CSA/ACVM Canadian Securities Administrators Autorités canadiennes en valeurs mobilières

Notice and Request for Comment on Proposed National Instrument 24-102 *Clearing Agency Requirements* and Related Companion Policy 24-102CP

November 27, 2014

I. Introduction

The Canadian Securities Administrators (the CSA or we) are publishing the following documents for a 75 day comment period:

- Proposed National Instrument 24-102 – *Clearing Agency Requirements* (Instrument), and
- Proposed Companion Policy 24-102CP – to National Instrument 24-102 – *Clearing Agency Requirements* (Companion Policy).

The comment period will end on February 10, 2015. The Instrument and Companion Policy are revised versions of the Local Rules and Local CPs published last year in the provinces of Québec, Manitoba and Ontario described below under "II. *Background*".

The texts of the Instrument (together with Forms 24-102F1 and F2) and Companion Policy are contained in Appendix "C" of this Notice and are also available on websites of CSA jurisdictions, including:

www.lautorite.qc.ca
www.albertasecurities.com
www.bcsc.bc.ca
www.gov.ns.ca/nssc
www.fcnb.ca
www.osc.gov.on.ca
www.fcaa.gov.sk.ca
www.msc.gov.mb.ca

II. Background

On December 18, 2013, the Autorité des marchés financiers (AMF), Manitoba Securities Commission (MSC) and Ontario Securities Commission (OSC) each published for comment the following documents, in substantially similar form, in their respective jurisdictions:

- a proposed local rule 24-503 regarding clearing agency requirements (Local Rule);[1]
- a related proposed local companion policy 24-503CP (Local CP); and
- a notice and request for comments on the proposed Local Rule and Local CP (Local Request Notice).

In addition, concurrent to the publication of the Local Request Notices and proposed Local Rules and CPs, provincial securities regulatory authorities in Alberta, British Columbia, New Brunswick, Nova Scotia and Saskatchewan published Multilateral Staff Notice 24-309 (the Multilateral Notice).[2] The purpose of the Multilateral Notice was to inform the public that such authorities had also begun the development of, and intended to publish at a later date, a proposed multilateral instrument and companion policy (Multilateral Instrument and CP) substantially similar to the Local Rules and CPs.

The Local Rules and CPs had several purposes. They had set out certain requirements in connection with the application process for recognition as a clearing agency under securities legislation, or for an application to be exempt from the recognition requirement. The Local CPs contained guidance on the regulatory approaches to applications for recognition or exemption. The Local Rules had also set forth on-going requirements for *recognized* clearing agencies that operate as a central counterparty (CCP), central securities depository (CSD) or securities settlement system (SSS). These requirements were based largely on international standards applicable to financial market infrastructures (FMIs) described in the April 2012 report *Principles for financial market infrastructures* (as the context requires, the "PFMIs" or "PFMI report") published by the Committee on Payments and Market Infrastructures (CPMI)[3] and the International Organization of Securities Commissions (IOSCO).[4] A key objective of the proposed Local Rules and CPs was to adopt, in Canada, the CPMI-IOSCO international standards governing FMIs set out in the PFMI report. Implementation of the standards was intended to enhance the safety and efficiency of FMIs, limit systemic risk, and foster financial stability. It was also intended to complement the work of the CSA Derivatives Committee to develop a comprehensive regulatory framework for the trading and clearing of derivatives in Canada.

[1] The proposed Local Rules that were published for comment are the following: AMF *Regulation 24-503 Respecting Clearing House, Central Securities Depository and Settlement System Requirements;* MSC Rule 24-503 *Clearing Agency Requirements*; and OSC Rule 24-503 *Clearing Agency Requirements*(see Notice and Request for Comment on Proposed OSC Rule 24-503 *Clearing Agency Requirements* and Related Companion Policy, December 19, 2013 (2013), 36 OSCB 12209).

[2] The Multilateral Notice can be found on certain websites of such authorities. For example, see on the Website of the British Columbia Securities Commission (BCSC) at: https://www.bcsc.bc.ca/Securities_Law/Policies/Policy2/24-309_Publication_of_Clearing_Agency_Requirements_in_Ontario__Quebec_and_Manitoba__CSA_Multilateral_Staff_Notice_/

[3] Prior to September, 2014, CPMI was known as the Committee on Payment and Settlement Systems (CPSS).

[4] The PFMI report is available on the Bank for International Settlements' website (www.bis.org) and the IOSCO website (www.iosco.org).

We received nine comment letters and published a summary of the comments in CSA Notice 24-310 on July 17, 2014 (Notice 24-310).[5] As discussed in Notice 24-310, stakeholders requested that provincial securities regulators take a unified approach to implementing the PFMIs. As a result, the CSA have developed the Instrument and Companion Policy to achieve essentially the same objectives as the Local Rules and CPs and Multilateral Instrument and CP. We have provided general responses to the comments summarized in Notice 24-310 in Appendix "A" to this Notice.

III. Substance and Purpose of Instrument and Companion Policy

As with the Local Rules and CPs, the main purpose of the Instrument and Companion Policy is to implement the PFMIs as clearing agency rule requirements in Canada. Part 3 of the Instrument generally incorporates the text of the PFMI report's relevant principles and their key considerations. Part 4 of the Instrument separately sets out certain other requirements that are in addition to the PFMIs. The Companion Policy largely contains supplementary guidance (Joint Supplementary Guidance) jointly developed by the CSA and the Bank of Canada in interpreting and applying the PFMIs.

Overall, the Instrument and Companion Policy are intended to enhance the regulatory framework for recognized clearing agencies operating or seeking to operate in a Canadian jurisdiction. As discussed more fully below under "VIII. Anticipated Costs and Benefits", this regulatory framework will facilitate ongoing observance by a recognized clearing agency of international minimum standards applicable to FMIs. The CSA believe that the Instrument will support resilient and cost-effective clearing agency operations.

We discuss key elements of the Instrument and Companion Policy below under "IV. *Summary of Instrument and Companion Policy and Ongoing Policy Matters"*. We also discuss certain ongoing policy matters that may need to be clarified in the Instrument or Companion Policy. We are seeking comment on any aspect of the Instrument and Companion Policy and the ongoing policy matters. Please see below under "X. *Comment Process*" for information on how to provide comments.

IV. Summary of Instrument and Companion Policy and Ongoing Policy Matters

The Instrument is divided into seven parts.

(a) Part 1 – Definitions, Interpretation and Application

We have removed certain defined terms in the Local Rules from Part 1 of the Instrument. We believe that terms defined in the Local Rules that were derived almost verbatim from the PFMI report's glossary of terms do not need to be defined in the Instrument. As noted in the Companion Policy, regard should be had to the PFMI report in interpreting and applying the Instrument. This includes how the PFMI report defines or describes the specialized terminology it uses, which are also used in the Instrument.

[5] See CSA Staff Notice 24-310 Status Update on Proposed Local Rules 24-503 *Clearing Agency Requirements* and Related Companion Policies, July 17, 2014, (2014), 37 OSCB 6677.

Part 1 of the Instrument contains additional interpretive provisions, such as the typical meanings of affiliated entity, controlled entity and subsidiary entity that are based on the notion of *de jure* control of an entity. Consistent with the PFMIs,[6] there is also an extended *de facto*-control meaning of "affiliate" for limited purposes. These provisions will ensure that the terms are interpreted uniformly in all CSA jurisdictions.

We have included additional provisions in Part 1 of the Instrument that clarify the scope of various parts of the Instrument. For example, Part 3 of the Instrument applies to a recognized clearing agency that operates as a CCP, CSD or SSS, while Part 4 of the Instrument generally applies to a recognized clearing agency whether or not it operates as a CCP, CSD or SSS.

Subsection 1.4(2) of the Local Rules has been removed in the Instrument. The intent of the provision was to address any potential conflict or inconsistency between Part 3 of the Local Rules and a provision of proposed *Model Provincial Rule on Derivatives: Customer Clearing and Protection of Customer Collateral and Positions* published for comment on January 16, 2014 in CSA Staff Notice 91-304 (Model Rule 91-304). At this time, we do not believe that such a conflict provision will be necessary. The CSA Derivatives Committee is currently revising proposed Model Rule 91-304 (Revised Model Rule 91-304), which is expected to be republished for comment subsequent to the date of this Notice. Revised Model Rule 91-304 will include requirements on clearing agencies operating as a CCP for the clearing and settlement of trades in over-the-counter (OTC) derivatives, including requirements governing a CCP's segregation and portability arrangements to protect customer positions and associated collateral in the event of a participant's failure. See the discussion below under "(c) Part 3 – *International Standards Applicable to Recognized Clearing Agencies – (iii) Segregation and portability*".

(b) Part 2 – Clearing Agency Recognition and Exemption from Recognition

Part 2 of the Instrument is mostly unchanged from the Local Rules. We have modified some of the requirements governing the filing of financial statements by clearing agencies, including allowing statements that are prepared in accordance with the generally accepted accounting principles of the foreign jurisdiction in which the clearing agency is incorporated, organized or located.

(c) Part 3 – International Standards Applicable to Recognized Clearing Agencies

(i) Implementation of the PFMIs as rule requirements

We have significantly modified Part 3 of the Local Rules, by dividing it into two parts in the Instrument:

- Part 3 - *International Standards Applicable to Recognized Clearing Agencies*, and

[6] See footnote 39 of the PFMI report, at p. 38.

- Part 4 - *Other Requirements of Recognized Clearing Agencies.*

Part 3 of the Instrument incorporates by way of an appendix to the Instrument (Appendix A to the Instrument) clearing agency standards (Standards) that are substantially similar to the PFMI report's 23 principles (Principles) and their respective key considerations (Key Considerations) that are relevant to CCPs, SSSs and CSDs. Specifically, section 3.1 of the Instrument requires recognized clearing agencies to establish, implement and maintain rules, procedures, policies or operations designed to ensure that they meet or exceed the Standards in Appendix A to the Instrument with respect to their clearing, settlement and depository activities. Requiring clearing agencies to implement rules, procedures, policies or operations to meet or exceed the Standards is consistent with a flexible and principles-based approach to regulation. Among other reasons, a principles-based approach anticipates that a clearing agency's rules, procedures, policies and operations will need to evolve over time so that it can adequately respond to changes in technology, legal requirements, the needs of its participants and their customers, trading volumes, trading practices, linkages between financial markets, and the financial instruments traded in the markets that a clearing agency serves.

The Standards in Appendix A to the Instrument generally reproduce the text of the 23 Principles and their respective Key Considerations. Differences between the text of the Standards and the Principles and Key Considerations are minimal. We include in Appendix "B" of this Notice a black-lined version of the Standards that reflects the changes that we have made to the text of the Principles and Key Considerations in drafting the Standards. We also discuss below the following Standards (including ongoing policy matters):

- a clearing agency's recovery or orderly wind-down plans (see section 3.4 of Standard 3: *Framework for the comprehensive management of risks* and section 15.3 of Standard 15: *General business risk*);
- a clearing agency's segregation and portability arrangements for customer positions and collateral (see Standard 14: *Segregation and portability*);
- the resumption of operations of a clearing agency's critical information technology systems within two hours following disruptive events (see section 17.6 of Standard 17: *Operational risks*); and
- tiered participation arrangements in using a clearing agency's services (see Standard 19: *Tiered participation arrangements*).

(ii) Recovery or orderly wind-down plans

Section 3.4 of Standard 3: *Framework for the comprehensive management of risks* requires a clearing agency to identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern, and assess the effectiveness of a full range of options for recovery or orderly wind-down. It also notes that the clearing agency should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Moreover, where applicable, the clearing agency is expected to provide relevant authorities with the information needed for purposes of resolution planning. Section 15.3 of Standard 15: *General business risk*

requires a clearing agency, among other things, to maintain a viable recovery or orderly wind-down plan and hold sufficient liquid net assets funded by equity to implement the plan.

The CSA, together with the Bank of Canada, have decided to defer the implementation of these Standards because additional guidance on these Standards has only recently been published by the CPMI and IOSCO,[7] and we have not yet completed proposed Joint Supplementary Guidance on such Standards. We will be expecting clearing agencies to develop recovery plans in two stages, due to the complexity of recovery planning and the need to assess what recovery tools are appropriate for Canadian FMIs. Canadian authorities will expect a clearing agency's first-generation recovery plan to identify critical services, recovery triggers, stress scenarios, structural weaknesses and processes for orderly wind-down. Second-generation plans, due from clearing agenciess by the end of 2016, should additionally specify the concrete recovery tools the clearing agency plans to deploy in specific recovery scenarios. We will update stakeholders on proposed transitional dates for implementing the various stages of these Standards in 2015.

(iii) Segregation and portability

Standard 14: *Segregation and portability* requires a CCP to have rules and procedures that enable the segregation and portability[8] of positions and related collateral of a CCP participant's customers, particularly to protect the customers from the default or insolvency of the participant. Standard 14 mirrors Principle 14 and its Key Considerations in the PFMI report.

The CSA and Bank of Canada are continuing to assess certain policy considerations in implementing Standard 14 for our domestic CCPs serving cash and exchange-traded derivatives markets.[9] Currently, the vast majority of participants in such CCPs, who clear for customers, are investment dealers and members of the Investment Industry Regulatory Organization of Canada (IIROC).[10] IIROC dealer-members holding client assets are required to contribute to the Canadian Investor Protection Fund (CIPF), an investor compensation protection fund that is sponsored by IIROC and approved by the CSA. We are having ongoing discussions with stakeholders, particularly domestic CCPs, IIROC and CIPF, to determine the scope of implementing Standard 14 for domestic CCPs serving exchange-traded derivatives markets. As a result, we have decided, together with the Bank of Canada, to defer the implementation of this Standard. The CSA will update stakeholders on a proposed transitional period for implementing Standard 14 in 2015. We discuss some of the ongoing policy matters below.

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[7] See the CPMI-IOSCO's October 2014 report *Recovery of financial market infrastructures*, which is available on the Bank for International Settlements' website (www.bis.org) and the IOSCO website (www.iosco.org).

[8] Portability refers to the operational aspects of the transfer of contractual positions, funds, or securities from one party to another party. See paragraph 3.14.3 of the PFMI report.

[9] As discussed above, the CSA Derivatives Committee is separately developing a regulatory framework that will implement Principle 14 for CCPs serving the OTC derivatives markets.

[10] Investment dealers are firms registered in the category of "investment dealer" under provincial securities legislation. Investment dealers are required to be members of IIROC. See section 9.1 of National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*.

(A) Alternate approach for CCPs serving cash markets

As discussed in the Local Request Notices, the explanatory notes in the PFMI report offer an "alternate approach" to meeting Principle 14. The report notes that, in certain jurisdictions, cash market CCPs operate in legal regimes that facilitate segregation and portability to achieve protection of customer assets by alternate means that offer the same degree of protection as the approach in Principle 14.[11] We highlighted the features of the alternate approach in the Local Request Notices,[12] and sought feedback on how to apply Principle 14 and the alternate approach. We stated that, particularly for certain cash market CCPs, such as the continuous net settlement (CNS) service offered by CDS Clearing and Depository Services Inc. (CDS), once netting and novation have been completed, the CCP is unable to track customer positions directly. To do otherwise would require fundamental changes to the operations, and potentially the effectiveness of, these CCPs, as well as impact the market structure more broadly. We said that imposing a prescriptive CCP-level segregation and portability model on cash-market CCPs may have, in certain circumstances, unintended consequences for existing customer protection frameworks. Many stakeholders agreed with this view, noting in particular that the customer asset protection regime applicable to investment dealers (IIROC-CIPF regime) is an appropriate alternative framework for customers of investment dealers who are direct participants of a cash-market CCP.

We believe that the IIROC-CIPF regime meets the criteria for the alternate approach for CCPs serving certain domestic cash markets, such as CDS' CNS service, because:

- IIROC's requirements governing, among other things, an investment dealer's books and records, capital adequacy, internal controls, client account margining, and segregation of client securities and cash help ensure that customer positions and collateral can be identified timely,
- customers of an investment dealer are protected by CIPF, and
- through a combination of IIROC's member rules and oversight powers, CIPF's role in the administration of the bankruptcy of a dealer, and the overarching policy objectives of Part XII of the federal *Bankruptcy and Insolvency Act* (BIA) (discussed below), customer accounts can be moved from a failing dealer to another dealer in a timely manner and customers' assets can be restored.

[11] See paragraph 3.14.6 of the PFMI report, at p. 83.

[12] Features of such legal regimes are that, if a participant fails, (a) the customer positions can be identified in a timely manner, (b) customers will be protected by an investor protection scheme designed to move customer accounts from the failed or failing participant to another participant in a timely manner, and (c) customer assets can be restored. As an example, the PFMIs suggest that domestic law may subject participants to explicit and comprehensive financial responsibility and customer protection requirements that obligate participants to make frequent determinations (for example, daily) that they maintain possession and control of all customers' fully paid and excess margin securities and to segregate their proprietary activities from those of their customers. Under these types of regimes, pending securities purchases do not belong to the customer; thus there is no customer trade or position entered into the CCP. As a result, participants who provide collateral to the CCP do not identify whether the collateral is provided on behalf of their customers regardless of whether they are acting on a principal or agent basis, and the CCP is not able to identify positions or the assets of its participants' customers.

Part XII of the BIA sets out a special bankruptcy regime for administering the insolvency of a securities firm. The regime generally provides for all cash and securities of a bankrupt securities firm, whether held for its own account and for its customers, to vest in the appointed trustee in bankruptcy. The trustee, in turn, is directed to pool such assets into a "customer pool fund" for the benefit of the customers, which are entitled to a pro rata share of the customer pool fund according to their respective "net equity" claims as a priority claim before the general creditors are paid. To the extent there is a shortfall in customer recovery from the customer pool fund and any remaining assets in the insolvent estate, the assets are allocated among the customers on a pro rata basis. CIPF, which works in conjunction with IIROC and the bankruptcy trustee,[13] provides protection to eligible customers for losses up to $1 million per account.[14]

We have not added any provision in the Instrument or Companion Policy to explicitly govern the use of the alternate approach for CCPs serving cash markets to meet the requirements of Standard 14. The CSA are considering the need for an explicit rule provision in the Instrument, or for special guidance in the Companion Policy, to accommodate and govern the availability of the alternate approach in the cash markets. We agree with commenters' views that a rule provision or special guidance should not be framed as an exemption to the requirements of Standard 14. This is because the PFMIs acknowledge that the outcomes of the Principles can generally be achieved using different means.[15] Moreover, the Companion Policy expressly states that regard is to be given to the explanatory notes in the PFMI report, as appropriate, in interpreting and implementing the Standards. This would include paragraph 3.14.6 of the PFMI report, which describes the alternate approach for CCPs serving certain cash markets as a means to meet Principle 14.

(B) Standard 14 for domestic CCPs serving futures and other exchange-traded derivatives markets – Policy considerations

The PFMI report does not contemplate the availability of the alternate approach in respect of CCPs serving non-cash markets, such as futures and other exchange-traded markets. CSA regulators are considering the need to require enhanced CCP-level segregation and portability frameworks for customer positions and collateral held in omnibus customer account structures in such markets, such as requiring the CCP to collect customer margin on a gross basis.[16] According to the PFMI report, gross

[13] CIPF is a "customer compensation body" for the purposes of Part XII of the BIA. Where the accounts of a securities firm are protected (in whole or in part) by CIPF, the trustee in bankruptcy is required to consult with CIPF on the administration of the bankruptcy, and CIPF may designate an inspector to act on its behalf. See section 264 of the BIA.

[14] The losses must be in respect of a claim for the failure of the dealer to return or account for securities, cash balances, commodities, futures contracts, segregated insurance funds or other property received, acquired or held by the dealer in an account for the customer.

[15] See paragraph 1.19 of the PFMI report, at p. 12.

[16] Collecting margin on a gross basis means that the amount of margin a participant must post to the CCP on behalf of its customers is the sum of the amounts of margin required for each such customer. See footnote 123 of the PFMI report, at p. 84. ICE Clear Canada has recently implemented a gross customer margin segregation and portability framework to enhance customer protection and its ability to port customer positions and collateral in the event of a participant default in accordance with Principle 14. It collects gross margin on futures positions held in dealer customer accounts, a process which requires clearing participants to submit customer level position data daily to the clearing agency. ICE Clear Canada, Inc is a wholly-owned subsidiary of, and designated clearinghouse for ICE Futures

margining enhances the feasibility of portability for the CCP.[17] A number of commenters on the Local Rules and CPs raised concerns about the application of Principle 14 on CCPs serving the futures markets.

CSA regulators are continuing to review the implications of requiring enhanced CCP-level customer segregation and portability rules and procedures for CCPs serving the exchange-traded derivatives markets, particularly on CCPs, investment dealers, the IIROC-CIPF regime, and the pro rata distribution scheme of Part XII of the BIA.[18]

(C) Standard 14 for CCPs serving the OTC derivatives markets

As we note above under "(a) Part 1 – *Definitions, Interpretation and Application*", the CSA Derivatives Committee is separately developing a regulatory framework that will implement Principle 14 for CCPs serving the OTC derivatives markets. Proposed Revised Model Rule 91-304 is expected to require such CCPs to have detailed segregation and portability rules and arrangements that are more stringent than the Key Considerations of Principle 14.

(iv) Resumption of operations within two hours of disruptive events

Section 17.6 of Standard 17: *Operational risks* requires a recognized clearing agency to have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. In the Local Request Notices we had recognized that, currently, a two hour timeframe for resuming operations from a disruptive event may pose operational difficulties for certain clearing agencies. However, we also noted that a recognized clearing agency that performs any of the services of a CCP, CSD or SSS should maintain a reasonable business continuity plan that is designed to meet the two hour resumption period, in line with the emerging industry objective. We had sought feedback on a clearing agency's current abilities and future prospects to meet the objective of recovering and resuming critical systems and processes within two hours of a disruptive event. One commenter suggested that the proposed timeframe appears arbitrary and may not be the appropriate recovery objective in Canada.

We continue to believe that a CCP, CSD or SSS should maintain a reasonable business continuity plan that is designed to meet the two hour resumption period, in line with the emerging industry trend. The Instrument maintains this requirement, but as a principles-

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Canada, Inc., an electronic trading facility for agricultural futures and options contracts on canola, milling wheat, durum wheat and barley.

[17] For a discussion of the benefits and costs of gross margining of customer positions at the CCP level, see the explanatory notes at paragraphs 3.14.7 to 3.14.13 of the PFMI report.

[18] The IIROC-CIPF regime and insolvency law for investment dealers provide a customer asset protection regime that applies on a "universal" basis. That is, the IIROC-CIPF regime and Part XII of the BIA protect customers against losses arising from an investment dealer's insolvency in respect of client assets that are both cash products and derivatives products which IIROC members are permitted to hold on behalf of customers.

based rule. Section 3.1 of the Instrument requires a clearing agency to have rules, procedures, policies or operations designed to ensure that the clearing agency meets or exceeds Standard 17 (including section 17.6 of the Standard).

