disruption.
- 8. Procedures for internal and external communications, including the distribution of information internally, to the securities regulatory authority, and, if appropriate, to the public, together with the roles and responsibilities of marketplace staff for internal and external communications.
- 9. The scenarios that would trigger the activation of the plans.
- 10. How frequently the business continuity and disaster recovery plans are tested.
- 11. Procedures for record keeping in relation to the review and updating of the plans, including the logging of tests and deficiencies.
- 12. The targeted time to resume operations of critical information technology systems following the declaration of a disaster by the marketplace and the service level to which such systems are to be restored.
- 13. Any single points of failure faced by the marketplace.

Systems Capacity

Please provide information regarding:

- 1. How frequently future market activity is evaluated in order to adjust processing capacity.
- 2. The approximate excess capacity maintained over average daily transaction volumes.
- 3. How often or at what point stress testing is performed.

Systems

Please provide information regarding:

1. Whether the trading engine was developed in-house or by a commercial vendor.

- 2. Whether the trading engine is maintained in-house or by a commercial vendor and provide the name of the commercial vendor, if applicable.
- 3. The marketplace's networks. Please provide a copy of a high-level network diagram of the systems referred to in section 12.1 of the Instrument, as applicable, together with a description of the external points of contact for the marketplace's networks.
- 4. The message protocols supported by the marketplace's systems.
- 5. The transmission protocols used by the marketplace's systems.

IT Risk Assessment

Please describe the IT risk assessment framework, including:

- 1. How the probability and likelihood of IT threats are considered.
- 2. How the impact of risks are measured according to qualitative and quantitative criteria.
- 3. The documentation process for acceptable residual risks with related offsets.
- 4. The development of management's action plan to implement a risk response to a risk that has not been accepted..
- 48. Exhibit I of Form 21-101F1 is amended by replacing "Filer" wherever it occurs with "filer".
- 49. Exhibit J of Form 21-101F1 is amended by replacing "Exhibit E.4" with "Exhibit E item 4".
- 50. Exhibit K of Form 21-101F1 is amended
 - (a) in section 4 by adding "Please identify if the marketplace participant accesses the marketplace through co-location." after "or other access.",
 - (b) in section 5 by deleting ":" after "indicating for each", and
 - (c) in section 5 by replacing ";" wherever it occurs with ",".
- 51. Exhibit M of Form 21-101F1 is amended
 - (a) in section 2 by adding "a copy of" after "and its members, provide", and

- (b) by deleting "." after "regulation services provider" after the box following section 2.
- 52. Exhibit N of Form 21-101F1 is amended by adding "Marketplace Operation" after "21-101".
- 53. Form 21-101F2 is amended
 - (a) in the title by replacing "INITIAL OPERATION REPORT" with "INFORMATION STATEMENT",
 - (b) by replacing "should" wherever it occurs with "must",
 - (c) by replacing "shall" wherever it occurs with "must",
 - (d) under "Type of Filing" by adding "; AMENDMENT No." after "AMENDMENT", and
 - (e) in subsection 12 of the Instructions by adding "name of" after "contracted with [".
- 54. Exhibit E of Form 21-101F2 is amended
 - (a) by replacing "not be" with "is not",
 - (b) by replacing "Description" wherever it occurs with "A description", and
 - (c) by adding the following to the end of Exhibit E:

The filer must provide all material contracts relating to order routing, execution, trade reporting, trade comparison, data feeds, market surveillance and trade clearing..

- 55. Exhibit F of Form 21-101F2 is amended
 - (a) by deleting "the" after "including any function associated with",
 - (b) by adding "data" after "clearing and settlement,", and
 - (c) by adding the following sections:
 - 4. A copy of the marketplace's policies and procedures for the selection of service providers to which key services and systems may be outsourced and for the evaluation and approval of such outsourcing arrangements that are established and maintained pursuant to paragraph 5.12(a) of National Instrument 21-101 *Marketplace Operation*.

- 5. A description of any conflicts of interest between the marketplace and the service provider to which key services and systems are outsourced and a copy of the policies and procedures to mitigate and manage such conflicts of interest that have been established pursuant to paragraph 5.12(b) of National Instrument 21-101 *Marketplace Operation*.
- 6. A description of the measures the marketplace has taken pursuant to paragraph 5.12(f) of National Instrument 21-101 *Marketplace Operation* to ensure that the service provider has established, maintains and periodically tests an appropriate business continuity plan, including a disaster recovery plan.
- 7. A description of the measures the marketplace has taken pursuant to paragraph 5.12(g) of National Instrument 21-101 *Marketplace Operation* to ensure that the service provider protects the proprietary order, trade or any other confidential information of the participants of the marketplace.
- 8. A copy of the marketplace's processes and procedures to regularly review the performance of a service provider under an outsourcing arrangement that are established pursuant to paragraph 5.12(h) of National Instrument 21-101 *Marketplace Operation*..