(v) Tiered participation arrangements

Standard 19: *Tiered participation arrangements* requires a recognized clearing agency to identify, monitor, and manage the material risks to the clearing agency arising from any tiered participation arrangements. A tiered participation arrangement occurs when firms (indirect participants) rely on the services provided by other firms – who are direct participants of a clearing agency – to use the clearing agency's services. In the Local Request Notices, we had asked, among other questions, to what extent can a CCP identify and gather information about a tiered (indirect) participant. Stakeholders generally responded by saying that it is challenging for Canadian clearing agencies to identify or gather meaningful information pertaining to indirect/tiered participants, due to the lack of legal or other contractual relationship between the clearing agency and the indirect participant. Currently, clearing agencies utilize omnibus account structures which enable the clearing agency to distinguish proprietary and client assets, but more granular detail would be needed to permit the clearing agency to identify and measure the activity of indirect participants. Clearing agencies currently have limited recourse to require the necessary information disclosures from indirect participants.

Owing to the significant work that remains for clearing agencies to obtain meaningful information on tiered participation arrangements, the CSA, together with the Bank of Canada, have decided to defer the implementation of Standard 19. We are proposing to develop Joint Supplementary Guidance on the Standard, and will update stakeholders on a proposed transitional period for implementing the Standard in 2015.

(d) Part 4 – Other Requirements of Recognized Clearing Agencies

Some commenters raised concerns about certain requirements in the Local Rules and CPs that appeared different from, or were supplementary to, the PFMIs' Principles and Key Considerations. They noted that it was unclear how and where *other* requirements in the Local Rules went beyond, modified, or replaced the PFMI requirements.

We have moved these other requirements into a separate Part 4 of the Instrument, as well as clarified and simplified them. Provisions in the Local Rules that were substantially derived from the PFMIs' explanatory notes only (i.e., not based on a Principle or Key Consideration) have been removed from the Instrument. Other requirements, which are not derived from the PFMIs, such as rules that are based on other CSA instruments,[19] have been retained in the Instrument.

We discuss below a number of the provisions in Part 4 of the Instrument.

[19] For example, National Instrument 21-101 – *Marketplace Operation* (NI 21-101) and local Rules 91-507 – *Trade Repositories and Derivatives Data Reporting*.

(i) Independent director

Section 4.1 of the Instrument requires that a recognized clearing agency's board of directors include appropriate representation by individuals who are independent of the clearing agency, and are not employees or executive officers of a participant or their immediate family members. Paragraph 3.2(4)(b) of the Local Rules contained a similar provision. We have added provisions in the Instrument (subsections 4.1(3) to (9)) that describe when an individual is considered to be "independent" of a clearing agency, which are generally consistent with its meaning in securities legislation and in the PFMIs.

(ii) Provisions modelled on NI 21-101

A number of provisions in the Local Rules that were modelled on NI 21-101 were maintained in the Instrument, and are contained in Part 4. They are the following sections: 4.6 – *Systems requirements* (formerly subsection 3.17(5) of the Local Rules); 4.7 – *Systems reviews* (formerly subsections 3.17(6) and (7) of the Local Rules); 4.8 – *Clearing agency technology requirements and testing facilities* (formerly subsections 3.17(8) to (11) of the Local Rules); 4.9 – *Testing of business continuity plans* (formerly paragraph 3.17(12)(d) of the Local Rules); and 4.10 – *Outsourcing* (formerly subsection 3.17(15) of the Local Rules).

In April 2014 the CSA proposed amendments to update NI 21-101 to reflect developments that have occurred since 2012, including updating the requirements applicable to marketplaces' systems and business continuity planning (BCP).[20] The proposed amendments relating to systems and BCP requirements are intended to help ensure that marketplace systems are reliable, robust and have adequate controls. We are of the view that certain of these amendments may be equally applicable to recognized clearing agencies due to their criticality to our capital markets, specifically:

- Business continuity testing – clarification that testing of BCPs should be conducted according to prudent business practices; and an expectation that the clearing agency facilitates and participates in industry-wide BCP tests;
- Security breaches – new requirement to notify regulators of any material security breach; and
- Expansion of scope of independent systems reviews (ISRs) – a requirement that the scope of the annual ISRs include review of the information security controls of the entity's auxiliary systems.

The CSA are currently reviewing comments received on the proposed amendments to NI 21-101. To the extent the above requirements are finalized and included in NI 21-101, we will consider including equivalent requirements for this Instrument and Companion Policy as well.

(iii) CCP skin-in-the-game requirement

[20] See CSA Notice and Request for Comment – Proposed Amendments to NI 21-101 *Marketplace Operation* and NI 23-101 *Trading Rules*, April 24, 2014, (2014), 37 OSCB 4197.

Section 4.5 of the Instrument requires a recognized clearing agency that operates as a CCP to dedicate and use a reasonable portion of its own capital to cover losses resulting from one or more participant defaults prior to applying the collateral of, or other prefunded financial resources contributed by, the non-defaulting participants. A similar provision was contained in subsection 3.13(8) of the Local Rules. A commenter expressed the view that, while the proposed Local Rule would require "skin in the game" to motivate a clearing agency to act in a manner that would minimize loss and risk to all, given the reputational risk the clearing agency has at stake as the market watches its response to a default, it is unnecessary to add any additional motivating factor.

While this is not a requirement of the PFMIs, we believe that this skin-in-the-game requirement represents international best practice, particularly for CCPs that are operated on a for-profit basis. It promotes risk culture and is a positive signal to the clearing agency's participants that the owners of the CCP have an equal stake in ensuring the robustness of CCP's risk management. The Companion Policy provides some guidance on section 4.5 of the Instrument.

(e) Part 5 – Books and Records and Legal Entity Identifier

Section 5.1 of the Instrument is new. While it largely reflects requirements that are, for the most part, already contained in securities legislation, not all books and records requirements in securities legislation of CSA jurisdictions apply necessarily to recognized and exempt clearing agencies.

Section 5.2 of the Instrument, which requires a clearing agency to identify itself by means of a single legal entity identifier, was moved from Part 2 in the Local Rules.

(f) Part 6 – Exemption

Part 6 of the Instrument contains the usual provisions in a CSA national instrument authorizing a regulator or securities regulatory authority, as the case may be, to grant an exemption from any provision of the Instrument.

(g) Part 7 – Effective Dates and Transition

The dates and transition periods proposed in the Local Rules have not been retained in the Instrument, due in large part to the time required to develop the Instrument, and the time that will be required for clearing agencies to address risk management and other gaps to meet the Standards.

We expect that the Instrument will be in force by October 2015. However, the PFMIs represent a substantial strengthening of the previous CPMI-IOSCO standards on SSSs and CCPs. We recognize that clearing agencies may need more time to implement certain aspects of the Standards. Therefore, as discussed above under "(c) Part 3 – *International Standards Applicable to Recognized Clearing Agencies*"**,** we are proposing longer transition periods for implementing certain Standards. The CSA will update stakeholders on proposed transitional periods for implementing these Standards at a later time.

(h) Companion Policy

In developing the Companion Policy, the CSA have substantially modified the Local CPs. The Local CPs had contained most of the text comprising the PFMI report's explanatory notes. We have removed such text, as we believe that reproducing the PFMI report's explanatory notes in the Companion Policy is unnecessary. However, the removal of such text does not mean that the explanatory notes do not play an important role in interpreting and applying the Standards in the Instrument. On the contrary, as noted in section 3.1 of the Companion Policy, regard is to be given to the explanatory notes in the PFMI report, as appropriate, in interpreting and implementing the Standards. Therefore, the CSA is not intending any policy change by not reproducing the explanatory notes.

Given the above, the content of the Companion Policy has been significantly reduced compared to the Local CPs. The Companion Policy now consists mostly of the Joint Supplementary Guidance developed by the CSA and the Bank of Canada. The Joint Supplementary Guidance is intended to provide additional clarity on certain aspects of some of the Standards within the Canadian context. It is directed at recognized *domestic* clearing agencies that are also regulated by the Bank of Canada. It is included in separate text boxes in the Companion Policy under the relevant headings of the Standards. We note that other recognized domestic clearing agencies should assess the applicability of the Joint Supplementary Guidance to their respective operations as well.

Joint Supplementary Guidance related to governance standards (Standard 2) was published for comment in the Local CPs. The CSA and Bank of Canada have developed further Joint Supplementary Guidance related to the Standards governing collateral (Standard 5), liquidity risk (Standard 7), general business risk (Standard 15), investment risk (Standard 16), and disclosure of an FMI's rules, key procedures and market data (Standard 23). Over time, the CSA and Bank of Canada will propose Joint Supplementary Guidance on certain other Standards as well, such as on recovery and orderly wind down plans (Standards 3 and 15) and tiered participation (Standard 19).

V. Authority for Instrument

In those jurisdictions in which the Instrument 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 Instrument.

VI. Alternatives to Instrument Considered

The CSA considered, as general alternatives, adopting the Principles and Key Considerations in a policy, or including them on a case-by-case basis as terms and conditions to a recognition order of a clearing agency. The CSA decided against these alternatives because they believe the PFMIs should be contained in a rule to provide for greater transparency of clearing agency requirements and to promote consistency across all recognized clearing agencies that operate as a CCP, CSD or SSS in carrying on business in a jurisdiction in Canada.

VII. Unpublished Materials

In proposing the Instrument and Companion Policy, the CSA did not rely on any significant unpublished study, report, or other material.

VIII. Anticipated Costs and Benefits

As mentioned in Notice 24-310, the Instrument will enhance the regulatory framework for recognized clearing agencies operating or seeking to operate in a Canadian jurisdiction. This regulatory framework will facilitate ongoing observance by recognized clearing agencies of international minimum standards applicable to FMIs. The CSA believe that the Instrument will support resilient and cost-effective clearing agency operations. It will promote transparency and support confidence among market participants in the ability of clearing agencies to provide efficient and safe clearance and settlement services, which in turn will facilitate capital formation, limit systemic risk, and foster financial stability. Also, the Instrument will further facilitate the efforts of Canadian CCPs to meet the "qualifying CCP" (QCCP) status under the Basel III and Canadian banking guidelines. Canadian and foreign banks that have certain counterparty exposures to Canadian CCPs would be subject to higher capital requirements if these CCPs do not meet the QCCP status.[21]

The CSA also believe the proposed clearing agency regulatory framework should enhance confidence in the market and better serve market participants. With the adoption of the Instrument, clearing agencies may be better positioned to withstand market volatility and evolve with market developments and technological advancements. Establishing rules that are consistent with current practice and international standards provides a good starting point for promoting appropriate risk management practices.

Finally, the Standards are intended to support the initiatives of the Group of Twenty Finance Ministers and Central Bank Governors (G20) and the Financial Stability Board (FSB) to strengthen core financial infrastructures and markets. To promote consistent global enforcement, the PFMIs are considered minimum requirements, and it is expected that members of CPMI and IOSCO apply the PFMI standards to the fullest extent possible.[22] The global and uniform implementation of the PFMIs is considered to be crucial to meeting the G20 commitments for derivative markets regulatory reforms, including requirements for centralized clearing and data reporting.

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[21] See CSA Multilateral Staff Notice 24-311 Qualifying Central Counterparties, July 28, 2014, at http://www.osc.gov.on.ca/en/SecuritiesLaw_csa_20140728_24-311_sn-qualifying-central-counterparties.htm.

[22] CPMI and IOSCO have stated that they expect full, timely and consistent implementation of the PFMIs by the authorities in all member-jurisdictions. In this regard, they have established an international task force to monitor implementation of the PFMIs by relevant authorities. Reports on PFMI implementation by CPMI and IOSCO members, including the OSC, AMF, BCSC and Bank of Canada, are available on the Bank for International Settlements' website (http://www.bis.org/cpss/index.htm) and the IOSCO website (http://www.iosco.org/library/index.cfm?section=pubdocs).

The CSA acknowledge that implementing the Standards will entail costs for the industry. Recognized clearing agencies in Canada have begun the transition to the new Standards by conducting detailed self-assessments against the Principles and Key Considerations and identifying their current gaps in observance. They are currently developing plans to address those gaps, but it will take some time for them to meet all the Standards. As noted previously, we are therefore proposing longer transition periods for implementing certain Standards.

IX. Regulations or Other Instruments to be Amended or Revoked (Ontario only)

OSC Staff Notice 24-702 *Regulatory Approach to Recognition and Exemption from Recognition of Clearing Agencies* will be withdrawn upon the implementation of the Instrument and Companion Policy.

X. Comment Process

Please submit your comments in writing on or before February 10, 2015. If you are not sending your comments by email, please include a CD containing the submissions. Address your submission to the following CSA member commissions:

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

Please deliver your comments only to the addresses that follow. Your comments will be forwarded to the remaining CSA member jurisdictions.

The Secretary
Ontario Securities Commission
20 Queen Street West, 22nd Floor
Toronto, Ontario M5H 3S8
Fax: 416-593-2318
E-mail: comments@osc.gov.on.ca

Me 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
Fax : 514-864-6381
E-mail: consultation-en-cours@lautorite.qc.ca

Please note that comments received will be made publicly available and posted on the Websites of certain CSA jurisdictions. We cannot keep submissions confidential because securities legislation requires that a summary of the written comments received during the comment period be published. In this context, you should be aware that some information which is personal to you, such as your e-mail and address, may appear in the websites. It is important that you state on whose behalf you are making the submission.

Additionally, where comments pertain specifically to the Joint Supplementary Guidance (as presented in text boxes within the Companion Policy), we request that these particular comments also be sent to the Bank of Canada at the following email address:

PFMI-consultation@bankofcanada.ca

Questions with respect to this Notice, or the Instrument and Companion Policy, may be referred to:

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APPENDIX "A"

Summary of comments to proposed Local Rules 24-503 *Clearing Agency Requirements* and related Local CPs, and CSA general responses to comments[23]

1. Theme/question[24]	2. Summary of comments	3. General responses
General		
Purposes of the proposed Local Rule and approach to drafting	One commenter disagrees with the drafting approach chosen to achieve the purposes of the proposed Local Rule (i.e. adopting the PFMIs in a rule). The commenter feels that differences, however modest, between the PFMIs and the proposed Local Rule would require complex, time consuming and costly analyses of such differences (including what, if any, non-PFMI provisions have been added to the proposed Local Rule). The commenter enumerates several possible consequences resulting from the approach (which necessitates analyses of possible differences from the PFMIs): • it may deter participants and clearing agencies from entering/expanding in the Canadian market, leading to less competition, liquidity and stability as a whole; • clearing agencies that have begun self-assessments according to PFMI standards would have to reconsider the proposed Local Rule requirements; • domestic clearing agencies held to more rigorous provincial requirements than those based in foreign jurisdictions would be disadvantaged by an uneven playing field; • CPMI-IOSCO implementation monitoring efforts of the PFMIs	We have addressed this concern. See "IV. Summary of Instrument and Companion Policy" in the Notice.

[23] Columns 1 and 2 are reproduced from Appendix "B" to Notice 24-310. Column 3 is new.
[24] A reference to a provision (i.e., section, subsection, paragraph, etc.) is a reference to a provision of the proposed Local Rule, unless otherwise indicated.

1. Theme/question[24]	2. Summary of comments	3. General responses
	would be confused by potentially different standards imposed on Canadian clearing agencies; • foreign regulators would have difficulty assessing equivalency of the proposed Local Rule to their own PFMIs-based requirements; and • assessment as a "qualifying CCP" (QCCP) could be made more difficult and uncertain, should the Local Rule's requirements be seen as different from, or potentially imposing lower standards than, the PFMIs. The commenter expresses that the stated purposes of the proposed Local Rule could be achieved by requiring direct compliance with the international standards, and only adding to a proposed Local Rule the additional requirements that would be unique to a province.	
Unified approach to rule-drafting	A commenter is concerned that the complexity of analyzing the differences between the proposed Local Rule and the PFMIs would be magnified by the impact of each jurisdiction enacting its own rule. The commenter calls for a unified approach to drafting and implementing the proposed Local Rule amongst the provincial/territorial regulators.	We have addressed this concern by proposing a National Instrument.
Requirements pursuant to existing terms and conditions	One commenter says that it was unclear whether certain recognized/exempt clearing agencies would be required to continue to comply with an existing term and condition that requires compliance with the PFMIs, possibly in addition to the proposed Local Rule.	We note that Part 3 of the Instrument, which implements the Standards/PFMIs, will apply to recognized clearing agencies only. For the most part, we would exempt foreign clearing agencies carrying on business in Canada. As such, we would rely on the regulations governing, and the oversight of, the clearing agency in its home jurisdiction, including the local rules or policies that implement the PFMIs. Where a foreign clearing agency is recognized by us because, for example, we judge it to be systemically important to our capital markets, Part 3 of the Instrument will apply. However, in view of the

1. Theme/question[24]	2. Summary of comments	3. General responses
		principles-based approach and drafting of the Standards that mirror the Principles and Key Considerations, we do not believe that compliance with Part 3 will be a burden. As such, a foreign clearing agency should not experience duplication and inefficiency of cross-border regulation. To the extent that a recognized foreign clearing agency faces a conflict or inconsistency between the requirements of sections 2.2, 2.5 and Part 4 of the Instrument and the terms and conditions of its existing order, Part 6 of the Instrument provides that the securities regulatory authority may grant an exemption from a provision of the Instrument, in whole or in part, subject to appropriate conditions or restrictions.
Foreign-based entities' compliance with proposed Local Rule, and equivalence and mutual recognition approaches	A commenter is concerned that the proposed Local Rule is not clear whether foreign-based clearing agencies that are recognized in a province will be required to comply with all new provisions, or may continue to abide by terms and conditions in their existing recognition orders. The commenter notes that adhering to the proposed Local Rule's Part 3 provisions would be duplicative and inefficient when considering the regulation in a home jurisdiction, whereas current terms and conditions already address the balance with the home jurisdiction's regulation.	See response above.
	Two commenters highlight a need for access to third-country markets / clearing agencies under the concepts of equivalence and mutual recognition. One commenter suggests that an equivalence test be based on transparent, proportionate, fair and objective grounds, and should be judged on an outcome-determinative basis that looks to the PFMIs for guidance, so as to recognize the differences in legal and regulatory structures around the world. The commenters advocate for a process similar to the EMIR scheme for the recognition of third country CCPs, which relies on an	See response above. We do not believe that an equivalency regime and process similar to the EMIR regime is necessary at this time. Part 3 of the Instrument, which implements the Standards/PFMIs, will apply to recognized clearing agencies only. For the most part, we would exempt foreign clearing agencies carrying on business in Canada. As such, we would rely on the regulations governing, and the oversight of, the clearing agency in its home jurisdiction, including the local rules or policies that implement the PFMIs. Where a foreign clearing agency is recognized by us because, for example, we judge it to be systemically important to our capital markets, Part 3 of the Instrument will apply. However, in view of the principles-based approach and drafting of the Standards that

1. Theme/question[24]	2. Summary of comments	3. General responses
	equivalence assessment of the home country's legal and regulatory structure and an MOU between ESMA and the relevant regulator. The commenters also note that terms and conditions would have to be appropriate in light of the supervision and oversight being carried out in multiple jurisdictions, and that reliance should be placed on the regulations in the home jurisdictions to implement the PFMIs in place of direct application of CSA requirements on third country CCPs.	mirror the Principles and Key Considerations, we do not believe that compliance with Part 3 will be a burden.
Part 2: Clearing agency recognition or exemption from recognition		
Request Notice question 1: Are there other factors that could be considered in determining systemic importance of a clearing agency to the relevant province? If so, please describe such factors and your reasons for including them. Subsections 2.0(2)-(5) of the proposed CP – systemic importance	A commenter notes that the proposed definition should include (a) the extent to which failure of a clearing agency would require the use of public funds to maintain the stability of Canada's financial infrastructure, and (b) the impact a clearing agency failure would have on Canada's financial infrastructure.	The Companion Policy describes a broad range of guiding factors in determining the systemic importance of a clearing agency. These factors are non-exhaustive. They inherently would include scenarios described by the commenter.
	A commenter notes that it would be useful to view the criteria within the context of the currencies in which an FMI's obligations are denominated, since any effects in Canada may depend on the value of an FMI's CDN dollar-denominated transactions.	See response above.
	A commenter suggests that the linkages between the clearing agency and other CCPs should be considered, including instances in which they assume exposure to one or more CCPs, as well as how such exposures are managed.	See response above.
	A commenter suggests that any risk exposure of the clearing agency to counterparties that are not residents of a relevant province but are systemically important to those residents should be considered.	See response above.
	A commenter highlights the absence	Canadian securities legislation generally

1. Theme/question[24]	2. Summary of comments	3. General responses
	of an appeal mechanism for parties who wish to have their determination of systemic importance reviewed.	provides for appeal mechanisms for reviewing a decision made by a regulator or securities regulatory authority.[25]
Significant changes and other changes in information Section 2.2	A commenter notes that the advanced approval requirement for significant changes and notification of fee changes is inconsistent with international regulations and thus puts domestic clearing agencies on an uneven playing field relative to foreign-based clearing agencies, who may make such changes more quickly. The commenter describes that CFTC regulations for derivatives clearing agencies, for example, require only self-certification of rule changes with the CFTC ten business days in advance of the change. The commenter requests aligning the requirements with those of the CFTC.	Subsection 2.2(2) of the Instrument prohibits a recognized clearing agency from implementing a "material change" without obtaining the prior written approval of the securities regulatory authority. However, the provision does not contain any timeline or process for obtaining such approval. We note that, typically, the terms and conditions of a recognition decision will contain provisions governing the process and timelines for obtaining prior approval of a material change. To the extent possible, the securities regulatory authority will consider the rule approval or self-certification process of another jurisdiction's regulations to which the clearing agency is subject when imposing the terms and conditions. This consideration may be carried out in concert with Part 6 of the Instrument, which provides that a securities regulatory authority may grant an exemption from a provision of the Instrument, in whole or in part, subject to appropriate conditions or restrictions.
Filing of initial audited financial statements Section 2.4	A commenter notes that while it plans to adopt the use of IFRS in the near future, it currently prepares its financial statements in accordance with UK GAAP, as per its home regulator's requirements. It requests confirmation that the provincial/territorial regulators will flexibly implement s. 2.4 to allow conformation with local regulatory requirements and that the provision will not negatively impact its operations in the relevant province.	We have addressed this concern. See section 2.4 of the Instrument.
Filing of annual audited and interim financial statements Section 2.5	A commenter urges the provincial/territorial regulators to extend the approach taken under s. 2.2 – to allowing alternate means to meeting the provision's requirement for foreign-based entities, as specified in its	See subsection 2.5(2) of the Instrument.

[25] In Ontario, see sections 8 and 9 of the OSA. In Quebec, see sections 169.1 and 322 of the *Securities Act* (Quebec) and sections 14 and 113 of the *Derivatives Act* (Quebec).

1. Theme/question[24]	2. Summary of comments	3. General responses
	recognition/exemption order – to the requirements of s. 2.5. The commenter notes that some home country regimes do not require interim financial statements to be audited.	
Part 3: On-going requirements applicable to recognized clearing agencies		
Section 3.2 – Governance		
Joint Supplementary Guidance Box 2, Item 1 Subsection 3.2(2) of the proposed CP	A commenter felt that the statement "the FMI functions should be legally separated from other functions performed by the consolidated entity in order to maximize bankruptcy remoteness of the FMI functions" does not align with the PFMIs paragraph 3.2.6. The commenter interprets that the PFMIs describe legal separation as a consideration when services present a distinct risk profile from, or pose additional risks to, its existing functions. So, whereas legal separation may be effective for multi-functional risks on a case-by-case basis, it is just one mechanism, in addition to, for example, effective governance and containment of risk through contractual terms.	The Joint Supplementary Guidance has been amended. It now provides for an option: where an FMI is part of a larger consolidated entity, it must either: (i) legally separate FMI-related functions from non-FMI-related functions performed by the consolidated entity in order to maximize bankruptcy remoteness of the FMI-related functions; or (ii) have satisfactory policies and procedures in place to manage additional risks resulting from the non-FMI-related functions appropriately to ensure the FMI's financial and operational viability.
Role of the chief compliance officer Paragraph 3.2(7)(d)	A commenter feels that the requirement could impose significant effort and cost on a clearing agency registered in multiple jurisdictions. Alternatively, the commenter proposes that recognized foreign clearing agencies be able to leverage similar information/reports provided to other regulators or information in its CPMI-IOSCO FMI Disclosure Framework Document.	This provision has been substantially retained in section 4.3 of the Instrument, which governs the requirements for having a Chief Risk Officer and Chief Compliance Officer. To the extent a recognized foreign clearing agency is subject to requirements of its home jurisdiction that achieve equivalent regulatory outcomes, Part 6 of the Instrument provides that a securities regulatory authority may grant an exemption from a provision of the Instrument, in whole or in part, subject to appropriate conditions or restrictions.
Transparency of major decisions Subsection 3.2(13)	A commenter proposes that, before a major decision that has a potential broad market impact is published, the clearing agency should be permitted to make a case for non-publication on the grounds of possible negative impact to financial stability in any of the jurisdictions in	This requirement is essentially retained in section 2.7 of Standard 2. We believe that a principles-based approach to this standard would provide the flexibility to the clearing agency to make a case for non-publication on the grounds of possible negative impact to financial stability, and to consult with, and seek the approval of, its home-

1. Theme/question[24]	2. Summary of comments	3. General responses
	which it operates. Also, the publication should be made only with the approval of a relevant home-jurisdiction regulator and/or regulator of any other impacted jurisdiction.	jurisdiction regulator and/or the regulator of any other impacted jurisdiction.
	A commenter also notes that it would make sense that ss. 3.2(13) should only apply to determinative decisions of a clearing agency's Board, since other (more preliminary or interim) resolutions may be confusing, misleading or inappropriately market-moving.	We agree that section 2.7 of Standard 2 applies only to major decisions made by the board of directors of the clearing agency.
Section 3.5 – Collateral and Section 3.7 – Liquidity risk		
Collateral – general principle Subsection 3.5(1)	A commenter says it is essential that letters of credit be perceived as permitted collateral, notwithstanding that the wording of the provision does not specifically suggest otherwise. The commenter requests positive clarity that letters of credit are intended to be included.	Consistent with footnote 63 of the PFMI report, in general we do not believe that letters of credit or other forms of guarantees are acceptable collateral. However, guarantees that are fully backed by collateral may be acceptable in rare circumstances, subject to regulatory approval. See also the Joint Supplementary Guidance on collateral.
Collateral and liquidity risk Sections 3.5, 3.7	A commenter requests flexibility in the eligible collateral a clearing agency can accept, as certain financial industries, such as the life insurance industry, tend to hold long-dated corporate securities to support the long-term nature of their activities. The commenter suggests that such participants would incur significant costs in obtaining more liquid assets to post as collateral with a clearing agency. It requests that long term assets, such as high grade corporate bonds, be considered eligible.	See the Joint Supplementary Guidance on collateral. However, we note that such guidance is applicable to recognized *domestic* clearing agencies only. If a foreign clearing agency is unwilling to accept long-dated Canadian corporate bonds and other securities, we do not believe it is appropriate for us to intervene to encourage them to accept such types of securities if they are not acceptable from a risk-management perspective.
Qualifying liquid resources Subsections 3.7(8) and (9)	With respect to par. 3.7(8)(a), a commenter notes that there is minimal liquidity risk with respect to major currencies and any potential concerns could be addressed through a foreign haircut allowance, if necessary. The commenter interprets that PFMIs paragraph 3.7.10 contemplates holding liquid resources in more than one currency, but does not strictly require that the currency of	We do not agree. The Joint Supplementary Guidance on liquidity risk makes it clear that an FMI must have qualifying liquid resources for liquidity exposures *denominated in the same currency* as the resources.

1. Theme/question[24]	2. Summary of comments	3. General responses
	liquid resources must exactly match the currency of the obligations. Further, if highly marketable collateral held in investments are permitted, given the standardization and marketability of major currencies, it does not seem reasonable to require that cash must be held in the same currency of the obligation.	
	With respect to par. 3.7(8)(b), a commenter requests that committed lines of credit be expanded to include letters of credit, as they are committed obligations of an underwriting bank.	If a particular letter of credit would be considered a committed line of credit by an underwriting bank, it would qualify.
	With respect to par. 3.7(8)(e) and the posting of bonds as collateral, a commenter notes that it is not clear what is included as "highly marketable collateral" or what funding arrangements would qualify as prearranged and highly reliable. The commenter is concerned that should customers not be able to post bonds as collateral with clearing members, because they in turn cannot post bonds to a clearing agency, customers or clearing members will be required to enter into repurchase transactions to raise cash to post, which may impose additional costs without reducing systemic risk.	See the Joint Supplementary Guidance on collateral. See also, above, our comment on the acceptability of long-dated Canadian corporate bonds and other securities by a foreign clearing agency.
Section 3.13 – Participant default rules and procedures		
Use and sequencing of financial resources Subsection 3.13(3)	A commenter asserts that it is not practical for a clearing agency to pre-commit to use particular liquidity resources in a specific order; rather the use of various resources to meet time-sensitive needs will depend on the details of a default situation. Also, the inclusion of such a hierarchy in publicly disclosed rules (or only to members) could make the clearing agency vulnerable to gaming by market participants. Accordingly, any plan for using liquidity resources should remain confidential, or at least disclosed only at a high level.	This provision in the Local Rules has not been retained in the Instrument. We note, however, that the requirement was consistent with the explanatory note in par. 3.13.3 of the PFMI report.

1. Theme/question[24]	2. Summary of comments	3. General responses
Testing of default procedures Subsection 3.13(6)	A commenter requests that only entities that clear positions for their clients' futures commission merchant (FCM) services or that are involved in loss mutualization be involved as the required participants and stakeholders for the testing of a clearing agency's default rules and procedures. The commenter explains that for clearing members of a private, non-mutualized clearing agency, clearing members are clearing for their own accounts, and do not provide services typically afforded by FCMs. Accordingly, in the event of a default and close out, non-defaulting participants are neither impacted nor included in the process. As such, these members are unwilling to, and see little value in being involved in the testing and review of relevant procedures.	We believe this concern is addressed through the explanatory notes of the PFMIs. Paragraph 3.13.7 of the PFMI report expressly contemplates that tests should include all "relevant parties or an appropriate subset" that would likely be involved in the default procedures, such as members of the appropriate board committees, participants, linked or interdependent FMIs, relevant authorities, and any related service providers. Moreover, a principles-based approach to applying section 13.4 of Standard 13 would provide some flexibility in determining the relevant "stakeholders" for the testing of a clearing agency's default rules and procedures.
Use of own capital Subsection 3.13(8)	A commenter expresses that, while the PFMIs contemplate that an FMI using its own resources is an option for the management of a default, it is not actually required. Further, while the proposed Local Rule may require 'skin in the game' to motivate a clearing agency to act in a manner that would minimize loss and risk to all, given the reputational risk the clearing agency has at stake as the market watches its response to a default, it is unnecessary to add any additional motivating factor.	See the discussion in the Notice on section 4.5 of the Instrument under "IV. Summary of Instrument and Companion Policy and Ongoing Policy Matters, (d) Part 4 – Other Requirements of Recognized Clearing Agencies, (iii) CCP skin-in-the-game requirement".
Section 3.14 – Segregation and portability		
General comments	A commenter expresses concern that, in the context of a securities firm insolvency, the application of Principle 14 to all markets may impede or negate the ability of a trustee in bankruptcy, as well as investor protection funds, from returning the firm's client funds, and will only move the Canadian framework closer to the US model, in spite of the well-received Canadian performances to date. Whereas collateral would have to be	See the discussion in the Notice on segregation and portability under "IV. Summary of Instrument and Companion Policy and Ongoing Policy Matters, (c) Part 3 – International Standards Applicable to Recognized Clearing Agencies, (iii) Segregation and portability".

1. Theme/question[24]	2. Summary of comments	3. General responses
	held on a gross basis by the CCP, CIPF coverage would be impacted because assets held at the CCP would not vest with the CIPF trustee. Indeed, the principle of pooling assets for pro-rata distribution – the cornerstone of Part XII of the *Bankruptcy and Insolvency Act* – would no longer be applied to all clients.	
	A commenter notes that in the particularly complex area of open futures positions, the application of Principle 14 would negatively affect the ability of CIPF to provide customer protection, if the CCP has custody of clients' assets and it does not vest in a trustee.	See response above.
	A commenter expresses concern about the impact to IIROC members when applying Principle 14. Such members would not have the same degree of collateral available to them for their use, where there is a different margin requirement by the CCP vs. the clearing member.	See response above.
	A commenter expresses concern about the operational issues and impacts related to a CCP undertaking the responsibility to move client assets, especially because the CCP may not have client account information which is held by a clearing member.	See response above.
Customer account structures and transfer of positions and collateral Subparagraph 3.14(4)(a)(ii)	A commenter suggests to replace "or" with "and/or" to accommodate clearing members who clear for a combination of clients that include both individual and omnibus accounts.	See the discussion in the Notice under "IV. Summary of Instrument and Companion Policy and Ongoing Policy Matters, (c) Part 3 – International Standards Applicable to Recognized Clearing Agencies, (i) Implementation of the PFMIs as rule requirements". The Standards in Appendix A to the Instrument are largely a reproduction of the text of the 23 Principles and their respective Key Considerations.
Request Notice question 2: Do you agree with the current drafting approach of section 3.14 of the Rule, i.e.,	Three commenters argue that CCPs serving the cash markets should not be required to obtain an "exemption" from section 3.14, as the wording of Principle 14 should be understood to allow, as a matter	See the discussion in the Notice on segregation and portability under "IV. Summary of Instrument and Companion Policy and Ongoing Policy Matters, (c) Part 3 – International Standards Applicable to Recognized Clearing Agencies, (iii)

1. Theme/question[24]	2. Summary of comments	3. General responses
requiring all CCPs to meet Principle 14 in its entirety (without referencing the alternate approach), and granting exemptions on a case-by-case basis to those CCPs for which the alternate approach is appropriate?	of course, the application of its "alternate approach" to cash market CCPs that provide the same protections as those envisioned by the Principle (as explained in PFMIs paragraph 3.14.6). The commenters express that an "exemption" may imply that the CCP employs a weaker approach to investor protection than that which is otherwise required by the PFMIs.	Segregation and portability".
	A commenter is unsure whether timely portability could be achieved without supporting legislation to ensure a release of funds within a certain period.	See response above.
Request Notice question 3: Should all CCPs serving the Canadian cash markets be able to avail themselves of the alternate approach to implementation of Principle 14? How could such CCPs demonstrate that customer assets and positions are protected to the same degree envisioned by Principle 14?	Three commenters conclude that cash market CCPs should be able to demonstrate how they fit within the alternate approach, if they satisfy the criteria set out in paragraph 3.4.16 of the PFMIs. The combination of IIROC rules, CIPF customer protection (that extends to all assets held in a customer's account, including securities, cash balances, commodities, futures contracts, segregated insurance funds or other property) and the Part XII *Bankruptcy and Insolvency Act* scheme, in the Canadian regulatory environment should be conducive to satisfying this alternate approach. At least one commenter feels that the alternate approach should extend to all CCPs not serving the OTC derivatives markets.	See response above.
	Two commenters argue that unintended consequences would be severe if CCPs serving markets other than the OTC derivatives markets were not able to avail themselves of the alternate approach.	See response above.
	A commenter describes several consequences that might arise if the alternate approach is unavailable for non-OTC market CCPs: (1) the efficiencies achieved by netting trades would be lost as segregation	See response above.

1. Theme/question[24]	2. Summary of comments	3. General responses
	and portability requirements would force CCPs to decompose netted trades, thereby increasing costs to the CCP and reducing the risk reduction provided by netting; (2) costly changes would be required to the CCP's margining system, in order to margin positions at a gross level; (3) for CCPs without cross-product margining, the introduction of portability could result in higher margin requirements for legitimate market activity; (4) CCPs would have to develop a communication mechanism to inform investors of their collateral/positions in the event of a CCP participant insolvency; and (5) market participants would be negatively impacted by having to undertake significant reconciliation efforts, as each trade would have to be individually inspected to note the client and its corresponding collateral.	
	A commenter suggests that CCPs could demonstrate their protection of customer assets and positions through disclosure of: (i) the nature of the information held in respect of individual clients; (ii) the roles and responsibilities of surviving participants under default scenarios; and (iii) the processes and procedures to be followed by the CCP and its surviving participants in these circumstances. It is also suggested that for CCPs obligated to test default management processes, the processes enabling portability of positions and collateral should also be tested.	See response above.
Section 3.15 – General business risk		
Determining sufficiency of liquid net assets Subsection 3.15(3)	A commenter requests that the last sentence of PFMI key consideration 15.3 be included in section 3.15(3) in order to avoid duplicate capital requirements by permitting the inclusion of equity held under international risk-based capital standards, where appropriate.	We have added such sentence in section 15.3 of Standard 15 in Appendix A to the Instrument.
Section 3.16 – Custody and investment risks		

1. Theme/question[24]	2. Summary of comments	3. General responses
Investment strategy Subsection 3.16(4)	A commenter is concerned that public disclosure of its investment strategies could negatively impact its ability to invest large amounts of cash on a daily basis. It requests that investment strategies only be disclosed at a high level and only to participants.	Section 16.4 of Standard 16 in Appendix A to the Instrument says that a clearing agency should "fully disclose" its investment strategy to its participants. We do not believe that the same type of disclosure would be required for the public. See also Standard 23, which governs certain types of public disclosures.
Section 3.17 – Operational risks		
Operational capacity, systems requirements, and incident management Paragraph 3.17(5)(e)	A commenter suggests that an alternative should be available for foreign-based recognized clearing agencies. It requests that this alternative be provided in the clearing agency's recognition order or 'notice and approval protocol'.	This requirement is now contained in Part 4 of the Instrument, which applies only to recognized clearing agencies. To the extent that a recognized foreign clearing agency is subject to requirements in its home jurisdiction that achieve equivalent regulatory outcomes, Part 6 of the Instrument provides that a securities regulatory authority may grant an exemption from a provision of the Instrument, in whole or in part, subject to appropriate conditions or restrictions.
Operational capacity, systems requirements, and incident management Subsections 3.17(8), (9)	A commenter requests that public disclosure under these subsections not include detailed proprietary information.	We have clarified this in section 4.8 of the Companion Policy.
Operational capacity, systems requirements, and incident management Subsection 3.17(11):	In respect of paragraph (b), one commenter suggests that the provision should allow a foreign-based recognized clearing agency to meet the requirement in a manner described in the terms and conditions of its recognition order or 'notice and approval protocol'. In respect of paragraph (c), one commenter expresses concern that the scope of this disclosure requirement is too broad. It suggests that it be narrowed to only include non-sensitive information that is not proprietary in nature.	See previous two responses above.
Request Notice question 4: What are a clearing agency's current abilities and future prospects to meet the objective of recovering and	A commenter requests further clarity with respect to whether (i) the ability of a clearing agency to meet the two hour requirement would impact how the requirement is applied, and (ii) whether more than two hours may be permitted, if	See the discussion in the Notice under "IV. Summary of Instrument and Companion Policy and Ongoing Policy Matters, (c) Part 3 – International Standards Applicable to Recognized Clearing Agencies, (iv) Resumption of operation within two hours after disruptive events".

1. Theme/question[24]	2. Summary of comments	3. General responses
resuming critical systems and processes within two hours of a disruptive event? Should recovery and resumption-time objectives differ according to critical importance of markets? Subparagraph 3.17(12)(c)(i)	necessary. The commenter notes that the proposed timeframe appears arbitrary and may not be the appropriate recovery objective in Canada.	
	A commenter notes that recovery and resumption time objectives should not differ from market to market, based on critical importance.	See response above.
Section 3.19 – Tiered participation arrangements		
Request Notice question 5: To what extent can a CCP identify and gather information about a tiered (indirect) participant? Section 3.19	A commenter requests further clarity as to whether (i) the ability of the clearing agency to meet the requirement would impact how the requirement is applied, and (ii) the type and extent of the information that would be required to be gathered.	See the discussion in the Notice under "IV. Summary of Instrument and Companion Policy and Ongoing Policy Matters, (c) Part 3 – International Standards Applicable to Recognized Clearing Agencies, (v) Tiered participation arrangements".
	A commenter submits that it is challenging for Canadian CCPs to identify or gather meaningful information pertaining to indirect/tiered participants, due to the lack of legal or other contractual relationship between the CCP and the indirect participant, and more generally, because Canadian clearing models are founded on the 'principal model'. The model utilizes omnibus account structures which enable the CCP to distinguish proprietary and client assets, but more granular detail would be needed to permit the CCP to identify and measure the activity of indirect participants. CCPs have limited recourse to require the necessary information disclosures from indirect participants.	See response above.
	A commenter notes that CCPs are able to gather sufficient information about their indirect participants to be able to manage the risks they pose.	See response above.
Request Notice question 6: In	A commenter agreed that all cited risks are present in tiered	See response above.

1. Theme/question[24]	2. Summary of comments	3. General responses
Canada, what types of risks (such as credit, liquidity, and operational risks) arise in tiered participation arrangements between customers and direct participants or between customers and other intermediaries that provide clearing services to such customers?	participation arrangements.	
Request Notice question 7: How can a clearing agency properly manage the risks posed by tiered participation arrangements?	A commenter described that the control, mitigation and management of risks would require, at a minimum, the disclosure of client accounts and/or securities positions by direct CCP participants. Doing so would allow the CCP to meet the minimum standards of Principle 14 and would allow a CCP to modify or calibrate its risk model towards the effective management of the credit and liquidity risks that tiered participants introduce to the clearing system.	See response above.
	A commenter suggests two layers of controls to help manage risks posed by tiered participation arrangements: (i) require the clearing agency to gather detailed information on the direct participant's customer activity in order to identify relationships and positions at the indirect participant level, and (ii) require the clearing agency to act on the information within a risk policy framework that identifies, signals and monitors risks and risk concentrations and which, where appropriate, provides incentives for participants to reduce these risks and concentrations.	See response above.
Section 3.23 – Transparency		
Changes to rules and procedures Subsection 3.23(5)	A commenter requests that a clearing agency's disclosure of changes to its rules and procedures be limited to only what is required	While this provision has not been retained in the Instrument, section 23.1 of Standard 23 in Appendix A to the Instrument requires a recognized clearing agency to

1. Theme/question[24]	2. Summary of comments	3. General responses
	by its recognition order or 'notice and approval protocol'. It also expresses its belief that disclosure should be limited to services over which the regulatory authority possesses jurisdiction.	adopt clear and comprehensive rules and procedures that are fully disclosed to participants. It also requires that relevant rules and key procedures be publicly disclosed. We note, however, that the requirement was consistent with the explanatory note in par. 3.23.3 of the PFMI report, which says that a clearing agency should have a clear and fully disclosed process for proposing and implementing changes to its rules and procedures and for informing participants and relevant authorities of these changes.
Part 5: Effective dates and transition		
Section 5.1	A commenter requests that, where a clearing agency has already carried out preparatory work or has dedicated resources to PFMIs implementation plans (that have been approved by its regulators), the transition periods should take such efforts into account. The commenter also requests that where the CSA's implementation of the PFMIs differ from CPMI-IOSCO, that the CSA provide a mechanism through which PFMI requirements that are substantively similar to the CSA requirements be grandfathered under the proposed Local Rule.	Effective dates and transition periods have been significantly modified in the Instrument. See the discussion in the Notice under "IV. Summary of Instrument and Companion Policy and Ongoing Policy Matters, (g) Part 7 – Effective Dates and Transition".
	In respect of the interaction of CSA Staff Notices 91-303 and 91-304, one commenter notes that there are significant operational implications and unknowns for customers, in terms of setting up procedures to deal with derivatives clearing agencies (DCAs) and clearing members. Accordingly, there will need to be transition time once DCAs are established and before all clearing requirements are implemented. The commenter also expresses concern that it is unclear how many DCAs will exist and how they will be differentiated, leading to the possibility that transactions that would otherwise net to zero may be required to clear at different derivatives clearing agencies,	This comment has been referred to the CSA Derivatives Committee, which is working on Revised Model Rule 91-304.

1. Theme/question[24]	2. Summary of comments	3. General responses
	thereby resulting in exposures that are not being offset.	
Subsection 5.1(2)	A commenter suggests that sections 3.4-3.7 should have the same effective date as CSA Staff Notices 91-303 and 91-304 in order to ensure customers have the protection of risk management tools when clearing trades.	We will raise this comment with the CSA Derivatives Committee.
Request Notice question 8: Are the above transition periods appropriate? If yes, please give your reasons. If not, what alternative transition periods would balance the CPMI-IOSCO's expectation of timely implementation of the PFMIs and the practical implementation needs of our markets? Subsection 5.1(3)	A commenter notes that successful implementation under the proposed timeline may be difficult.	See the discussion in the Notice under "IV. Summary of Instrument and Companion Policy and Ongoing Policy Matters, (g) Part 7 – Effective Dates and Transition".

APPENDIX "B"

Comparison of the Standards in Appendix A to NI 24-102 and text of the Principles and Key Considerations in PFMI report

Disclaimer

This document provides a comparison between the Standards in Appendix A to NI 24-102 and the text of the 23 relevant Principles and their respective Key Considerations in the PFMI report. It is intended to assist readers of the Standards in understanding where the CSA have amended the text of the Principles and their Key Considerations in drafting the Standards. An automated process was used in generating the comparison. While the CSA have used due care in preparing this document, it is possible that the comparison contains errors, omissions and inaccuracies introduced through use of the automated process. This document should therefore be used as an aid only. Readers should refer directly to the text of the Standards and the Principles and Key Considerations in order to fully understand the requirements of and differences between the two.