56. Exhibit G of Form 21-101F2 is replaced with the following:

General

Provide:

- 1. A high level description of the marketplace's systems that support order entry, order routing, execution, trade reporting, trade comparison, data feeds, co-location and if applicable, market surveillance and trade clearing.
- 2. An organization chart of the marketplace's information technology group unless otherwise provided as part of the report required by subsection 12.2(1) of the Instrument.

Business Continuity Planning

Please provide a description of the marketplace's business continuity and disaster recovery plans that includes, but is not limited to, information regarding the following:

- 1. Where the primary processing site is located.
- 2. What the approximate percentage of hardware, software and network redundancy is at the primary site.

- 3. Any uninterruptible power source (UPS) at the primary site.
- 4. How frequently market data is stored off-site.
- 5. Any secondary processing site, the location of any such secondary processing site, and whether all of the marketplace's critical business data is accessible through the secondary processing site.
- 6. The creation, management, and oversight of the plans, including a description of responsibility for the development of the plans and their ongoing review and updating.
- 7. Escalation procedures, including event identification, impact analysis, and activation of the plans in the event of a disaster or disruption.
- 8. Procedures for internal and external communications, including the distribution of information internally, to the securities regulatory authority, and, if appropriate, to the public, together with the roles and responsibilities of marketplace staff for internal and external communications.
- 9. The scenarios that would trigger the activation of the plans.
- 10. How frequently the business continuity and disaster recovery plans are tested.
- 11. Procedures for record keeping in relation to the review and updating of the plans, including the logging of tests and deficiencies.
- 12. The targeted time to resume operations of critical information technology systems following the declaration of a disaster by the marketplace and the service level to which such systems are to be restored.
- 13. Any single points of failure faced by the marketplace.

Systems Capacity

Please provide information regarding:

- 1. How frequently future market activity is evaluated in order to adjust processing capacity.
- 2. The approximate excess capacity maintained over average daily transaction volumes.
- 3. How often or at what point stress testing is performed.

Systems

Please provide information regarding:

- 1. Whether the trading engine was developed in-house or by a commercial vendor.
- 2. Whether the trading engine is maintained in-house or by a commercial vendor and provide the name of the commercial vendor, if applicable.
- 3. The marketplace's networks. Please provide a copy of a high-level network diagram of the systems referred to in section 12.1 of the Instrument, as applicable, together with a description of the external points of contact for the marketplace's networks.
- 4. The message protocols supported by the marketplace's systems.
- 5. The transmission protocols used by the marketplace's systems.

IT Risk Assessment

Please describe the IT risk assessment framework, including:

- 1. How the probability and likelihood of IT threats are considered.
- 2. How the impact of risks are measured according to qualitative and quantitative criteria.
- 3. The documentation process for acceptable residual risks with related offsets.
- 4. The development of management's action plan to implement a risk response to a risk that has not been accepted..
- 57. Exhibit I of Form 21-101F2 is amended by adding "list" after "If this is an initial filing,".
- 58. Exhibit J of Form 21-101F2 is amended
 - (a) in section 1 by replacing "Exhibit E.4" with "Exhibit E item 4", and
 - (b) in section 2 by deleting "," after "institution".
- 59. Exhibit K of Form 21-101F2 is amended
 - (a) in section 4 by adding "Please identify if the marketplace participant accesses the marketplace through co-location." after "access.",