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~~**Principles for financial market infrastructures**~~

Appendix A

Risk Management Standards Applicable to Recognized Clearing Agencies

~~*Principle*~~**Standard 1:** *Legal basis*~~An FMI should have~~ - A recognized clearing agency has a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.

~~**Key considerations**~~

~~*1.*~~ 1.1 The legal basis ~~*should provide*~~provides a high degree of certainty for each material aspect of ~~*an FMI*~~the clearing agency's activities in all relevant jurisdictions.

~~*2. An FMI should have*~~ 1.2 The clearing agency has rules, procedures~~,~~ and contracts that are clear, understandable~~,~~ and consistent with relevant laws and regulations.

~~*3. An FMI should be able to articulate*~~1.3 The clearing agency articulates the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.

~~*4. An FMI should have*~~1.4 The clearing agency has rules, procedures~~,~~ and contracts that are enforceable in all relevant jurisdictions. There ~~*should be*~~is a high degree of certainty that actions taken by the ~~*FMI*~~clearing agency under ~~*such*~~its rules and procedures will not be voided, reversed~~,~~ or subject to stays.

~~*5. An FMI conducting*~~1.5 If the clearing agency conducts business in multiple jurisdictions~~ *should identify*~~, it identifies and ~~*mitigate*~~mitigates the risks arising from any potential ~~*conflict*~~conflicts of laws across jurisdictions.

~~*Principle*~~**Standard 2:** *Governance* ~~An FMI should have~~ A recognized clearing agency has governance arrangements that are clear and transparent, promote the safety and efficiency of the ~~FMI, and~~clearing agency, support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

~~**Key considerations**~~

~~*1. An FMI should have*~~ 2.1 The clearing agency has objectives that place a high priority on the safety and efficiency of the ~~*FMI*~~clearing agency and explicitly support financial stability and other relevant public interest considerations.

~~*2. An FMI should have*~~2.2 The clearing agency has documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements ~~*should be*~~are disclosed to owners, relevant authorities, participants, and, at a more general level, the public.

~~*3.*~~ 2.3 The roles and responsibilities of ~~*an FMI*~~the clearing agency's board of directors ~~*(or equivalent) should be*~~are clearly specified, and there ~~*should be*~~are documented governance procedures for its functioning, including procedures to identify, address~~,~~ and manage member conflicts of interest. The board ~~*should review*~~of directors reviews both its overall performance and the performance of its individual board members regularly.

~~*4.*~~ 2.4 The board ~~*should contain*~~of directors contains suitable members with the appropriate skills and incentives to ~~*fulfil*~~fulfill its multiple roles. This typically requires the inclusion of non-executive board member(s).

~~*5.*~~ 2.5 The roles and responsibilities of management ~~*should be*~~are clearly specified. ~~*An FMI*~~The clearing agency's management ~~*should have*~~has the appropriate experience, a mix of skills, and the integrity necessary to discharge ~~*their*~~its responsibilities for the operation and risk management of the ~~*FMI*~~clearing agency.

~~*6.*~~ 2.6 The board ~~*should establish*~~of directors establishes a clear, documented risk-management framework that includes the ~~*FMI*~~clearing agency's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements ~~*should*~~ ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board~~.~~ of directors.

2.7 ~~*7.*~~ The board ~~*should ensure*~~of directors ensures that the ~~*FMI*~~clearing agency's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions ~~*should be*~~are clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.

~~*Principle*~~**Standard 3:** *Framework for the comprehensive management of risks*~~An FMI should have~~ – A recognized clearing agency has a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational~~,~~ and other risks.

~~**Key considerations**~~

~~*1. An FMI should have*~~3.1 The clearing agency has risk-management policies, procedures, and systems that enable it to identify, measure, monitor~~,~~ and manage the range of risks that arise in or are borne by ~~*the FMI. Risk*~~it. The risk-management ~~*frameworks should be*~~framework is subject to periodic review.

~~*2. An FMI should provide*~~3.2 The clearing agency provides incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the ~~*FMI.*~~ clearing agency.

~~*3. An FMI should*~~3.3 The clearing agency regularly ~~*review*~~reviews the material risks it bears from and poses to other entities (such as other ~~*FMIs*~~clearing agencies, payments systems, trade repositories, settlement banks, liquidity providers~~,~~ and service providers) as a result of interdependencies and ~~*develop*~~develops appropriate risk-management tools to address these risks.

~~*4. An FMI should identify*~~3.4 The clearing agency identifies scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and ~~*assess*~~assesses the effectiveness of a full range of options for recovery or orderly wind-down. ~~*An FMI should prepare*~~The clearing agency prepares appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, ~~*an FMI should*~~the clearing agency also ~~*provide*~~provides relevant authorities with the information needed for purposes of resolution planning.

~~*Principle*~~**Standard 4:** *Credit risk* ~~An FMI should~~ – A recognized clearing agency that operates as a central counterparty or securities settlement system effectively ~~measure, monitor~~measures, monitors, and ~~manage~~manages its credit exposures to participants and those arising from its ~~payment,~~ clearing~~,~~ and settlement processes. ~~An FMI should maintain~~The clearing agency maintains sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, ~~a CCP~~the clearing agency, if it operates as a central counterparty, that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions ~~should maintain~~maintains additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the ~~CCP~~clearing agency in extreme but plausible market conditions. All other ~~CCPs should~~clearing agencies that operate as a central counterparty maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the ~~CCP~~clearing agency in extreme but plausible market conditions.

Key considerations

*1. An FMI should establish*4.1 The clearing agency establishes a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.

*2. An FMI should identify*4.2 The clearing agency identifies sources of credit risk, routinely *measure*measures and *monitor*monitors its credit exposures, and *use*uses appropriate risk-management tools to control these risks.

*3. A payment system or SSS should cover*4.3 The clearing agency, if it operates as a securities settlement system, covers its current exposures and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources *(see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS*. Where the clearing agency operates as a deferred net settlement system, in which there is no settlement guarantee but where its participants face credit exposures arising from its payment, clearing, and settlement processes, *such an FMI should maintain*the clearing agency maintains, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.

*4. A CCP should cover*4.4 The clearing agency that operates as a central counterparty covers its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources *(see Principle 5 on collateral and Principle 6 on margin)*. In addition, *a CCP*the clearing agency that operates as a central counterparty and that is involved in activities with a more-complex risk profile or *that* is systemically important in multiple jurisdictions *should maintain*maintains additional financial resources to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure *for*to the *CCP*clearing agency in extreme but plausible market conditions. All other *CCPs should*clearing agencies that operate as a central counterparty maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure for the *CCP*clearing agency in extreme but plausible market conditions. In all cases, *a CCP should document*the clearing agency that operates as a central counterparty documents its supporting rationale for, and *should have*has appropriate governance arrangements relating to, the amount of total financial resources it maintains.

*5. A CCP should determine*4.5 The clearing agency that operates as a central counterparty determines the amount and regularly *test*tests the sufficiency of its

total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. ~~*A CCP should have*~~The clearing agency has clear procedures to report the results of its stress tests to appropriate decision makers at the ~~*CCP*~~clearing agency and to use these results to evaluate the adequacy of and adjust its total financial resources. Stress tests ~~*should be*~~are performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, ~~*a CCP should perform*~~the clearing agency performs a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the ~~*CCP*~~clearing agency's required level of default protection in light of current and evolving market conditions. ~~*A CCP should perform*~~The clearing agency performs this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by ~~*a CCP*~~the clearing agency's participants increases significantly. A full validation of ~~*a CCP*~~the clearing agency's risk~~-~~ management model ~~*should be*~~is performed at least annually.

~~*6.*~~ 4.6 In conducting stress testing, ~~*a CCP should consider*~~the clearing agency that operates as a central counterparty considers the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods. Scenarios ~~*should*~~ include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions.

~~*7. An FMI should establish*~~4.7 The clearing agency establishes explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the ~~*FMI*~~clearing agency. These rules and procedures ~~*should*~~ address how potentially uncovered credit losses would be allocated, including the repayment of any funds ~~*an FMI*~~the clearing agency may borrow from liquidity providers. These rules and procedures ~~*should*~~ also indicate the ~~*FMI*~~clearing agency's process to replenish any financial resources that the ~~*FMI*~~clearing agency may employ during a stress event, so that the ~~*FMI*~~clearing agency can continue to operate in a safe and sound manner.

~~*Principle*~~**Standard 5:** *Collateral* ~~An FMI that~~ A recognized clearing agency that operates as a central counterparty or securities settlement system and requires collateral to manage its or its participants' credit exposure ~~should accept~~, accepts collateral with low credit, liquidity, and market risks. ~~An FMI should~~The clearing agency also ~~set~~sets and ~~enforce~~enforces appropriately conservative haircuts and concentration limits.

~~**Key considerations**~~

~~*1. An FMI should*~~5.1 The clearing agency generally ~~*limit*~~limits the assets it (routinely) accepts as collateral to those with low credit, liquidity~~,~~ and market risks.

~~*2. An FMI should establish*~~5.2 The clearing agency establishes prudent valuation practices and ~~*develop*~~develops haircuts that are regularly tested and take into account stressed market conditions.

~~*3.*~~ 5.3 In order to reduce the need for procyclical adjustments, ~~*an FMI should establish*~~the clearing agency establishes stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the extent practicable and prudent.

~~*4. An FMI should avoid*~~5.4 The clearing agency avoids concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.

~~*5. An FMI that*~~5.5 Where the clearing agency accepts cross-border collateral ~~*should mitigate*~~, it mitigates the risks associated with its use and ~~*ensure*~~ensures that the collateral can be used in a timely manner.

~~*6. An FMI should use*~~5.6 The clearing agency uses a collateral management system that is well-designed and operationally flexible.

~~*Principle*~~**Standard 6:** *Margin* ~~A CCP should cover~~ – A recognized clearing agency that operates as a central counterparty covers its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.

~~**Key considerations**~~

~~*1. A CCP should have*~~6.1 The clearing agency has a margin system that establishes margin levels commensurate with the risks and particular attributes of each product, portfolio~~,~~ and market it serves.

~~*2. A CCP should have*~~6.2 The clearing agency has a reliable source of timely price data for its margin system. ~~*A CCP should*~~The clearing agency also ~~*have*~~has procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.

~~*3. A CCP should adopt*~~6.3 The clearing agency adopts initial margin models and parameters that are risk-based and generate margin requirements sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin ~~*should meet*~~meets an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. For a ~~*CCP*~~clearing agency that calculates margin at the portfolio level, this requirement applies to each portfolio's distribution of future exposure. For a ~~*CCP*~~clearing agency that calculates margin at more-granular levels, such as at the subportfolio

level or by product, the requirement ~~*must be*~~is met for the corresponding distributions of future exposure. The model ~~*should*~~ (a) ~~*use*~~uses a conservative estimate of the time horizons for the effective hedging or close out of the particular types of products cleared by the ~~*CCP*~~clearing agency (including in stressed market conditions), (b) ~~*have*~~has an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products, and (c) to the extent practicable and prudent, ~~*limit*~~limits the need for destabilising, procyclical changes.

~~*4. A CCP should mark*~~6.4 The clearing agency marks participant positions to market and ~~*collect*~~collects variation margin at least daily to limit the build-up of current exposures. ~~*A CCP should have*~~The clearing agency has the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants.

6.5 ~~*5.*~~ In calculating margin requirements, ~~*a CCP*~~the clearing agency may allow offsets or reductions in required margin across products that it clears or between products that it and another ~~*CCP*~~central counterparty clear, if the risk of one product is significantly and reliably correlated with the risk of the other product. Where ~~*two or more CCPs are authorised*~~the clearing agency is authorized to offer cross-margining~~*, they must*~~ with one or more other central counterparties, it and the other central counterparties have appropriate safeguards and harmonised overall risk-management systems.

~~*6. A CCP should analyse*~~6.6 The clearing agency analyses and ~~*monitor*~~monitors its model performance and overall margin coverage by conducting rigorous daily backtesting and at least monthly, and more ~~*frequent*~~ frequently where appropriate, sensitivity analysis. ~~*A CCP should*~~The clearing agency regularly ~~*conduct*~~conducts an assessment of the theoretical and empirical properties of its margin model for all products it clears. In conducting sensitivity analysis of the model's coverage, ~~*a CCP should take*~~the clearing agency takes into account a wide range of parameters and assumptions that reflect possible market conditions, including the most volatile periods that have been experienced by the markets it serves and extreme changes in the correlations between prices.

~~*7. A CCP should*~~6.7 The clearing agency regularly ~~*review*~~reviews and ~~*validate*~~validates its margin system.

~~*Principle*~~**Standard 7:** *Liquidity risk*~~An FMI should effectively measure, monitor~~ – A recognized clearing agency that operates as a central counterparty or securities settlement system effectively measures, monitors, and ~~manage~~manages its liquidity risk. ~~An FMI should maintain~~The clearing agency maintains sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the ~~FMI~~clearing agency in extreme but plausible market conditions.

Key considerations

1. An FMI should have 7.1 The clearing agency has a robust framework to manage its liquidity risks from its participants, settlement banks, *nostro* agents, custodian banks, liquidity providers, and other entities.

2. An FMI should have 7.2 The clearing agency has effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.

3. A payment 7.3 The clearing agency that performs the services of a securities settlement system or SSS, including one employing a DNS that employs a deferred net settlement mechanism, should maintain maintains sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.

4. A CCP should maintain 7.4 The clearing agency that operates as a central counterparty maintains sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet other payment obligations on time with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation to the CCP clearing agency in extreme but plausible market conditions. In addition, a CCP the clearing agency that operates as a central counterparty, and that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should consider, considers maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP clearing agency in extreme but plausible market conditions.

7.5 5. For the purpose of meeting its minimum liquid resource requirement, an FMI the clearing agency's qualifying liquid resources in each currency include cash at the central bank of issue and or at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos repurchase agreements, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI the clearing agency has access to routine credit at the central bank of issue, the FMI clearing agency may count such access as part of the minimum requirement to the extent it has collateral that is eligible

for pledging to, ~~(~~or for conducting other appropriate forms of transactions with~~)~~, the relevant central bank. All such resources ~~*should be*~~are available when needed.

~~*6. An FMI*~~7.6 The clearing agency may supplement its qualifying liquid resources with other forms of liquid resources. If the ~~*FMI*~~clearing agency does so, then these liquid resources ~~*should be*~~are in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or ~~*repos*~~repurchase agreements on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if ~~*an FMI*~~the clearing agency does not have access to routine central bank credit, it ~~*should*~~ still ~~*take*~~takes account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. ~~*An FMI should*~~The clearing agency does not assume the availability of emergency central bank credit as a part of its liquidity plan.

~~*7. An FMI should obtain*~~7.7 The clearing agency obtains a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the ~~*FMI*~~clearing agency or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. ~~*An FMI should*~~The clearing agency regularly ~~*test*~~tests its procedures for accessing its liquid resources at a liquidity provider.

~~*8. An FMI*~~7.8 The clearing agency with access to central bank accounts, payment services, or securities services ~~*should use*~~uses these services, where practical, to enhance its management of liquidity risk.

~~*9. An FMI should determine*~~7.9 The clearing agency determines the amount and regularly ~~*test*~~tests the sufficiency of its liquid resources through rigorous stress testing. ~~*An FMI should have*~~The clearing agency has clear procedures to report the results of its stress tests to appropriate decision makers at the ~~*FMI*~~clearing agency and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, ~~*an FMI should consider*~~the clearing agency considers a wide range of relevant scenarios. Scenarios ~~*should*~~ include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios ~~*should*~~ also take into account the design and operation of the ~~*FMI*~~clearing agency, include all entities that ~~*might*~~may pose material liquidity risks to the ~~*FMI*~~clearing agency (such as settlement banks, *nostro* agents, custodian banks, liquidity providers, and linked ~~*FMIs*~~clearing agencies, trade repositories and payment systems), and where appropriate, cover a multiday period. In all cases, ~~*an FMI should document*~~the clearing agency documents its supporting rationale for, and ~~*should have*~~has

appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.

~~*10. An FMI should establish*~~7.10 The clearing agency establishes explicit rules and procedures that enable the ~~*FMI*~~clearing agency to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. These rules and procedures ~~*should*~~ address unforeseen and potentially uncovered liquidity shortfalls ~~*and should*~~which aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures ~~*should*~~ also indicate the ~~*FMI*~~clearing agency's process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.

~~*Principle*~~**Standard 8:** *Settlement finality*~~An FMI should provide~~ – A recognized clearing agency that operates as a central counterparty or securities settlement system provides clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, ~~an FMI should provide~~the clearing agency provides final settlement intraday or in real time.

~~**Key considerations**~~

~~*1. An FMI*~~8.1 The clearing agency's rules and procedures ~~*should*~~ clearly define the point at which settlement is final.

~~*2. An FMI should complete*~~8.2 The clearing agency completes final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. ~~*An LVPS or SSS should consider adopting RTGS*~~The clearing agency that operates as a securities settlement system generally considers adopting real-time gross settlement or multiple-batch processing during the settlement day.

~~*3. An FMI should*~~8.3 The clearing agency clearly ~~*define*~~defines the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.

~~*Principle*~~**Standard 9:** *Money settlements*~~An FMI should conduct~~ – A recognized clearing agency that operates as a central counterparty or securities settlement system conducts its money settlements in central bank money, where practical and available. If central bank money is not used, ~~an FMI should minimise~~the clearing agency minimizes and strictly ~~control~~controls the credit and liquidity risk arising from the use of commercial bank money.

~~**Key considerations**~~

~~*1. An FMI should conduct*~~9.1 The clearing agency conducts its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.

9.2 ~~2.~~ If central bank money is not used, ~~*an FMI should conduct*~~the clearing agency conducts its money settlements using a settlement asset with little or no credit or liquidity risk.

~~*3.*~~ 9.3 If ~~*an FMI*~~the clearing agency settles in commercial bank money, it ~~*should monitor, manage*~~monitors, manages, and ~~*limit*~~limits its credit and liquidity risks arising from the commercial settlement banks. In particular, ~~*an FMI should establish and monitor*~~the clearing agency establishes and monitors adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. ~~*An FMI should*~~The clearing agency also ~~*monitor*~~monitors and ~~*manage*~~manages the concentration of credit and liquidity exposures to its commercial settlement banks.

~~*4.*~~ 9.4 If ~~*an FMI*~~the clearing agency conducts money settlements on its own books, it ~~*should minimise*~~minimizes and strictly ~~*control*~~controls its credit and liquidity risks.

~~*5. An FMI*~~9.5 The clearing agency's legal agreements with any settlement banks ~~*should*~~ state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received ~~*should*~~are to be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the ~~*FMI*~~clearing agency and its participants to manage credit and liquidity risks.

~~*Principle*~~**Standard 10:** *Physical deliveries*~~An FMI should~~ – A recognized clearing agency clearly ~~state~~states its obligations with respect to the delivery of physical instruments or commodities and ~~should identify, monitor, and manage~~identifies, monitors and manages the risks associated with such physical deliveries.

~~**Key considerations**~~

~~*1. An FMI*~~10.1 The clearing agency's rules ~~*should*~~ clearly state its obligations with respect to the delivery of physical instruments or commodities.

~~*2. An FMI should identify, monitor,*~~10.2 The clearing agency identifies, monitors and ~~*manage*~~manages the risks and costs associated with the storage and delivery of physical instruments ~~*or*~~and commodities.

~~*Principle*~~**Standard 11:** *Central securities depositories*~~A CSD should have~~ – A recognized clearing agency that operates as a central securities depository has appropriate rules and procedures to help ensure the integrity of securities issues and ~~minimise~~minimizes and ~~manage~~manages the risks associated with the safekeeping and transfer of securities. ~~A CSD should maintain~~The clearing agency maintains securities in an ~~immobilised or dematerialised~~immobilized or dematerialized form for their transfer by book entry.

~~**Key considerations**~~

~~*1. A CSD should have*~~11.1 The clearing agency has appropriate rules, procedures~~,~~ and controls, including robust accounting practices, to safeguard the rights of securities issuers and holders, prevent the unauthorised creation or deletion of securities, and conduct periodic and at least daily reconciliation of securities issues it maintains.

~~*2. A CSD should prohibit*~~11.2 The clearing agency prohibits overdrafts and debit balances in securities accounts.

~~*3. A CSD should maintain*~~11.3 The clearing agency maintains securities in an ~~*immobilised*~~immobilized or dematerialised form for their transfer by book entry. Where appropriate, ~~*a CSD should provide*~~the clearing agency provides incentives to ~~*immobilise*~~immobilize or dematerialise securities.

~~*4. A CSD should protect*~~11.4 The clearing agency protects assets against custody risk through appropriate rules and procedures consistent with its legal framework.

~~*5. A CSD should employ*~~11.5 The clearing agency employs a robust system that ensures segregation between ~~*the CSD's*~~its own assets and the securities of its participants and segregation among the securities of participants. Where supported by the legal framework, the ~~*CSD should*~~clearing agency also ~~*support*~~supports operationally the segregation of securities belonging to a participant's customers on the participant's books and ~~*facilitate*~~facilitates the transfer of customer holdings.

~~*6. A CSD should identify, measure, monitor*~~11.6 The clearing agency identifies, measures, monitors, and ~~*manage*~~manages its risks from other activities that it may perform; additional tools may be necessary in order to address these risks.

~~*Principle*~~**Standard 12:** *Exchange-of-value settlement systems*~~If an FMI~~ – Where a recognized clearing agency operates as a central counterparty or securities settlement system and settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it ~~should eliminate~~eliminates principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

~~**Key consideration**~~

~~*1. An FMI*~~12.1 The clearing agency that is an exchange-of-value settlement system ~~*should eliminate*~~eliminates principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the ~~*FMI*~~clearing agency settles on a gross or net basis and when finality occurs.

~~*Principle*~~**Standard 13:** *Participant~~ - default rules and procedures~~*~~An FMI should have~~ – A recognized clearing agency has effective and clearly defined rules and procedures to manage a participant default. These rules and procedures ~~should be~~are designed to ensure that the ~~FMI~~clearing agency can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

~~**Key considerations**~~

~~*1. An FMI should have*~~13.1 The clearing agency has default rules and procedures that enable the ~~*FMI*~~clearing agency to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.

~~*2. An FMI should be*~~13.2 The clearing agency is well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.

~~*3. An FMI should*~~13.3 The clearing agency publicly ~~*disclose*~~discloses key aspects of its default rules and procedures.

~~*4. An FMI should involve*~~13.4 The clearing agency involves its participants and other stakeholders in the testing and review of the ~~*FMI*~~clearing agency's default procedures, including any close-out procedures. Such testing and review ~~*should be*~~is conducted at least annually or following material changes to the clearing agency's rules and procedures to ensure that they are practical and effective.

~~*Principle*~~**Standard 14:** *Segregation and portability*~~A CCP should have~~ – A recognized clearing agency that operates as a central counterparty has rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the ~~*CCP*~~clearing agency with respect to those positions.

~~**Key considerations**~~

~~*1. A CCP should*~~14.1 The clearing agency has, at a minimum, ~~*have*~~ segregation and portability arrangements that effectively protect a participant's customers' positions and related collateral from the default or insolvency of that participant. If the ~~*CCP*~~clearing agency additionally offers protection of such customer positions and collateral against the concurrent default of the participant and a fellow customer, the ~~*CCP should take*~~clearing agency takes steps to ensure that such protection is effective.

~~*2. A CCP should employ*~~14.2 The clearing agency employs an account structure that enables it readily to identify positions of a participant's customers and to segregate related collateral. ~~*A CCP should maintain*~~The clearing agency maintains customer positions and collateral in individual customer accounts or in omnibus customer accounts.

~~*3. A CCP should structure*~~14.3 The clearing agency structures its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants.

~~*4. A CCP should disclose*~~14.4 The clearing agency discloses its rules, policies, and procedures relating to the segregation and portability of a participant's customers' positions and related collateral. In particular, the ~~*CCP should disclose*~~clearing agency discloses whether customer collateral is protected on an individual or omnibus basis. In addition, ~~*a CCP should disclose*~~ the clearing agency discloses any constraints, such as legal or operational constraints, that may impair its ability to segregate or port ~~*a*~~the participant's customers' positions and related collateral.

~~*Principle*~~**Standard 15:** *General business risk*~~An FMI should identify, monitor~~ – A recognized clearing agency identifies, monitors, and ~~manage~~manages its general business risk and ~~hold~~holds sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets ~~should~~are at all times ~~be~~ sufficient to ensure a recovery or orderly wind-down of critical operations and services.

~~**Key considerations**~~

~~*1. An FMI should have*~~15.1 The clearing agency has robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.

~~*2. An FMI should hold*~~15.2 The clearing agency holds liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity ~~*an FMI should hold should be*~~the clearing agency holds is determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.

~~*3. An FMI should maintain*~~15.3 The clearing agency maintains a viable recovery or orderly wind-down plan and ~~*should hold*~~holds sufficient liquid net assets funded by equity to implement this plan. At a minimum, ~~*an FMI should hold*~~the clearing agency holds liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults ~~*or*~~and other risks required to be covered under the financial resources ~~*principles*~~Standards. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.

~~*4.*~~ 15.4 Assets held to cover general business risk ~~*should be*~~are of high quality and sufficiently liquid in order to allow the ~~*FMI*~~clearing agency to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.

~~*5. An FMI should maintain*~~15.5 The clearing agency maintains a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan ~~*should be*~~is approved by the board of directors and updated regularly.

~~*Principle*~~**Standard 16:** *Custody and investment risks*~~An FMI should safeguard~~ – A recognized clearing agency safeguards its own and its participants' assets and ~~minimise~~minimizes the risk of loss on and delay in access to these assets. ~~An FMI~~The clearing agency's investments ~~should be~~are in instruments with minimal credit, market, and liquidity risks.

~~**Key considerations**~~

~~*1. An FMI should hold*~~16.1 The clearing agency holds its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect ~~*these*~~such assets.

~~*2. An FMI should have*~~16.2 The clearing agency has prompt access to its assets and the assets provided by participants, when required.

~~*3. An FMI should evaluate and understand*~~16.3 The clearing agency evaluates and understands its exposures to its custodian banks, taking into account the full scope of its relationships with each.

~~*4. An FMI*~~16.4 The clearing agency's investment strategy ~~*should be*~~is consistent with its overall risk-management strategy and fully disclosed to its participants, and investments ~~*should be*~~are secured by, or ~~*be*~~ claims on, high-quality obligors. These investments ~~*should*~~ allow for quick liquidation with little, if any, adverse price effect.

~~*Principle*~~**Standard 17:** *Operational* ~~*risk*~~*risks* ~~An FMI should identify~~ – A recognized clearing agency identifies the plausible sources of operational risk, both internal and external, and ~~mitigate~~mitigates their impact through the use of appropriate systems, policies, procedures, and controls. Systems ~~should be~~are designed to ensure a high degree of security and operational reliability and ~~should~~ have adequate, scalable capacity. Business continuity management ~~should aim~~aims for timely recovery of operations and ~~fulfilment~~fulfillment of the ~~FMI~~clearing agency's obligations, including in the event of a wide-scale or major disruption.

~~**Key considerations**~~

~~*1. An FMI should establish*~~17.1 The clearing agency establishes a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.

~~*2. An FMI*~~17.2 The clearing agency's board of directors ~~*should*~~ clearly ~~*define*~~defines the roles and responsibilities for addressing operational risk and ~~*should endorse*~~endorses the ~~*FMI*~~clearing agency's operational risk-management framework. Systems, operational policies, procedures, and controls ~~*should be*~~are reviewed, audited, and tested periodically and after significant changes.

~~*3. An FMI should have*~~17.3 The clearing agency has clearly defined operational reliability objectives and ~~*should have*~~has policies in place that are designed to achieve those objectives.

~~*4. An FMI should ensure*~~17.4 The clearing agency ensures that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.

~~*5. An FMI should have*~~17.5 The clearing agency has comprehensive physical and information security policies that address all potential vulnerabilities and threats.

~~*6. An FMI should have*~~17.6 The clearing agency has a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan ~~*should incorporate*~~incorporates the use of a secondary site and ~~*should be*~~is designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan ~~*should be*~~is designed to enable the ~~*FMI*~~clearing agency to complete settlement by the end of the day of the disruption, even in ~~*case of*~~ extreme circumstances. The ~~*FMI should*~~clearing agency regularly ~~*test*~~tests these arrangements.

~~*7. An FMI should identify, monitor*~~17.7 The clearing agency identifies, monitors, and ~~*manage*~~manages the risks that key participants, other ~~*FMIs*~~clearing agencies, trade repositories, payment systems, and service and utility providers might pose to its operations. In addition, ~~*an FMI should identify, monitor, and manage*~~the clearing agency identifies, monitors, and manages the risks its operations might pose to other ~~*FMIs*~~clearing agencies, trade repositories, and payment systems.

~~*Principle*~~**Standard 18:** *Access and participation requirements* ~~An FMI should have~~– A recognized clearing agency has objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

~~**Key considerations**~~

~~*1. An FMI should allow*~~ 18.1 The clearing agency allows for fair and open access to its services, including by direct and, where relevant, indirect participants and

other ~~*FMIs*~~clearing agencies, payment systems and trade repositories, based on reasonable risk-related participation requirements.

~~*2. An FMI*~~18.2 The clearing agency's participation requirements ~~*should be*~~are justified in terms of the safety and efficiency of the ~~*FMI*~~clearing agency and the markets it serves, ~~*be*~~are tailored to and commensurate with the ~~*FMI*~~clearing agency's specific risks, and ~~*be*~~are publicly disclosed. Subject to maintaining acceptable risk control standards, ~~*an FMI should endeavour*~~the clearing agency endeavours to set requirements that have the least-restrictive impact on access that circumstances permit.

~~*3. An FMI should monitor*~~18.3 The clearing agency monitors compliance with its participation requirements on an ongoing basis and ~~*have*~~has clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.

~~*Principle*~~**Standard 19:** *Tiered participation arrangements*~~An FMI should identify, monitor~~ – A recognized clearing agency identifies, monitors, and ~~manage~~manages the material risks to the ~~FMI~~clearing agency arising from any tiered participation arrangements.

~~**Key considerations**~~

~~*1. An FMI should ensure*~~19.1 The clearing agency ensures that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the ~~*FMI*~~clearing agency arising from such tiered participation arrangements.

~~*2. An FMI should identify*~~19.2 The clearing agency identifies material dependencies between direct and indirect participants that might affect the ~~*FMI.*~~ clearing agency.

~~*3. An FMI should identify*~~19.3 The clearing agency identifies indirect participants responsible for a significant proportion of transactions processed by the ~~*FMI*~~clearing agency and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the ~~*FMI*~~clearing agency in order to manage the risks arising from these transactions.

~~*4. An FMI should*~~19.4 The clearing agency regularly ~~*review*~~reviews risks arising from tiered participation arrangements and ~~*should take*~~takes mitigating action when appropriate.

~~*Principle 20: FMI links*~~

~~An FMI~~**Standard 20**: *Links with other financial market infrastructures* – A recognized clearing agency that establishes a link with one or more ~~FMIs should identify, monitor,~~

~~and manage~~clearing agencies or trade repositories identifies, monitors, and manages link-related risks.

~~Key considerations~~

~~1.~~ 20.1 Before entering into a link ~~*arrangement*~~ and on an ongoing basis once the link is established, ~~*an FMI should identify, monitor, and manage*~~the clearing agency identifies, monitors, and manages all potential sources of risk arising from the link ~~*arrangement. Link arrangements should be*~~. Links are designed such that ~~*each FMI*~~the clearing agency is able to observe the other ~~*principles in this report*~~Standards.

~~2.~~ 20.2 A link ~~*should have*~~has a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the ~~*FMIs*~~clearing agencies and trade repositories involved in the link.

20.3 ~~3.~~ Linked ~~*CSDs should*~~central securities depositories measure, monitor, and manage the credit and liquidity risks arising from each other. Any credit extensions between ~~*CSDs should be*~~central securities depositories are covered fully with high-quality collateral and ~~*be*~~are subject to limits. ~~4.~~

20.4 Provisional transfers of securities between linked ~~*CSDs should be*~~central securities depositories are prohibited or, at a minimum, the retransfer of provisionally transferred securities ~~*should be*~~are prohibited prior to the transfer becoming final.

~~5.~~ 20.5 An investor ~~*CSD should*~~central securities depository only ~~*establish*~~establishes a link with an issuer ~~*CSD*~~central securities depository if the ~~*arrangement*~~link provides a high level of protection for the rights of the investor ~~*CSD*~~central securities depository's participants.

20.6 ~~6.~~ An investor ~~*CSD*~~central securities depository that uses an intermediary to operate a link with an issuer ~~*CSD should measure, monitor, and manage*~~central securities depository measures, monitors, and manages the additional risks (including custody, credit, legal, and operational risks) arising from the use of the intermediary.

~~7.~~ 20.7 Before entering into a link with another ~~*CCP, a CCP should identify and manage*~~central counterparty, a central counterparty identifies and manages the potential spill-over effects from the default of the linked ~~*CCP*~~central counterparty. If a link has three or more ~~*CCPs, each CCP should identify, assess, and manage*~~central counterparties, each central counterparty identifies, assesses, and manages the risks of the collective link ~~*arrangement*~~.

~~8.~~ 20.8 Each ~~*CCP*~~central counterparty in a ~~*CCP*~~central counterparty link ~~*arrangement should be*~~is able to cover, at least on a daily basis, its current and potential future exposures to the linked ~~*CCP*~~central counterparty and its

participants, if any, fully with a high degree of confidence without reducing the ~~*CCP*~~central counterparty's ability to ~~*fulfil*~~fulfill its obligations to its own participants at any time.

~~*9. A TR should carefully assess the additional operational risks related to its links to ensure the scalability and reliability of IT and related resources.*~~

~~*Principle*~~**Standard 21:** *Efficiency and effectiveness*~~An FMI should be~~ – A recognized clearing agency is efficient and effective in meeting the requirements of its participants and the markets it serves.

~~**Key considerations**~~

~~*1. An FMI should be*~~21.1 The clearing agency is designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.

~~*2. An FMI should have*~~21.2 The clearing agency has clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.

~~*3. An FMI should have*~~21.3 The clearing agency has established mechanisms for the regular review of its efficiency and effectiveness.

~~*Principle*~~**Standard 22:** *Communication procedures and standards*~~An FMI should use~~ – A recognized clearing agency uses, or at a minimum ~~accommodate~~accommodates, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, depository, and recording.

~~**Key consideration**~~

~~*1. An FMI should use*~~22.1 The clearing agency uses, or at a minimum ~~*accommodate*~~accommodates, internationally accepted communication procedures and standards.

~~*Principle*~~ **Standard 23:** *Disclosure of rules, key procedures, and market data*~~An FMI should have~~ – A recognized clearing agency has clear and comprehensive rules and procedures and ~~should provide~~provides sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the ~~FMI~~clearing agency. All relevant rules and key procedures ~~should be~~are publicly disclosed.

~~**Key considerations**~~

~~*1. An FMI should adopt*~~23.1 The clearing agency adopts clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures ~~*should*~~are also ~~*be*~~ publicly disclosed.

~~*2. An FMI should disclose*~~23.2 The clearing agency discloses clear descriptions of the ~~*system's*~~clearing agency's systems' design and operations, as well as the ~~*FMI's and participants'*~~ rights and obligations of the clearing agency and its participants, so that participants can assess the risks they would incur by participating in the ~~*FMI.*~~ clearing agency.

~~*3. An FMI should provide*~~23.3 The clearing agency provides all necessary and appropriate documentation and training to facilitate participants' understanding of the ~~*FMI*~~clearing agency's rules and procedures and the risks they face from participating in the ~~*FMI*~~clearing agency.

~~*4. An FMI should*~~23.4 The clearing agency publicly ~~*disclose*~~discloses its fees at the level of individual services it offers as well as its policies on any available discounts. The ~~*FMI should provide*~~clearing agency provides clear descriptions of priced services for comparability purposes.

~~*5. An FMI should complete*~~23.5 The clearing agency completes regularly and ~~*disclose*~~discloses publicly responses to the ~~*CPSS-IOSCO*~~PFMI Disclosure ~~framework for financial market infrastructures. *An FMI also should*~~Framework Document. The clearing agency also, at a minimum, ~~*disclose*~~discloses basic data on transaction volumes and values.

APPENDIX "C"

Texts of proposed National Instrument 24-102 – *Clearing Agency Requirements* (including related Forms 24-102 F1 and F2) and Companion Policy 24-102CP – to National Instrument 24-102 – *Clearing Agency Requirements*

National Instrument 24 – 102

CLEARING AGENCY REQUIREMENTS

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PART 1
DEFINITIONS, INTERPRETATION AND APPLICATION

Definitions

1.1 In this Instrument, including Appendix A to this Instrument,

"board of directors" means, in the case of a recognized clearing agency that does not have a board of directors, a group of individuals that acts for the clearing agency in a capacity similar to a board of directors;

"clearing agency" includes, in Quebec, a clearing house, central securities depository and settlement system within the meaning of the Quebec *Securities Act* and a derivatives clearing house and settlement system within the meaning of the Quebec *Derivatives Act*;

"central counterparty" means a person or company that interposes itself between the counterparties to securities or derivatives transactions in one or more financial markets, acting functionally as the buyer to every seller and the seller to every buyer or the counterparty to every party;

"central securities depository" means a person or company that provides centralized facilities as a depository of securities, including securities accounts, central safekeeping services, and asset services, which may include the administration of corporate actions and redemptions;

"executive officer" has the meaning ascribed to it in National Instrument 52-110 – *Audit Committee*;

"exempt clearing agency" means a clearing agency that has been granted a decision of the securities regulatory authority pursuant to securities legislation exempting it from the requirement in such legislation to be recognized by the securities regulatory authority as a clearing agency;

"immediate family member" has the meaning ascribed to it in National Instrument 52-110 – *Audit Committee*;

"initial margin", in relation to a clearing agency's margin system to manage credit exposures to its participants, means collateral that is required by the clearing agency to cover potential changes in the value of each participant's position (that is, potential future exposure) over an appropriate close-out period in the event the participant defaults;

"link" means, in relation to a clearing agency, a set of contractual and operational arrangements that directly or indirectly through an intermediary connects the clearing agency and one or more other systems or arrangements for the clearing, settlement or recording of securities or derivatives transactions;

"participant" means a person or company that has entered into an agreement with a clearing agency to access the services of the clearing agency and is bound by the clearing agency's rules and procedures;

"PFMI Disclosure Framework Document" means a disclosure document completed substantially in the form of *Annex A: FMI disclosure template* of the December 2012 report *Principles for financial market infrastructures: Disclosure framework and Assessment methodology* published by the Committee on Payment and Settlement Systems and the International Organization of Securities Commissions, as amended, supplemented or superseded from time to time or a similar disclosure document required to be completed regularly and disclosed publicly by a clearing agency in accordance with the regulatory requirements of a foreign jurisdiction in which the clearing agency is located;

"product", when used in relation to a clearing agency's depository, clearance or settlement services, means a security or derivative, or class of securities or derivatives, or, where the context so requires, a trade or other transaction in or related to a security or derivative, or class of securities or derivatives, that is eligible for such services;

"securities settlement system" means a system that enables securities to be transferred and settled by book entry according to a set of predetermined multilateral rules;

"Standard" means a standard set out in Appendix A to this Instrument that is based on international standards governing financial market infrastructures developed by the Committee on Payment and Settlement Systems and the International Organization of Securities Commissions;

"stress test" or "stress testing" means, except in section 4.13, a test conducted periodically by a clearing agency that operates as a central counterparty or securities settlement system to estimate credit and liquidity exposures that would result from the realization of extreme price changes to determine the amount and sufficiency of the clearing agency's total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions;

"variation margin", in relation to the margin system of a clearing agency that operates as a central counterparty to manage credit exposures to its participants for all products it clears, means funds that are collected and paid out on a regular and *ad hoc* basis by the clearing agency to reflect current exposures resulting from actual changes in market prices.

Interpretation – Meaning of Accounting Terms

1.2 In this Instrument, each of the following terms has the same meaning as in National Instrument 52-107 *Acceptable Accounting Principles and Auditing Standards*: "accounting principles", "auditing standards", and "publicly accountable enterprises".

Interpretation - Affiliated Entity, Controlled Entity and Subsidiary Entity

1.3 (1) In this Instrument, a person or company is considered to be an affiliated entity of another person or company if one is a subsidiary entity of the other or if both are subsidiary entities of the same person or company, or if each of them is a controlled entity of the same person or company.

(2) In this Instrument, a person or company is considered to be controlled by a person or company if

(a) in the case of a person or company,

(i) voting securities of the first-mentioned person or company carrying more than fifty percent of the votes for the election of directors are held, otherwise than by way of security only, by or for the benefit of the other person or company, and

(ii) the votes carried by the securities are entitled, if exercised, to elect a majority of the directors of the first-mentioned person or company;

(b) in the case of a partnership that does not have directors, other than a limited partnership, the second-mentioned person or company holds more than fifty percent of the interests in the partnership; or

(c) in the case of a limited partnership, the general partner is the second-mentioned person or company.

(3) In this Instrument, a person or company is considered to be a subsidiary entity of another person or company if

(a) it is a controlled entity of,

(i) that other,

(ii) that other and one or more persons or companies each of which is a controlled entity of that other, or

(iii) two or more persons or companies, each of which is a controlled entity of that other; or

(b) it is a subsidiary entity of a person or company that is the other's subsidiary entity.

Interpretation – Extended Meaning of Affiliate

1.4 For the purposes of Standards 4, 5, 6 and 7 in Appendix A to this Instrument, a person or company is also considered to be an affiliate of a participant (in this section, the person or company and the participant each described as a "party") where,

(a) a party holds directly or indirectly, otherwise than by way of security only, voting securities of the other party carrying at least 20 percent of the votes for the election of directors; or

(b) in the event paragraph (a) is not applicable,

(i) a party holds directly or indirectly, otherwise than by way of security only, an interest in the other party that allows it to direct the management or operations of the other party; or

(ii) financial information in respect of both parties is consolidated for financial reporting purposes.

Application

1.5 (1) Part 3 applies to a recognized clearing agency that operates as any of the following:

(a) a central counterparty;

(b) a central securities depository; or

(c) a securities settlement system.

(2) Unless the context otherwise indicates, Part 4 applies to a recognized clearing agency whether or not it operates as a central counterparty, central securities depository or securities settlement system.

(3) In Quebec, if there is a conflict or an inconsistency between section 2.2 for implementing a material change and the provisions of the Quebec *Derivatives Act* governing the self-certification process,, the provisions of the Quebec *Derivatives Act* prevail.

PART 2
CLEARING AGENCY RECOGNITION OR EXEMPTION FROM RECOGNITION

Application and initial filing of information

2.1 (1) An applicant for recognition as a clearing agency under securities legislation, or for exemption from the requirement to be recognized as a clearing agency pursuant to such securities legislation, must include in its application:

(a) where applicable, the applicant's most recently completed PFMI Disclosure Framework Document;

(b) sufficient information to demonstrate that the applicant is in compliance with,

(i) provincial and territorial securities legislation, or

(ii) the regulatory regime of a foreign jurisdiction in which the applicant's head office or principal place of business is located; and

(c) any additional relevant information sufficient to demonstrate that it is in the public interest for the securities regulatory authority to recognize or exempt the applicant, as the case may be.

(2) In addition to the requirement set out in subsection (1), an applicant whose head office or principal place of business is located in a foreign jurisdiction must,

(a) certify that it will assist the securities regulatory authority in accessing the applicant's books and records and in undertaking an onsite inspection and examination at the applicant's premises;

(b) certify that it will provide the securities regulatory authority, where requested by such authority, with an opinion of legal counsel that the applicant has, as a matter of law, the power and authority to,

(i) provide the securities regulatory authority with prompt access to its books and records; and

(ii) submit to onsite inspection and examination by the securities regulatory authority.

(3) In addition to the requirements set out in subsections (1) and (2), an applicant whose head office or principal place of business is located in a foreign jurisdiction must file a completed Form 24-102-F1 *Submission to Jurisdiction and Appointment of Agent for Service*.

(4) An applicant must inform the securities regulatory authority in writing of any material change to the information provided in its application, or if any of the information becomes materially inaccurate for any reason, as soon as the change occurs or the applicant becomes aware of any inaccuracy.

Material changes and other changes in information

2.2 (1) In this section, for greater certainty, a "material change" includes, in relation to a clearing agency,

(a) any change to the clearing agency's constating documents or by-laws;

(b) any change to the clearing agency's corporate governance or corporate structure, including any change of control of the clearing agency, whether directly or indirectly;

(c) any material change to an agreement among the clearing agency and participants in connection with the clearing agency's operations and services, including those agreements to which the clearing agency is a party and those agreements among participants to which the clearing agency is not a party, but which are expressly referred to in the clearing agency's rules or procedures and are made available by participants to the clearing agency;

(d) any material change to the clearing agency's rules, operating procedures, user guides, manuals, or other documentation governing or establishing the rights, obligations and relationships among the clearing agency and participants in connection with the clearing agency's operations and services;

(e) any material change to the design, operation or functionality of any of the clearing agency's operations and services;

(f) the establishment or removal of a link or any material change to an existing link;

(g) commencing to engage in a new type of business activity or ceasing to engage in a business activity in which the clearing agency is then engaged; and

(h) any other matter identified as a material change in the recognition terms and conditions.