- (b) in section 5 by deleting ":" after "for each", and
- (c) in section 5 by replacing ";" wherever it occurs with ",".
- 60. Exhibit N of Form 21-101F2 is amended by adding "Marketplace Operation" after "21-101".
- 61. Form 21-101F3 is amended by replacing "should" wherever it occurs with "must".
- 62. Section 4 of Part A of Form 21-101F3 is replaced with the following:
 - 4. A list of all amendments in the information in Form 21-101F1 or 21-101F2 that were filed with the Canadian securities regulatory authorities and implemented during the period covered by the report. The list must include a brief description of each amendment, the date filed and the date implemented..
- 63. Section 5 of Part A of Form 21-101F3 is replaced with the following:
 - 5. A list of all amendments in the information in Form 21-101F1 or 21-101F2 that have been filed with the Canadian securities regulatory authorities but not implemented as of the end of the period covered by the report. The list must include a brief description of each amendment, the date filed and the reason why it was not implemented..
- 64. Section 6 of Part A of Form 21-101F3 is replaced with the following:
 - 6. Systems If any outages occurred at any time during the period for any system relating to trading activity, including trading, routing or data, provide the date, duration, reason for the outage and its resolution..
- 65. Section 7 of Part A of Form 21-101F3 is replaced with the following:
 - 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. Please provide the current status of the changes that are under development..
- 66. Section 8 of Part A of Form 21-101F3 is repealed.
- 67. Section 1 of Part B in Chart 2 of Form 21-101F3 is amended
 - (a) by deleting "%" wherever it occurs, and
 - (b) by deleting "% Number of exchange traded securities that are".

- 68. Section 1 of Part B in Chart 3 of Form 21-101F3 is amended by deleting "%" wherever it occurs.
- 69. Section 1 of Part B of Form 21-101F3 is amended by replacing "third-party" with "third party" in item 6 beneath Chart 5.
- 70. Section 1 of Part B of Form 21-101F3 is amended by deleting item 7 beneath Chart 6.
- 71. Section 2 of Part B of Form 21-101F3 is amended
 - (a) by adding "during the quarter" after "regular trading hours" in item 1,
 - (b) by replacing "the 10 most traded fixed income securities" with "each fixed income security traded" in item 2, and
 - (c) by deleting "(based on the value of the volume traded) for trades executed" in item 2.
- 72. Section 2 of Part B in Chart 8 of Form 21-101F3 is replaced with the following:

Chart 8 – Traded fixed income securities

Category of Securities	Value Traded	Number of Trades
Domestic Unlisted Debt Securities -		
Government		
1. Federal		
[Enter issuer, maturity, coupon]		
2. Federal Agency		
[Enter issuer, maturity, coupon]		
3. Provincial and Municipal		
[Enter issuer, maturity, coupon]		
Domestic Unlisted Debt Securities –		
Corporate		
[Enter issuer, maturity, coupon]		
Domestic Unlisted Debt Securities –		
Other		
[Enter issuer, maturity, coupon]		
Foreign Unlisted Debt Securities –		
Government		
[Enter issuer, maturity, coupon]		

Category of Securities	Value Traded	Number of Trades
Foreign Unlisted Debt Securities –		
Corporate		
[Enter issuer, maturity, coupon]		
Foreign Unlisted Debt Securities –		
Other		
[Enter issuer, maturity, coupon]		

73. Section 4 of Part B in Chart 15 of Form 21-101F3 is amended

- (a) by deleting "%" wherever it occurs, and
- (b) by deleting "of" before "Volume".
- 74. Section 4 of Part B in Chart 16 of Form 21-101F3 is amended by deleting "%" wherever it occurs.
- 75. Section 4 of Part B of Form 21-101F3 is amended by deleting item 6 beneath Chart 18.
- 76. Form 21-101F4 is amended by replacing "shall" with "must" wherever it occurs.
- 77. Form 21-101F5 is amended
 - (a) by replacing "INITIAL OPERATION REPORT FOR" with "INFORMATION STATEMENT" in the title,
 - (b) in "Type of Filing" by adding ": AMENDMENT No." after "AMENDMENT",
 - (c) by replacing "should" wherever it occurs with "must",
 - (d) by replacing "shall" wherever it occurs with "must", and
 - (e) by adding "," after "National Instrument 21-101" under the heading "Exhibits".
- 78. Section 1 of Exhibit C of Form 21-101F5 is amended
 - (a) by adding "," after "standing committees of the board", and
 - (b) by adding "," after "previous year".
- 79. Section 1 of Exhibit G of Form 21-101F5 is amended
 - (a) by replacing "system" with "System" in paragraph 3,

- (b) by replacing "Description" with "A description" in paragraph 5.
- 80. Section 2 of Exhibit J of Form 21-101F5 is amended
 - (a) by replacing "exists" with "exist", and
 - (b) by adding "provide" after "National Instrument 21-101,".
- 81. Section 3 of Exhibit K of Form 21-101F5 is amended by replacing "who" with "that".
- 82. Form 21-101F6 is amended by replacing "shall" with "must" wherever it occurs.
- 83. The Instrument comes into force on October 1, 2015.