(2) A recognized clearing agency must not implement a material change without obtaining the prior written approval of the securities regulatory authority.

(3) If a proposed material change would affect the information set out in its PFMI Disclosure Framework Document filed with the securities regulatory authority, a recognized clearing agency must complete and file with the securities regulatory authority, prior to implementing the material change, an appropriate amendment to the its PFMI Disclosure Framework Document.

(4) Where a recognized clearing agency proposes to modify a fee or introduce a new fee for any of its clearing, settlement or depository services, the clearing agency must notify in writing the securities regulatory authority of such fee change at least twenty business days before implementing the fee change.

(5) An exempt clearing agency must notify in writing the securities regulatory authority which granted the exemption of any material change to the information provided to the securities regulatory authority in its PFMI Disclosure Framework Document and related application materials, or if any of the information becomes materially inaccurate for any reason, as soon as the change occurs or the exempt clearing agency becomes aware of any inaccuracy.

Ceasing to carry on business

2.3 (1) A recognized clearing agency or exempt clearing agency that intends to cease carrying on business in Canada as a clearing agency must file a report on Form 24-102-F2 *Cessation of Operations Report for Clearing Agency* with the securities regulatory authority,

(a) at least 180 days before ceasing to carry on business if a significant reason for ceasing to carry on business relates to the clearing agency's financial viability or any other matter that is preventing, or may potentially prevent, it from being able to provide its operations and services as a going concern; or

(b) at least 90 days before ceasing to carry on business for any other reason.

(2) A recognized clearing agency or exempt clearing agency that involuntarily ceases to carry on business in Canada as a clearing agency must file a report on Form 24-102-F2 *Cessation of Operations Report for Clearing Agency* with the securities regulatory authority as soon as practicable after it ceases to carry on that business.

Filing of initial audited financial statements

2.4 (1) An applicant must file audited financial statements for its most recently completed financial year with the securities regulatory authority as part of its application under section 2.1.

(2) The financial statements referred to in subsection (1) must,

(a) be prepared in accordance with Canadian GAAP applicable to publicly accountable enterprises, IFRS or the generally accepted accounting principles of the foreign jurisdiction in which the person or company is incorporated, organized or located,

(b) identify in the notes to the financial statements the accounting principles used to prepare the financial statements,

(c) disclose the presentation currency, and

(d) be audited in accordance with Canadian GAAS, International Standards on Auditing or the generally accepted auditing standards of the foreign jurisdiction in which the person or company is incorporated, organized or located.

(3) The financial statements referred to in subsection (1) must be accompanied by an auditor's report that,

(a) expresses an unmodified or unqualified opinion,

(b) identifies all financial periods presented for which the auditor's report applies,

(c) identifies the auditing standards used to conduct the audit,

(d) identifies the accounting principles used to prepare the financial statements,

(e) is prepared in accordance with the same auditing standards used to conduct the audit, and

(f) is prepared and signed by a person or company that is authorized to sign an auditor's report under the laws of a jurisdiction of Canada or a foreign jurisdiction, and that meets the professional standards of that jurisdiction.

Filing of annual audited and interim financial statements

2.5 (1) A recognized clearing agency or exempt clearing agency must file annual audited financial statements that comply with the requirements in subsections 2.4(2) and (3) with the securities regulatory authority no later than the 90th day after the end of its financial year.

(2) A recognized clearing agency or exempt clearing agency must file interim financial statements that comply with the requirements in paragraphs 2.4(2)(a) and (2)(b) with the securities regulatory authority no later than the 45th day after the end of each interim period.

PART 3
INTERNATIONAL STANDARDS APPLICABLE TO RECOGNIZED CLEARING AGENCIES

Standards

3.1 A recognized clearing agency must establish, implement and maintain rules, procedures, policies or operations designed to ensure that it meets or exceeds the Standards in Appendix A with respect to its clearing, settlement and depository activities.

PART 4
OTHER REQUIREMENTS OF RECOGNIZED CLEARING AGENCIES

Division 1 – Governance:

Board of directors

4.1 (1) A recognized clearing agency must have a board of directors.

(2) The board of directors must include appropriate representation by individuals who are

(a) independent of the clearing agency; and

(b) not employees or executive officers of a participant or their immediate family members.

(3) For the purposes of paragraph (2)(a), an individual is independent of a clearing agency if he or she has no direct or indirect material relationship with the clearing agency.

(4) For the purposes of subsection (3), a "material relationship" is a relationship which could, in the view of the clearing agency's board of directors, be reasonably expected to interfere with the exercise of a member's independent judgment.

(5) Despite subsection (4), the following individuals are considered to have a material relationship with a clearing agency:

(a) an individual who is, or has been within the last three years, an employee or executive officer of the clearing agency or any of its affiliates;

(b) an individual whose immediate family member is, or has been within the last three years, an executive officer of the clearing agency or any of its affiliates;

(c) an individual who beneficially owns, directly or indirectly, voting securities carrying more than ten per cent of the voting rights attached to all voting securities of the clearing agency or any of its affiliates for the time being outstanding;

(d) an individual whose immediate family member beneficially owns, directly or indirectly, voting securities carrying more than ten per cent of the voting rights attached to all voting securities of the clearing agency or any of its affiliates for the time being outstanding;

(e) an individual who is, or has been within the last three years, an executive officer of a person or company that beneficially owns, directly or indirectly, voting securities carrying more than ten per cent of the voting rights attached to all voting securities of the clearing agency or any of its affiliates for the time being outstanding; and

(f) an individual who accepts or who received during any 12 month period within the last 3 years, directly or indirectly, any audit, consulting, advisory or other compensatory fee from the clearing agency or any of its affiliates, other than as remuneration for acting in his or her capacity as a member of the board of directors or any board committee, or as a part-time chair or vice-chair of the board or any board committee.

(6) For the purposes of subsection (5), the indirect acceptance by an individual of any audit, consulting, advisory or other compensatory fee includes acceptance of a fee by

(a) an individual's immediate family member; or

(b) an entity in which such individual is a partner, a member, an officer such as a managing director occupying a comparable position or an executive officer, or occupies a similar position (except limited partners, non-managing members and those occupying similar positions who, in each case, have no active role in providing services to the entity) and which provides accounting, consulting, legal, investment banking or financial advisory services to the clearing agency or any of its affiliates.

(7) For the purposes of subsection (5), compensatory fees do not include the receipt of fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the clearing agency if the compensation is not contingent in any way on continued service.

(8) For the purposes of subsection (5), an individual appointed to the board of directors or board committee of the clearing agency or any of its affiliates or of a person or company referred to in paragraph (5)(e) will not be considered to have a material

relationship with the clearing agency solely because the individual acts, or has previously acted, as a chair or vice-chair of the board of directors or a board committee.

(9) If a clearing agency is a reporting issuer and there is a conflict or an inconsistency between this section 4.1 and the provisions of National Instrument 52-110 *Audit Committee* governing the audit committee members, the provisions of National Instrument 52-110 *Audit Committee* prevail.

Documented procedures regarding risk spill-overs

4.2 The board of directors and management of a recognized clearing agency must have documented procedures to manage possible risk spill over where the clearing agency provides services with a different risk profile than its depository, clearing, and settlement services.

Chief Risk Officer and Chief Compliance Officer

4.3 (1) A recognized clearing agency must designate a chief risk officer and a chief compliance officer, who must report directly to the board of directors or, if determined by the board of directors, to the chief executive officer of the clearing agency.

(2) The chief risk officer must,

(a) have full responsibility and authority to maintain, implement and enforce the risk management framework established by the clearing agency;

(b) make recommendations to the clearing agency's board of directors regarding the clearing agency's risk management framework;

(c) monitor the effectiveness of the clearing agency's risk management framework on an ongoing basis; and

(d) report to the clearing agency's board of directors on a timely basis upon becoming aware of any significant deficiency with the risk management framework.

(3) The chief compliance officer must,

(a) establish, implement, maintain and enforce written policies and procedures to identify and resolve conflicts of interest and ensure that the clearing agency complies with securities legislation;

(b) monitor compliance with the policies and procedures described under paragraph (a) on an ongoing basis;

(c) report to the board of directors of the clearing agency as soon as practicable upon becoming aware of any circumstance indicating that the clearing agency, or any individual acting on its behalf, is not in compliance with securities legislation and one or more of the following apply:

(i) the non-compliance creates a risk of harm to a participant,

(ii) the non-compliance creates a risk of harm to the broader financial system,

(iii) the non-compliance is part of a pattern of non-compliance, or

(iv) the non-compliance may have an impact on the ability of the clearing agency to carry on business in compliance with securities legislation;

(d) prepare and certify an annual report assessing compliance by the clearing agency, and individuals acting on its behalf, with securities legislation and submit the report to the board of directors; and

(e) report to the clearing agency's board of directors as soon as practicable upon becoming aware of a conflict of interest that creates a risk of harm to a participant or to the capital markets; and

(f) concurrently with submitting a report under paragraphs (c), (d) or (e), file a copy of such report with the securities regulatory authority.

Board or advisory committees

4.4 The board of directors of a recognized clearing agency must establish and maintain one or more committees on risk management, finance, audit and executive compensation, whose mandates must include, at a minimum, the following:

(a) providing advice and recommendations to the board of directors to assist it in fulfilling its risk management responsibilities, including reviewing and assessing the clearing agency's risk management policies and procedures, the adequacy of the implementation of appropriate procedures to mitigate and manage such risks, and the clearing agency's participation standards and collateral requirements;

(b) ensuring adequate processes and controls are in place over the models used to quantify, aggregate, and manage the clearing agency's risks;

(c) monitoring the financial performance of the clearing agency and providing financial management oversight and direction to the business and affairs of the clearing agency;

(d) implementing policies and processes to identify, address, and manage potential conflicts of interest of board members;

(e) regularly reviewing the board of directors' and senior management's performance and the performance of each individual member; and

(f) a requirement that these committees,

(i) where the committee is a board committee, be chaired by a sufficiently knowledgeable individual who is independent of the clearing agency,

(ii) subject to clause (iii), have an appropriate representation by individuals who are independent of the clearing agency; and

(iii) where the committee is the audit or risk committee, have an appropriate representation by individuals who are

(A) independent of the clearing agency, and

(B) not employees or executive officers of a participant or their immediate family members.

Division 2 – Default management:

Use of own capital

4.5 A recognized clearing agency that operates as a central counterparty must dedicate and use a reasonable portion of its own capital to cover losses resulting from one or more participant defaults prior to applying the collateral of, or other prefunded financial resources contributed by, the non-defaulting participants.

Division 3 – Operational risk:

Systems requirements

4.6 A recognized clearing agency must, for each of the systems that support its clearing, settlement and depository functions,

(a) develop and maintain,

(i) an adequate system of internal controls over its systems that support the clearing agency's operations and services, and

(ii) adequate information technology general controls, including without limitation, controls relating to information systems operations, information security, change management, problem management, network support and system software support; and

(b) in accordance with prudent business practice, on a reasonably frequent basis and, in any event, at least annually,

(i) make reasonable current and future capacity estimates, and

(ii) conduct capacity stress tests to determine the ability of those systems to process transactions in an accurate, timely and efficient manner, and

(c) promptly notify the regulator or, in Québec, the securities regulatory authority of any material systems failure, malfunction, 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 clearing agency's internal review of the failure, malfunction, delay or security breach.

Systems reviews

4.7(1) A recognized clearing agency must annually engage a qualified party to conduct an independent systems review and vulnerability assessment and prepare a report in accordance with established audit standards and best industry practices to ensure that the clearing agency is in compliance with paragraph 4.6(a) and section 4.9.

(2) The clearing agency must provide the report resulting from the review conducted under subsection (1) to,

(a) its board of directors, or audit committee, promptly upon the report's completion; and

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

Clearing agency technology requirements and testing facilities

4.8(1) A recognized clearing agency must make publicly available, in their final form, all technology requirements regarding interfacing with or accessing the clearing agency,

(a) if operations have not begun, sufficiently in advance of operations to allow a reasonable period for testing and system modification by participants, and

(b) if operations have begun, sufficiently in advance of implementing a material change to technology requirements to allow a reasonable period for testing and system modification by participants.

(2) After complying with subsection (1), the clearing agency must make available testing facilities for interfacing with or accessing the clearing agency,

(a) if operations have not begun, sufficiently in advance of operations to allow a reasonable period for testing and system modification by participants, and

(b) if operations have begun, sufficiently in advance of implementing a material change to technology requirements to allow a reasonable period for testing and system modification by participants.

(3) The clearing agency must not begin operations until it has complied with paragraphs (1)(a) and (2)(a).

(4) Paragraphs (1)(b) and (2)(b) do not apply to the clearing agency if,

(a) the change to its technology requirements must be made immediately to address a failure, malfunction or material delay of its systems or equipment,

(b) the clearing agency immediately notifies the securities regulatory authority of its intention to make the change to its technology requirements, and

(c) the clearing agency publicly discloses the changed technology requirements as soon as practicable.

Testing of business continuity plans

4.9 A recognized clearing agency must test its business continuity plans, including its disaster recovery plans, according to prudent business practices and on a reasonably frequent basis and, in any event, at least annually.

Outsourcing

4.10 If a recognized clearing agency outsources a critical service or system to a service provider, including to an affiliate or associate of the clearing agency, the clearing agency must,

(a) establish, implement, maintain and enforce written policies and procedures to conduct suitable due diligence for selecting service providers to which a critical service and system may be outsourced and for the evaluation and approval of those outsourcing arrangements;

(b) identify any conflicts of interest between the clearing agency and the service provider to which a critical service and system is outsourced, and establish, implement, maintain and enforce written policies and procedures to mitigate and manage those conflicts of interest;

(c) enter into a written contract with the service provider to which a critical service or system is outsourced that,

(i) is appropriate for the materiality and nature of the outsourced activities,

(ii) includes service level provisions, and

(iii) provides for adequate termination procedures;

(d) maintain access to the books and records of the service provider relating to the outsourced activities;

(e) ensure that the securities regulatory authority has the same access to all data, information and systems maintained by the service provider on behalf of the clearing agency that it would have absent the outsourcing arrangements;

(f) ensure that all persons conducting audits or independent reviews of the clearing agency under this Instrument have appropriate access to all data, information and systems maintained by the service provider on behalf of the clearing agency that such persons would have absent the outsourcing arrangements,

(g) take appropriate measures to determine that the service provider to which a critical service or system is outsourced establishes, maintains and periodically tests an appropriate business continuity plan, including a disaster recovery plan;

(h) take appropriate measures to ensure that the service provider protects the clearing agency's proprietary information and participants' confidential information, including taking measures to protect information from loss, thefts, vulnerabilities, threats, and unauthorized access, copying, use, and modification, and discloses it only in circumstances where legislation or an order of a court or tribunal of competent jurisdiction requires the disclosure of such information; and

(i) establish, implement, maintain and enforce written policies and procedures to monitor the ongoing performance of the service provider's contractual obligations under the outsourcing arrangements.

Division 4 – Participation requirements:

Access requirements and due process

4.11(1) A recognized clearing agency must not,

(a) unreasonably prohibit, condition or limit access by a person or company to the services offered by it;

(b) permit unreasonable discrimination among its participants or the customers of its participants;

(c) impose any burden on competition that is not reasonably necessary and appropriate;

(d) unreasonably require the use or purchase of another service for a person or company to utilize the clearing agency's services offered by it; and

(e) impose fees and other material costs on its participants that are unfairly and inequitably allocated among the participants.

(2) For any decision made by the clearing agency that adversely affects a participant or an applicant that applies to become a participant, the clearing agency must ensure that,

(a) the participant or applicant is given an opportunity to be heard or make representations; and

(b) it keeps records of, gives reasons for, and provides for reviews of its decisions, including, for each applicant, the reasons for granting access or for denying or limiting access to the applicant, as the case may be.

(3) Nothing in subsection (2) shall be construed as to limit or prevent the clearing agency from taking timely action in accordance with its rules and procedures to manage the default of one or more participants or in connection with the clearing agency's recovery or orderly wind-down, whether or not such action adversely affects a participant.

PART 5
BOOKS AND RECORDS AND LEGAL ENTITY IDENTIFIER

Books and records

5.1 (1) A recognized clearing agency or exempt clearing agency must keep such books and records and other documents as are necessary to account for the conduct of its clearing, settlement and depository activities, its business transactions and financial affairs and must keep such other books, records and documents as may otherwise be required under securities legislation.

(2) The clearing agency must retain the books and records maintained under this section

(a) for a period of seven years from the date the record was made or received, whichever is later;

(b) in a safe location and a durable form; and

(c) in a manner that permits it to be provided promptly to the securities regulatory authority upon request.

Legal Entity Identifier

5.2 (1) In this section,

"Global Legal Entity Identifier System" means the system for unique identification of parties to financial transactions developed by the Legal Entity Identifier System Regulatory Oversight Committee; and

"LEI Regulatory Oversight Committee" means the international working group established by the Finance Ministers and the Central Bank Governors of the Group of Twenty nations and the Financial Stability Board, under the Charter of the Regulatory Oversight Committee for the Global Legal Entity Identifier System dated November 5, 2012.

(2) For the purposes of any recordkeeping and reporting requirements required under securities legislation, a recognized clearing agency or exempt clearing agency must identify itself by means of a single legal entity identifier.

(3) Each of the following rules apply to legal entity identifiers:

(a) a legal entity identifier must be a unique identification code assigned to the clearing agency in accordance with the standards set by the Global Legal Entity Identifier System, and

(b) the clearing agency must comply with all applicable requirements imposed by the Global Legal Entity Identifier System.

(4) Despite subsection (3), if the Global Legal Entity Identifier System is unavailable to the clearing agency, all of the following rules apply:

(a) the clearing agency must obtain a substitute legal entity identifier which complies with the standards established by the LEI Regulatory Oversight Committee for pre-legal entity identifiers,

(b) the clearing agency must use the substitute legal entity identifier until a legal entity identifier is assigned to the clearing agency in accordance with the standards set by the Global Legal Entity Identifier System as required under paragraph (3)(a), and

(c) after the holder of a substitute legal entity identifier is assigned a legal entity identifier in accordance with the standards set by the Global Legal Entity Identifier System as required under paragraph (3)(a), the clearing agency must ensure that it is identified only by the assigned identifier.

PART 6
EXEMPTIONS

Exemption

6.1 (1) The regulator or the securities regulatory authority may grant an exemption from the provisions of this Instrument, in whole or in part, subject to such conditions or restrictions as may be imposed in the exemption.

(2) Despite subsection (1), in Ontario, only the regulator may grant an exemption.

(3) Except in Ontario, an exemption referred to in subsection (1) is granted under the statute referred to in Appendix B of National Instrument 14-101 *Definitions* opposite the name of the local jurisdiction.

PART 7
EFFECTIVE DATES AND TRANSITION

Effective dates and transitions

7.1 (1) Except as provided in subsections (2) to (4), this Instrument comes into force on October ***, 2015.

(2) The requirement in section 3.1 to implement rules, procedures or operations designed to ensure that a recognized clearing agency meets or exceeds Standard 14 in Appendix A to this Instrument comes into force on ***.

(3) The requirement in section 3.1 to implement rules, procedures or operations designed to ensure that a recognized clearing agency meets or exceeds section 3.4 of Standard 3 and section 15.3 of Standard 15 in Appendix A to this Instrument comes into force on ***.

(4) The requirement in section 3.1 to implement rules, procedures or operations designed to ensure that a recognized clearing agency meets or exceeds Standard 19 in Appendix A to this Instrument comes into force on ***.

Appendix A

Risk Management Standards Applicable to Recognized Clearing Agencies

Standard 1: *Legal basis* - A recognized clearing agency has a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.

1.1 The legal basis provides a high degree of certainty for each material aspect of the clearing agency's activities in all relevant jurisdictions.

1.2 The clearing agency has rules, procedures and contracts that are clear, understandable and consistent with relevant laws and regulations.

1.3 The clearing agency articulates the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.

1.4 The clearing agency has rules, procedures and contracts that are enforceable in all relevant jurisdictions. There is a high degree of certainty that actions taken by the clearing agency under its rules and procedures will not be voided, reversed or subject to stays.

1.5 If the clearing agency conducts business in multiple jurisdictions, it identifies and mitigates the risks arising from any potential conflicts of laws across jurisdictions.

Standard 2: *Governance* – A recognized clearing agency has governance arrangements that are clear and transparent, promote the safety and efficiency of the clearing agency, support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

2.1 The clearing agency has objectives that place a high priority on the safety and efficiency of the clearing agency and explicitly support financial stability and other relevant public interest considerations.

2.2 The clearing agency has documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements are disclosed to owners, relevant authorities, participants, and, at a more general level, the public.

2.3 The roles and responsibilities of the clearing agency's board of directors are clearly specified, and there are documented governance procedures for its functioning, including procedures to identify, address and manage member conflicts of interest. The board of directors reviews both its overall performance and the performance of its individual board members regularly.

2.4 The board of directors contains suitable members with the appropriate skills and incentives to fulfill its multiple roles. This typically requires the inclusion of non-executive board member(s).

2.5 The roles and responsibilities of management are clearly specified. The clearing agency's management has the appropriate experience, a mix of skills, and the integrity necessary to discharge its responsibilities for the operation and risk management of the clearing agency.

2.6 The board of directors establishes a clear, documented risk-management framework that includes the clearing agency's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board of directors.

2.7 The board of directors ensures that the clearing agency's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions are clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.

Standard 3: *Framework for the comprehensive management of risks* – A recognized clearing agency has a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational and other risks.

3.1 The clearing agency has risk-management policies, procedures, and systems that enable it to identify, measure, monitor and manage the range of risks that arise in or are borne by it. The risk-management framework is subject to periodic review.

3.2 The clearing agency provides incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the clearing agency.

3.3 The clearing agency regularly reviews the material risks it bears from and poses to other entities (such as other clearing agencies, payments systems, trade repositories, settlement banks, liquidity providers and service providers) as a result of interdependencies and develops appropriate risk-management tools to address these risks.

3.4 The clearing agency identifies scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assesses the effectiveness of a full range of options for recovery or orderly wind-down. The clearing agency prepares appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, the clearing agency also provides relevant authorities with the information needed for purposes of resolution planning.

Standard 4: *Credit risk* – A recognized clearing agency that operates as a central counterparty or securities settlement system effectively measures, monitors, and manages its credit exposures to participants and those arising from its clearing and settlement processes. The clearing agency maintains sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, the clearing agency, if it operates as a central counterparty, that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions maintains additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the clearing agency in extreme but plausible market conditions. All other clearing agencies that operate as a central counterparty maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the clearing agency in extreme but plausible market conditions.

4.1 The clearing agency establishes a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.

4.2 The clearing agency identifies sources of credit risk, routinely measures and monitors its credit exposures, and uses appropriate risk-management tools to control these risks.

4.3 The clearing agency, if it operates as a securities settlement system, covers its current exposures and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources. Where the clearing agency operates as a deferred net settlement system, in which there is no settlement guarantee but where its participants face credit exposures arising from its payment, clearing and settlement processes, the clearing agency maintains, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.

4.4 The clearing agency that operates as a central counterparty covers its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources. In addition, the clearing agency that operates as a central counterparty and that is involved in activities with a more-complex risk profile or is systemically important in multiple jurisdictions maintains additional financial resources to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the clearing agency in extreme but plausible market conditions. All other clearing agencies that operate as a central counterparty maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure for the clearing agency in extreme but plausible market conditions. In all cases, the clearing agency that operates as a central counterparty documents its supporting rationale for, and has appropriate governance arrangements relating to, the amount of total financial resources it maintains.

4.5 The clearing agency that operates as a central counterparty determines the amount and regularly tests the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. The clearing agency has clear procedures to report the results of its stress tests to appropriate decision makers at the clearing agency and to use these results to evaluate the adequacy of and adjust its total financial resources. Stress tests are performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, the clearing agency performs a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the clearing agency's required level of default protection in light of current and evolving market conditions. The clearing agency performs this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by the clearing

agency's participants increases significantly. A full validation of the clearing agency's risk management model is performed at least annually.

4.6 In conducting stress testing, the clearing agency that operates as a central counterparty considers the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods. Scenarios include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions.

4.7 The clearing agency establishes explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the clearing agency. These rules and procedures address how potentially uncovered credit losses would be allocated, including the repayment of any funds the clearing agency may borrow from liquidity providers. These rules and procedures also indicate the clearing agency's process to replenish any financial resources that the clearing agency may employ during a stress event, so that the clearing agency can continue to operate in a safe and sound manner.

Standard 5: *Collateral* – A recognized clearing agency that operates as a central counterparty or securities settlement system and requires collateral to manage its or its participants' credit exposure, accepts collateral with low credit, liquidity, and market risks. The clearing agency also sets and enforces appropriately conservative haircuts and concentration limits.

5.1 The clearing agency generally limits the assets it (routinely) accepts as collateral to those with low credit, liquidity and market risks.

5.2 The clearing agency establishes prudent valuation practices and develops haircuts that are regularly tested and take into account stressed market conditions.

5.3 In order to reduce the need for procyclical adjustments, the clearing agency establishes stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the extent practicable and prudent.

5.4 The clearing agency avoids concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.

5.5 Where the clearing agency accepts cross-border collateral, it mitigates the risks associated with its use and ensures that the collateral can be used in a timely manner.

5.6 The clearing agency uses a collateral management system that is well-designed and operationally flexible.

Standard 6: *Margin* – A recognized clearing agency that operates as a central counterparty covers its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.

6.1 The clearing agency has a margin system that establishes margin levels commensurate with the risks and particular attributes of each product, portfolio and market it serves.

6.2 The clearing agency has a reliable source of timely price data for its margin system. The clearing agency also has procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.

6.3 The clearing agency adopts initial margin models and parameters that are risk-based and generate margin requirements sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin meets an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. For a clearing agency that calculates margin at the portfolio level, this requirement applies to each portfolio's distribution of future exposure. For a clearing agency that calculates margin at more-granular levels, such as at the subportfolio level or by product, the requirement is met for the corresponding distributions of future exposure. The model (a) uses a conservative estimate of the time horizons for the effective hedging or close out of the particular types of products cleared by the clearing agency (including in stressed market conditions), (b) has an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products, and (c) to the extent practicable and prudent, limits the need for destabilising, procyclical changes.

6.4 The clearing agency marks participant positions to market and collects variation margin at least daily to limit the build-up of current exposures. The clearing agency has the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants.

6.5 In calculating margin requirements, the clearing agency may allow offsets or reductions in required margin across products that it clears or between products that it and another central counterparty clear, if the risk of one product is significantly and reliably correlated with the risk of the other product. Where the clearing agency is authorized to offer cross-margining with one or more other central counterparties, it and the other central counterparties have appropriate safeguards and harmonised overall risk-management systems.

6.6 The clearing agency analyses and monitors its model performance and overall margin coverage by conducting rigorous daily backtesting and at least monthly, and more frequently where appropriate, sensitivity analysis. The clearing agency regularly conducts an assessment of the theoretical and empirical properties of its margin model for all products it clears. In conducting sensitivity analysis of the model's coverage, the clearing agency takes into account a wide range of parameters and assumptions that reflect possible market conditions, including the most volatile periods that have been experienced by the markets it serves and extreme changes in the correlations between prices.

6.7 The clearing agency regularly reviews and validates its margin system.

Standard 7: *Liquidity risk* – A recognized clearing agency that operates as a central counterparty or securities settlement system effectively measures, monitors, and manages its liquidity risk. The clearing agency maintains sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the clearing agency in extreme but plausible market conditions.

7.1 The clearing agency has a robust framework to manage its liquidity risks from its participants, settlement banks, *nostro* agents, custodian banks, liquidity providers, and other entities.

7.2 The clearing agency has effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.

7.3 The clearing agency that performs the services of a securities settlement system, including one that employs a deferred net settlement mechanism, maintains sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.

7.4 The clearing agency that operates as a central counterparty maintains sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet other payment obligations on time with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation to the clearing agency in extreme but plausible market conditions. In addition, the clearing agency that operates as a central counterparty, and that is involved in activities with a more-complex risk profile or is systemically important in multiple jurisdictions, considers maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the clearing agency in extreme but plausible market conditions.

7.5 For the purpose of meeting its minimum liquid resource requirement, the clearing agency's qualifying liquid resources in each currency include cash at the central bank of issue or at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repurchase agreements, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If the clearing agency has access to routine credit at the central bank of issue, the clearing agency may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to, or for conducting other appropriate forms of transactions with, the relevant central bank. All such resources are available when needed.

7.6 The clearing agency may supplement its qualifying liquid resources with other forms of liquid resources. If the clearing agency does so, then these liquid resources are in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repurchase agreements on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if the clearing agency does not have access to routine central bank credit, it still takes account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. The clearing agency does not assume the availability of emergency central bank credit as a part of its liquidity plan.

7.7 The clearing agency obtains a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the clearing agency or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. The clearing agency regularly tests its procedures for accessing its liquid resources at a liquidity provider.

7.8 The clearing agency with access to central bank accounts, payment services, or securities services uses these services, where practical, to enhance its management of liquidity risk.

7.9 The clearing agency determines the amount and regularly tests the sufficiency of its liquid resources through rigorous stress testing. The clearing agency has clear procedures to report the results of its stress tests to appropriate decision makers at the clearing agency and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, the clearing agency considers a wide range of relevant scenarios. Scenarios include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios also take into account the design and operation of the clearing agency, include all entities that may pose material liquidity risks to the clearing agency (such as settlement banks, *nostro* agents, custodian banks, liquidity providers, and linked clearing agencies, trade repositories and payment systems), and where appropriate, cover a multiday period. In all cases, the clearing agency documents its supporting rationale for, and has appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.

7.10 The clearing agency establishes explicit rules and procedures that enable the clearing agency to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. These rules and procedures address unforeseen and potentially uncovered liquidity shortfalls which aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures also indicate the clearing agency's process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.

Standard 8: *Settlement finality* – A recognized clearing agency that operates as a central counterparty or securities settlement system provides clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, the clearing agency provides final settlement intraday or in real time.

8.1 The clearing agency's rules and procedures clearly define the point at which settlement is final.

8.2 The clearing agency completes final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. The clearing agency that operates as a securities settlement system generally considers adopting real-time gross settlement or multiple-batch processing during the settlement day.

8.3 The clearing agency clearly defines the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.

Standard 9: *Money settlements* – A recognized clearing agency that operates as a central counterparty or securities settlement system conducts its money settlements in central bank money, where practical and available. If central bank money is not used, the clearing agency minimizes and strictly controls the credit and liquidity risk arising from the use of commercial bank money.

9.1 The clearing agency conducts its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.

9.2 If central bank money is not used, the clearing agency conducts its money settlements using a settlement asset with little or no credit or liquidity risk.

9.3 If the clearing agency settles in commercial bank money, it monitors, manages, and limits its credit and liquidity risks arising from the commercial settlement banks. In particular, the clearing agency establishes and monitors adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. The clearing agency also monitors and manages the concentration of credit and liquidity exposures to its commercial settlement banks.

9.4 If the clearing agency conducts money settlements on its own books, it minimizes and strictly controls its credit and liquidity risks.

9.5 The clearing agency's legal agreements with any settlement banks state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received are to be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the clearing agency and its participants to manage credit and liquidity risks.

Standard 10: *Physical deliveries* – A recognized clearing agency clearly states its obligations with respect to the delivery of physical instruments or commodities and identifies, monitors and manages the risks associated with such physical deliveries.

10.1 The clearing agency's rules clearly state its obligations with respect to the delivery of physical instruments or commodities.

10.2 The clearing agency identifies, monitors and manages the risks and costs associated with the storage and delivery of physical instruments and commodities.

Standard 11: *Central securities depositories* – A recognized clearing agency that operates as a central securities depository has appropriate rules and procedures to help ensure the integrity of securities issues and minimizes and manages the risks associated with the safekeeping and transfer of securities. The clearing agency maintains securities in an immobilized or dematerialized form for their transfer by book entry.

11.1 The clearing agency has appropriate rules, procedures and controls, including robust accounting practices, to safeguard the rights of securities issuers and holders, prevent the unauthorised creation or deletion of securities, and conduct periodic and at least daily reconciliation of securities issues it maintains.

11.2 The clearing agency prohibits overdrafts and debit balances in securities accounts.

11.3 The clearing agency maintains securities in an immobilized or dematerialised form for their transfer by book entry. Where appropriate, the clearing agency provides incentives to immobilize or dematerialise securities.

11.4 The clearing agency protects assets against custody risk through appropriate rules and procedures consistent with its legal framework.

11.5 The clearing agency employs a robust system that ensures segregation between its own assets and the securities of its participants and segregation among the securities of participants. Where supported by the legal framework, the clearing agency also supports operationally the segregation of securities belonging to a participant's customers on the participant's books and facilitates the transfer of customer holdings.

11.6 The clearing agency identifies, measures, monitors, and manages its risks from other activities that it may perform; additional tools may be necessary in order to address these risks.

Standard 12: *Exchange-of-value settlement systems* – Where a recognized clearing agency operates as a central counterparty or securities settlement system and settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it eliminates principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

12.1 The clearing agency that is an exchange-of-value settlement system eliminates principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the clearing agency settles on a gross or net basis and when finality occurs.

Standard 13: *Participant default rules and procedures* – A recognized clearing agency has effective and clearly defined rules and procedures to manage a participant default. These rules and procedures are designed to ensure that the clearing agency can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

13.1 The clearing agency has default rules and procedures that enable the clearing agency to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.

13.2 The clearing agency is well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.

13.3 The clearing agency publicly discloses key aspects of its default rules and procedures.

13.4 The clearing agency involves its participants and other stakeholders in the testing and review of the clearing agency's default procedures, including any close-out procedures. Such testing and review is conducted at least annually or following material changes to the clearing agency's rules and procedures to ensure that they are practical and effective.

Standard 14: *Segregation and portability* – A recognized clearing agency that operates as a central counterparty has rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the clearing agency with respect to those positions.

14.1 The clearing agency has, at a minimum, segregation and portability arrangements that effectively protect a participant's customers' positions and related collateral from the default or insolvency of that participant. If the clearing agency additionally offers protection of such customer positions and collateral against the concurrent default of the participant and a fellow customer, the clearing agency takes steps to ensure that such protection is effective.

14.2 The clearing agency employs an account structure that enables it readily to identify positions of a participant's customers and to segregate related collateral. The clearing agency maintains customer positions and collateral in individual customer accounts or in omnibus customer accounts.

14.3 The clearing agency structures its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants.

14.4 The clearing agency discloses its rules, policies, and procedures relating to the segregation and portability of a participant's customers' positions and related collateral. In particular, the clearing agency discloses whether customer collateral is protected on an individual or omnibus basis. In addition, the clearing agency discloses any constraints, such as legal or operational constraints, that may impair its ability to segregate or port the participant's customers' positions and related collateral.

Standard 15: *General business risk* – A recognized clearing agency identifies, monitors, and manages its general business risk and holds sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets are at all times sufficient to ensure a recovery or orderly wind-down of critical operations and services.

15.1 The clearing agency has robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.

15.2 The clearing agency holds liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity the clearing agency holds is determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.

15.3 The clearing agency maintains a viable recovery or orderly wind-down plan and holds sufficient liquid net assets funded by equity to implement this plan. At a minimum, the clearing agency holds liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults and other risks required to be covered under the financial resources Standards. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.

15.4 Assets held to cover general business risk are of high quality and sufficiently liquid in order to allow the clearing agency to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.

15.5 The clearing agency maintains a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan is approved by the board of directors and updated regularly.

Standard 16: *Custody and investment risks* – A recognized clearing agency safeguards its own and its participants' assets and minimizes the risk of loss on and delay in access to these assets. The clearing agency's investments are in instruments with minimal credit, market, and liquidity risks.

16.1 The clearing agency holds its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect such assets.

16.2 The clearing agency has prompt access to its assets and the assets provided by participants, when required.

16.3 The clearing agency evaluates and understands its exposures to its custodian banks, taking into account the full scope of its relationships with each.

16.4 The clearing agency's investment strategy is consistent with its overall risk-management strategy and fully disclosed to its participants, and investments are secured by, or claims on, high-quality obligors. These investments allow for quick liquidation with little, if any, adverse price effect.

Standard 17: *Operational risks* – A recognized clearing agency identifies the plausible sources of operational risk, both internal and external, and mitigates their impact through the use of appropriate systems, policies, procedures, and controls. Systems are designed to ensure a high degree of security and operational reliability and have adequate, scalable capacity. Business continuity management aims for timely recovery of operations and fulfillment of the clearing agency's obligations, including in the event of a wide-scale or major disruption.

17.1 The clearing agency establishes a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.

17.2 The clearing agency's board of directors clearly defines the roles and responsibilities for addressing operational risk and endorses the clearing agency's operational risk-management framework. Systems, operational policies, procedures, and controls are reviewed, audited, and tested periodically and after significant changes.

17.3 The clearing agency has clearly defined operational reliability objectives and has policies in place that are designed to achieve those objectives.

17.4 The clearing agency ensures that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.

17.5 The clearing agency has comprehensive physical and information security policies that address all potential vulnerabilities and threats.

17.6 The clearing agency has a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan incorporates the use of a secondary site and is designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan is designed to enable the clearing agency to complete settlement by the end of the day of the disruption, even in extreme circumstances. The clearing agency regularly tests these arrangements.

17.7 The clearing agency identifies, monitors, and manages the risks that key participants, other clearing agencies, trade repositories, payment systems, and service and utility providers might pose to its operations. In addition, the clearing agency identifies, monitors, and manages the risks its operations might pose to other clearing agencies, trade repositories, and payment systems.

Standard 18: *Access and participation requirements* – A recognized clearing agency has objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

18.1 The clearing agency allows for fair and open access to its services, including by direct and, where relevant, indirect participants and other clearing agencies, payment systems and trade repositories, based on reasonable risk-related participation requirements.

18.2 The clearing agency's participation requirements are justified in terms of the safety and efficiency of the clearing agency and the markets it serves, are tailored to and commensurate with the clearing agency's specific risks, and are publicly disclosed. Subject to maintaining acceptable risk control standards, the clearing agency endeavours to set requirements that have the least-restrictive impact on access that circumstances permit.

18.3 The clearing agency monitors compliance with its participation requirements on an ongoing basis and has clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.

Standard 19: *Tiered participation arrangements* – A recognized clearing agency identifies, monitors, and manages the material risks to the clearing agency arising from any tiered participation arrangements.

19.1 The clearing agency ensures that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the clearing agency arising from such tiered participation arrangements.

19.2 The clearing agency identifies material dependencies between direct and indirect participants that might affect the clearing agency.

19.3 The clearing agency identifies indirect participants responsible for a significant proportion of transactions processed by the clearing agency and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the clearing agency in order to manage the risks arising from these transactions.

19.4 The clearing agency regularly reviews risks arising from tiered participation arrangements and takes mitigating action when appropriate.

Standard 20: *Links with other financial market infrastructures* – A recognized clearing agency that establishes a link with one or more clearing agencies or trade repositories identifies, monitors, and manages link-related risks.

20.1 Before entering into a link and on an ongoing basis once the link is established, the clearing agency identifies, monitors, and manages all potential sources of risk arising from the link. Links are designed such that the clearing agency is able to observe the other Standards.

20.2 A link has a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the clearing agencies and trade repositories involved in the link.

20.3 Linked central securities depositories measure, monitor, and manage the credit and liquidity risks arising from each other. Any credit extensions between central securities depositories are covered fully with high-quality collateral and are subject to limits.

20.4 Provisional transfers of securities between linked central securities depositories are prohibited or, at a minimum, the retransfer of provisionally transferred securities are prohibited prior to the transfer becoming final.

20.5 An investor central securities depository only establishes a link with an issuer central securities depository if the link provides a high level of protection for the rights of the investor central securities depository's participants.

20.6 An investor central securities depository that uses an intermediary to operate a link with an issuer central securities depository measures, monitors, and manages the additional risks (including custody, credit, legal, and operational risks) arising from the use of the intermediary.

20.7 Before entering into a link with another central counterparty, a central counterparty identifies and manages the potential spill-over effects from the default of the linked central counterparty. If a link has three or more central counterparties, each central counterparty identifies, assesses, and manages the risks of the collective link.

20.8 Each central counterparty in a central counterparty link is able to cover, at least on a daily basis, its current and potential future exposures to the linked central counterparty and its participants, if any, fully with a high degree of confidence without reducing the central counterparty's ability to fulfill its obligations to its own participants at any time.

Standard 21: *Efficiency and effectiveness* – A recognized clearing agency is efficient and effective in meeting the requirements of its participants and the markets it serves.

21.1 The clearing agency is designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.

21.2 The clearing agency has clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.

21.3 The clearing agency has established mechanisms for the regular review of its efficiency and effectiveness.

Standard 22: *Communication procedures and standards* – A recognized clearing agency uses, or at a minimum accommodates, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, depository, and recording.

22.1 The clearing agency uses, or at a minimum accommodates, internationally accepted communication procedures and standards.

Standard 23: *Disclosure of rules, key procedures, and market data* – A recognized clearing agency has clear and comprehensive rules and procedures and provides sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the clearing agency. All relevant rules and key procedures are publicly disclosed.

23.1 The clearing agency adopts clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures are also publicly disclosed.

23.2 The clearing agency discloses clear descriptions of the clearing agency's systems' design and operations, as well as the rights and obligations of the clearing agency and its participants, so that participants can assess the risks they would incur by participating in the clearing agency.

23.3 The clearing agency provides all necessary and appropriate documentation and training to facilitate participants' understanding of the clearing agency's rules and procedures and the risks they face from participating in the clearing agency.

23.4 The clearing agency publicly discloses its fees at the level of individual services it offers as well as its policies on any available discounts. The clearing agency provides clear descriptions of priced services for comparability purposes.

23.5 The clearing agency completes regularly and discloses publicly responses to the PFMI Disclosure Framework Document. The clearing agency also, at a minimum, discloses basic data on transaction volumes and values.

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FORM 24-102F1
NATIONAL INSTRUMENT 24-102 – *CLEARING AGENCY REQUIREMENTS*

CLEARING AGENCY SUBMISSION TO JURISDICTION AND APPOINTMENT OF AGENT FOR SERVICE OF PROCESS

1. Name of clearing agency (the "Clearing Agency"):

   _____

2. Jurisdiction of incorporation, or equivalent, of Clearing Agency:

   _____

3. Address of principal place of business of Clearing Agency:

   _____

4. Name of the agent for service of process for the Clearing Agency (the "Agent"):

   _____

5. Address of Agent for service of process in _____[province of local jurisdiction]:

   _____

6. The _____ [name of securities regulatory authority] ("securities regulatory authority") issued an order recognizing the Clearing Agency as a clearing agency pursuant to securities legislation, or the securities regulatory authority issued an order exempting the Clearing Agency from the requirement to be recognized as a clearing agency pursuant to such legislation, on _____.

7. The Clearing Agency designates and appoints the Agent as its agent upon whom may be served a notice, pleading, subpoena, summons or other process in any action, investigation or administrative, criminal, quasi-criminal, penal or other proceeding arising out of or relating to or concerning the activities of the Clearing Agency in _____ [province of local jurisdiction]. The Clearing Agency hereby irrevocably waives any right to challenge service upon its Agent as not binding upon the Clearing Agency.

8. The Clearing Agency agrees to unconditionally and irrevocably attorn to the non-exclusive jurisdiction of (i) the courts and administrative tribunals of _____ [province of local jurisdiction] and (ii) any proceeding in any province or territory arising out of, related to, concerning or in any other manner connected with the regulation and oversight of the activities of the Clearing Agency in _____ [province of local jurisdiction].

9. The Clearing Agency shall file a new submission to jurisdiction and appointment of agent for service of process in this form at least 30 days before the Clearing Agency ceases to be recognized or exempted by the securities regulatory authority, to be in effect for six years from the date it ceases to be recognized or exempted unless otherwise amended in accordance with section 10.

10. Until six years after it has ceased to be a recognized or exempted by the securities regulatory authority, the Clearing Agency shall file an amended submission to jurisdiction and appointment of agent for service of process at least 30 days before any change in the name or above address of the Agent.

11. This submission to jurisdiction and appointment of agent for service of process shall be governed by and construed in accordance with the laws of _____ [province of local jurisdiction].

Dated: _____

_____
Signature of the Clearing Agency

_____

Print name and title of signing officer of the Clearing Agency

AGENT

CONSENT TO ACT AS AGENT FOR SERVICE

I, _____ (name of Agent in full; if Corporation, full Corporate name) of _____ (business address), hereby accept the appointment as agent for service of process of _____ (insert name of Clearing Agency) and hereby consent to act as agent for service pursuant to the terms of the appointment executed by _____ (insert name of Clearing Agency) on _____ (insert date).

Dated: _____

_____
Signature of Agent

_____
Print name of person signing and, if Agent is not an individual, the title of the person

FORM 24-102F2
NATIONAL INSTRUMENT 24-102 – *CLEARING AGENCY REQUIREMENTS*

CESSATION OF OPERATIONS REPORT FOR CLEARING AGENCY

1. Identification:

   A. Full name of the recognized or exempted clearing agency:

   B. Name(s) under which business is conducted, if different from item 1A:

2. Date clearing agency proposes to cease carrying on business as a clearing agency:

3. If cessation of business was involuntary, date clearing agency has ceased to carry on business as a clearing agency:

Exhibits

File all Exhibits with the Cessation of Operations Report. For each exhibit, include the name of the clearing agency, the date of filing of the exhibit and the date as of which the information is accurate (if different from the date of the filing). If any Exhibit required is inapplicable, a statement to that effect shall be furnished instead of such Exhibit.

Exhibit A

The reasons for the clearing agency ceasing to carry on business as a clearing agency.

Exhibit B

A list of all participants in Canada during the last 30 days prior to ceasing business as a clearing agency.

Exhibit C

A description of the alternative arrangements available to participants in respect of the services offered by the clearing agency immediately prior to the cessation of business as a clearing agency.

Exhibit D

A description of all links the clearing agency had immediately prior to the cessation of business as a clearing agency with other clearing agencies or trade repositories.

CERTIFICATE OF CLEARING AGENCY

The undersigned certifies that the information given in this report is true and correct.

DATED at _____ this _____ day of _____ 20 _____

_____
(Name of clearing agency)

_____
(Name of director, officer or partner – please type or print)

_____
(Signature of director, officer or partner)

_____
(Official capacity – please type or print)

COMPANION POLICY

TO

National Instrument 24 – 102

CLEARING AGENCY REQUIREMENTS

TABLE OF CONTENTS

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PART I
GENERAL COMMENTS

Introduction

1.1 (1) This Companion Policy (CP) sets out how the Canadian Securities Administrators (the CSA or we) interpret or apply provisions of National Instrument 24-102 *Clearing Agency Requirements* (the Instrument) and related securities legislation.

(2) Except for Part 1 and the *text boxes* in Part 3 of this CP, the numbering of Parts, sections and subsections in this CP generally corresponds to the numbering in the Instrument. Any general guidance or introductory comments for a Part appears immediately after the Part's name. Specific guidance on a section or subsection in the Instrument follows any general guidance. If there is no guidance for a Part, section or subsection, the numbering in this CP will skip to the next provision that does have guidance.

(3) Unless otherwise stated, any reference to a Part, section, subsection, paragraph, defined term or Appendix in this CP is a reference to the corresponding Part, section, subsection, paragraph, defined term or Appendix in the Instrument.

Background and overview

1.2 (1) Securities legislation in certain Jurisdictions of Canada requires an entity seeking to carry on business as a clearing agency in the jurisdiction to be (i) recognized by the securities regulatory authority in that jurisdiction, or (ii) exempted from the recognition requirement.[1] Accordingly, Part 2 sets out certain requirements in connection with the application process for recognition as a clearing agency or exemption from the recognition requirement. Guidance on the CSA's regulatory approach to such an application is set out in this CP.

(2) Parts 3 and 4 set out on-going requirements applicable to a recognized clearing agency. Whereas Part 3 applies only to a clearing agency that operates as a central counterparty (CCP), securities settlement system (SSS) or central securities depository (CSD), Part 4 applies to a clearing agency whether or not it operates as a CCP, SSS or CSD. The Standards in Appendix A are based on international standards governing financial market infrastructures (FMIs) set forth in the April 2012 report *Principles for financial market infrastructures* (the PFMIs or PFMI Report, as the context requires). The PFMIs were developed jointly by the Committee on Payments and Market Infrastructures (CPMI)[2] and the International Organization of Securities Commissions (IOSCO).[3] The PFMIs harmonize and strengthen previous international standards for FMIs.[4]

(3) Part 3 incorporates the Standards that are relevant to a clearing agency that operates as a CCP, CSD and SSS. Part 3 of this CP includes supplementary guidance in *text boxes* that applies to recognized domestic clearing agencies that are also regulated by the Bank of Canada (BOC). The supplementary guidance (Joint Supplementary Guidance) was prepared jointly by the CSA and BOC to provide additional clarity on certain aspects of the Standards within the Canadian context.

Definitions, interpretation and application

1.3 (1) Unless defined in the Instrument or this CP, defined terms used in the Instrument and this CP have the meaning given to them in the securities legislation of each jurisdiction or in National Instrument 14-101 *Definitions*.

(2) The terms "clearing agency" and "recognized clearing agency" are generally defined in securities legislation. For the purposes of the Instrument, a clearing agency includes, in Quebec, a clearing house, central securities depository and settlement system within the meaning of the Québec *Securities Act* and a derivatives clearing house and settlement system within the meaning of the Québec *Derivatives Act.* The CSA notes that, while Part 3 applies only to a recognized clearing agency that operates as a CCP, CSD or SSS, the term "clearing agency" may incorporate certain other centralized post-trade functions that are not necessarily limited to those of a CCP, CSD or SSS, e.g. an entity that provides centralized facilities for comparing data respecting the terms of settlement of a trade or transaction may be considered a clearing agency, but would not be considered a CCP, CSD or SSS. Except in Québec, such an entity would be required to apply either for recognition as a clearing agency or an exemption from the requirement to be recognized. Whether applying for recognition or for an exemption, the entity would become subject to certain provisions in Part 2 and all of Parts 4 and 5, but not Part 3.[5]

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[1] In certain jurisdictions, the entity is prohibited from carrying on business as a clearing agency unless recognized or exempted.
[2] Prior to September 1, 2014, CPMI was known as the Committee on Payment and Settlement Systems (CPSS)..
[3] See the CPMI-IOSCO *Principles for Financial Market Infrastructures* Report, published in April 2012, available on the Bank for International Settlements' website (www.bis.org) and the IOSCO website (www.iosco.org).
[4] See (i) 2001 CPMI report *Core principles for systemically important payment systems*, (ii) 2001 CPMI-IOSCO report *Recommendations for securities settlement systems* (together with the 2002 CPMI-IOSCO report *Assessment methodology for Recommendations for securities settlement systems*); and (iii) 2004 CPMI-IOSCO report *Recommendations for central counterparties*. All of these reports are available on the Bank for International Settlements' website (www.bis.org). The CPMI-IOSCO reports are also available on IOSCO website (www.iosco.org).
[5] In Québec, an entity that provides such centralized facilities for comparing data would be required to apply either for recognition as a matching service utility or for an exemption from the recognition requirement, in application of the provisions of National Instrument 24-101 *Institutional Trade Matching and Settlement*.

(3) A clearing agency may serve either or both the securities and derivatives markets. A clearing agency serving the securities markets can be a CCP, CSD or SSS. A clearing agency serving the derivatives markets is typically only a CCP.

(4) In this CP, FMI means a financial market infrastructure, which the PFMI Report describes as follows: payment systems, CSDs, SSSs, CCPs and trade repositories.

PART 2
CLEARING AGENCY RECOGNITION OR EXEMPTION FROM RECOGNITION

Recognition and exemption

2.0 (1) An entity seeking to carry on business as a clearing agency in certain jurisdictions in Canada is required under the securities legislation of such jurisdictions to apply for recognition or an exemption. For greater clarity, a foreign-based clearing agency that provides or will provide its services or facilities to a person or company resident in a jurisdiction would be considered to be carrying on business in that jurisdiction.

- ***Recognition of a clearing agency***

(2) Generally, we take the view that a clearing agency that is systemically important to a jurisdiction's capital markets or that is not subject to comparable regulation by another regulatory body should be recognized by a securities regulatory authority. A securities regulatory authority may consider the systemic importance of a clearing agency to its capital markets based on the following list of guiding factors: value and volume of transactions processed, cleared and settled by the clearing agency;[6] risk exposures (particularly credit and liquidity) of the clearing agency to its participants; complexity of the clearing agency;[7] and centrality of the clearing agency with respect to its role in the market, including its substitutability, relationships, interdependencies and interactions.[8] The list of guiding factors is non-exhaustive, and no single factor described above will be determinative in an assessment of systemic importance. A securities regulatory authority retains the ability to consider additional quantitative and qualitative factors as may be relevant and appropriate.[9]

- ***Exemption from recognition***

(3) Depending on the circumstances, a clearing agency may be granted an exemption from recognition pursuant to securities legislation and subject to appropriate terms and conditions, where it is not considered systemically important or where it does not otherwise pose significant risk to the capital markets. For example, such an approach may be considered for an entity that provides limited services or facilities, thereby not warranting full regulation, such as a clearing agency that does not perform the functions of a CCP, CSD or SSS. However, in such cases, terms and conditions may be imposed. In addition, a foreign-based clearing agency that is already subject to a comparable regulatory regime in its home jurisdiction may be granted an exemption from the recognition requirement as full regulation may be duplicative and inefficient when imposed in addition to the regulation of the home jurisdiction. The exemption may be subject to certain terms and conditions, including reporting requirements and prior notification of certain material changes to information provided to the securities regulatory authority.

Application and initial filing of information

2.1 The application process for both recognition and exemption from recognition as a clearing agency is similar. The entity that applies will typically be the entity that operates the facility or performs the functions of a clearing agency. The application for recognition or exemption will require completion of appropriate documentation. This will include the items listed in subsection 2.1(1). Together, the application materials should present a detailed description of the history, regulatory structure (if any), and business operations of the clearing agency. A clearing agency that operates as a CCP, CSD or SSS will need to describe how it meets or will meet the requirements of Parts 3 and 4. An applicant based in a foreign jurisdiction should also provide a detailed description of the regulatory regime of its home jurisdiction and the requirements imposed on the clearing agency, including how such requirements are similar to the requirements in Parts 3 and 4.

Where specific information items of the PFMI Disclosure Framework Document are not relevant to an applicant because of the nature or scope of its clearing agency activities, its structure, the products it clears or settles, or its regulatory environment, the application should explain in reasonable detail why the information items are not relevant.

The application filed by an applicant will generally be published for public comment for a 30-day period. Other materials filed with the application, which the applicant wishes to maintain confidential, will generally be kept confidential in accordance with securities and privacy legislation. However, the clearing agency will be required to publicly disclose its PFMI Disclosure Framework Document. See Standard 23.5 in Appendix A.

Material changes and other changes in information

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[6] We would consider, for example, the current aggregate monetary values and volumes of such transactions, as well as the entity's potential for growth.

[7] We would look, for example, to the nature and complexity of the clearing agency, taking into account an analysis of the various products it processes, clears or settles.

[8] We would consider, for example, the centrality or importance of the clearing agency to the particular market or markets it serves, based on the degree to which it critically supports, or that its failure or disruption would affect, such markets or the entire Canadian financial infrastructure.

[9] Additional factors may be based on the characteristics of the clearing agency under review, such as the nature of its operations, its corporate structure, or its business model.

2.2 (2) Under subsection 2.2(2), a recognized clearing agency must receive prior written approval before implementing a material change, unless otherwise provided in the terms and conditions of the recognition decision. The term "material change" is defined in subsection 2.2(1). Any relevant procedures for notifying the securities regulatory authority of a material change and for the authority's review, approval and publication of the material change, are normally set out in the terms and conditions of the recognition decision.

(4) We recognize that a recognized clearing agency may frequently change their fees or fee structure and may need to implement fee changes within tight timeframes. To facilitate this process, subsection 2.2(4) provides that a recognized clearing agency need only notify the securities regulatory authority at least twenty business days before implementing the fee.

Ceasing to Carry on Business

2.3 A recognized or exempt clearing agency that ceases to carry on business in Canada as a clearing agency, either voluntarily or involuntarily, must file a completed Form 24-102F2 *Cessation of Operations Report for Clearing Agency* within the appropriate timelines. In certain jurisdictions, the clearing agency intending to cease carrying on business must also make an application to voluntarily surrender its recognition to the securities regulatory authority pursuant to securities legislation. The securities regulatory authority may accept the voluntary surrender subject to terms and conditions.[10]

[10] See, for example, section 21.4 of the *Securities Act* (Ontario).

PART 3
INTERNATIONAL STANDARDS APPLICABLE TO RECOGNIZED CLEARING AGENCIES

Introduction

3.0 The Standards in Appendix A are derived from the PFMIs. We have included in the Standards only those PFMIs that are relevant to clearing agencies operating as a CCP, CSD or SSS.[11]

Standards

3.1 In interpreting and implementing the Standards, regard is to be given to the explanatory notes in the PFMI Report, as appropriate. As discussed in subsection 1.2(3) of this CP, the CSA and BOC have together developed Joint Supplementary Guidance to provide additional clarity on certain aspects of some Standards within the Canadian context. The Joint Supplementary Guidance is directed at recognized domestic clearing agencies that are also regulated by the BOC. The Joint Supplementary Guidance is included in separate *text boxes* below under the relevant headings of the Standards. Other recognized domestic clearing agencies should assess the applicability of the Joint Supplementary Guidance to their respective entity as well.

- ***Standard 2: Governance***

Box 1:
Joint Supplementary Guidance –
Financial Stability and Other Public Interest Considerations

Context

The PFMIs define governance as the set of relationships between an FMI's owners, board of directors (or equivalent), management, and other relevant parties, including participants, authorities, and other stakeholders (such as participants' customers, other interdependent FMIs, and the broader market). Governance provides the processes through which an organization sets its objectives, determines the means for achieving those objectives, and monitors performance against those objectives. This note provides supplementary regulatory guidance for Canadian FMIs on their governance arrangements as it relates to supporting relevant public interest considerations.

Public interest considerations in the context of the PFMIs

The PFMIs indicate that FMIs should "explicitly support financial stability and other relevant public interests." However, there may be circumstances where providing explicit support of relevant public interests conflict with other FMI objectives and therefore require appropriate prioritization and balancing. For example, addressing the potential trade-offs between protecting the participants and the FMI while ensuring the financial stability interests are upheld.

Guidance within the PFMIs

The following text has been extracted directly from the PFMIs. The pertinent information is in bold italics.

PFMI paragraph 3.2.2:

> ***Given the importance of FMIs and the fact that their decisions can have widespread impact, affecting multiple financial institutions, markets, and jurisdictions, it is essential for each FMI to place a high priority on the safety and efficiency of its operations and explicitly support financial stability and other relevant public interests. Supporting the public interest is a broad concept that includes, for example, fostering fair and efficient markets.*** *For example, in certain over the counter derivatives markets, industry standards and market protocols have been developed to increase certainty, transparency, and stability in the market. If a CCP in such markets were to diverge from these practices, it could, in some cases, undermine the market's efforts to develop common processes to help reduce uncertainty. An FMI's governance arrangements should also include appropriate consideration of the interests of participants, participants' customers, relevant authorities, and other stakeholders. (...) For all types of FMIs, governance arrangements should provide for fair and open access (see Principle 18 on access and participation requirements) and for effective implementation of recovery or wind-down plans, or resolution.*

[11] International standards that are relevant to payment systems and trade repositories, but not CCPs, SSSs and CSDs, have not been included in the Standards in Appendix A.

PFMI paragraph 3.2.8:

> ***An FMI's board has multiple roles and responsibilities that should be clearly specified. These roles and responsibilities should include*** *(a) establishing clear strategic aims for the entity; (b) ensuring effective monitoring of senior management (including selecting its senior managers, setting their objectives, evaluating their performance, and, where appropriate, removing them); (c) establishing appropriate compensation policies (which should be consistent with best practices and based on long-term achievements, in particular, the safety and efficiency of the FMI); (d) establishing and overseeing the risk-management function and material risk decisions; (e) overseeing internal control functions (including ensuring independence and adequate resources); (f) ensuring compliance with all supervisory and oversight requirements;* ***(g) ensuring consideration of financial stability and other relevant public interests****; and (h) providing accountability to the owners, participants, and other relevant stakeholders.*

The CPMI-IOSCO PFMI Disclosure framework and Assessment methodology provides questions to guide the assessment of the FMI against the PFMIs. Questions related to public interest considerations are focused on ensuring that the FMI's objectives are clearly defined, giving a high priority to safety, financial stability and efficiency while also ensuring all other public interest considerations are identified and reflected in the FMI's objectives.

Supplementary Guidance for designated Canadian FMIs

By definition the PFMIs apply to systemically important FMIs, so safety and financial stability objectives should be given a high priority.

Efficiency is also a high priority that should contribute to (but not supersede) the safety and financial stability objectives.

Other public interest considerations such as competition and fair and open access should also be considered in the broader safety and financial stability context.

A framework (objectives, policies and procedures) should be in place for default and other emergency situations. The framework should articulate explicit principles to ensure financial stability and other relevant public interests are considered as part of the decision making process. For example, it should provide guidance on discretionary management decisions, consider the trade-offs between protecting the participants and the FMI while also ensuring the financial stability interests are upheld, and articulate a communication protocol with the board and regulators.

Practical questions/approaches to assessing the appropriateness of the framework include:

- Does the enabling legislation, articles of incorporation, corporate by-laws, corporate mission, vision statements, corporate risk statements/frameworks/methodology clearly articulate the objectives and are they appropriately aligned and communicated (transparent)?
- Do the objectives give appropriate priority to safety, financial stability, efficiency and other public interest considerations?
- Does the Board structure ensure the right mix of skills/experience and interests are in place to ensure the objectives are clear, appropriately prioritized, achieved and measured?
- What is the training provided to the Board and management to support the objectives?
- Do the service offerings and business plans support the objectives?
- Do the system design, rules, procedures support the objectives?
- Are the inter-dependencies and key dependencies considered and managed in the context of the broader financial stability objectives? For instance, do problem and default management policies and procedures appropriately provide for consideration of the broader financial stability interests and do they engage the key stakeholders and regulators?
- Are there procedures in place to get timely engagement of the Board to discuss emerging/current issues, consider scenarios, provide guidance and make decision?
- Does the framework ensure that the broader financial stability issues are considered in any actions relating to a participant suspension?

Box 2:
Joint Supplementary Guidance–
Vertically and Horizontally Integrated FMIs

Context

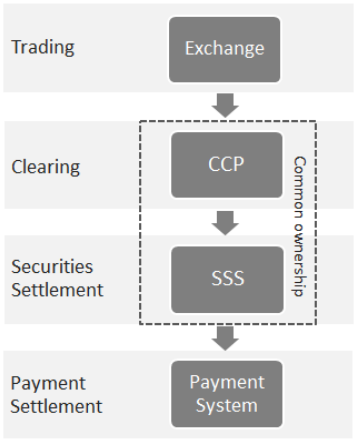
Consolidation, or integration, of FMI services may bring about benefits for merging FMIs; however it may also create new governance challenges. The PFMIs contain some general guidance regarding how FMIs should manage governance issues that arise in integrated entities. This note provides supplementary regulatory guidance for Canadian FMIs that either belong to an integrated entity or are considering consolidating with another entity to form one. The guidance applies to both vertically and horizontally integrated entities.

Vertical and horizontal integration in the context of FMIs

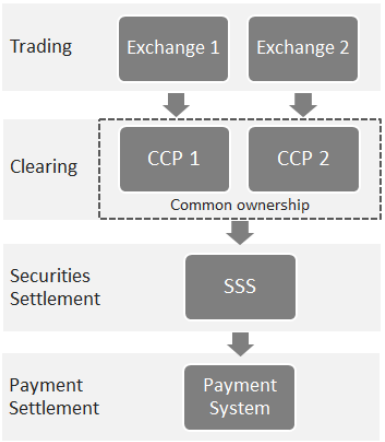
The PFMIs define a vertically integrated FMI group as one that brings together post-trade infrastructure providers under common ownership with providers of other parts of the value chain (for example, one entity owning and operating an exchange, CCP and SSS) and a horizontally integrated group as one that provides the same post-trade service offerings across a number of different products (for example, one entity offering CCP services for derivatives and cash markets).[12] Examples are shown in Figure 1.

Figure 1: Examples of FMI integration in the value chain

a) Example of vertically integrated FMIs



b) Example of horizontally integrated FMIs



Guidance within the PFMIs

The following text has been extracted directly from the PFMIs. The pertinent information is in bold italics.

PFMI paragraph 3.2.5:

> *Depending on its ownership structure and organisational form, an FMI may need to focus particular attention on certain aspects of its governance arrangements.* ***An FMI that is part of a larger organisation, for example, should place particular emphasis on the clarity of its governance arrangements, including in relation to any conflicts of interests and outsourcing issues that may arise because of the parent or other affiliated organisation's structure. The FMI's governance arrangements should also be adequate to ensure that decisions of affiliated organisations are not detrimental to the FMI.[13] An FMI that is, or is part of, a for-profit entity may need to place particular emphasis on managing any conflicts between income generation and safety.***

PFMI paragraph 3.2.6:

> *An FMI may also need to focus particular attention on certain aspects of its risk-management arrangements as a result of its ownership structure or organisational form.* ***If an FMI provides services that present a distinct risk profile from, and potentially pose significant additional risks to, its payment, clearing, settlement, or recording function, the FMI needs to manage those additional risks adequately. This may include separating the additional services that the FMI provides from its payment, clearing, settlement, and recording function legally, or taking equivalent action.*** *The ownership structure and organisational form may also need to be considered in the preparation and implementation of the FMI's recovery or wind-down plans or in assessments of the FMI's resolvability.*

Supplementary guidance for designated Canadian FMIs

An FMI that is part of a larger entity faces additional risk considerations compared to stand-alone FMIs. While there are potential benefits from integrating services into one large entity, including potential risk reduction benefits, integrated entities could face additional risks such as a greater degree of general business risk. Examples of how this could occur include the following:

[12] CPMI-IOSCO 2010. "Market structure developments in the clearing industry: implications for financial stability." CPMI-IOSCO Paper No 92. Available at: http://www.bis.org/publ/cpss92.htm.

[13] If an FMI is wholly owned or controlled by another entity, authorities should also review the governance arrangements of that entity to see that they do not have adverse effects on the FMI's observance of this principle.

- losses in one function may spill-over to the entity's other functions;
- the consolidated entity may face high combined exposures across its functions; and
- the consolidated entity may face exposures to the same participants across its functions.

For a more extensive discussion of potentially heightened risks that integrated FMIs may face, see CPMI, "Market structure developments in the clearing industry: implications for financial stability" (2010).[14]

If an FMI belongs to a larger entity, or is considering consolidating with another entity, it should consider how its risk profile differs as part of the consolidated entity, and take appropriate measures to mitigate these risks.

In addition, FMIs that either belong to an integrated entity or are considering merging to form one should meet the following conditions.

1) Measures to protect critical FMI functions

- FMIs may be part of a larger consolidated entity. These FMIs must either:
  - legally separate FMI-related functions[15] from non-FMI-related functions performed by the consolidated entity in order to maximize bankruptcy remoteness of the FMI-related functions; or
  - have satisfactory policies and procedures in place to manage additional risks resulting from the non-FMI-related functions appropriately to ensure the FMI's financial and operational viability.
- If an FMI performs multiple FMI-related functions with distinct risk profiles within the same entity, the operator should effectively manage the additional risks that may result. The FMI should hold sufficient financial resources to manage the risks in all services it offers, including the combined or compounded risks that would be associated with offering the services through a single legal entity. If the FMI provides multiple services, it should disclose information about the risks of the combined services to existing and prospective participants to give an accurate understanding of the risks they incur by participating in the FMI. The FMI should carefully consider the benefits of offering critical services with distinct risk profiles through separate legal entities.
- If an FMI offers CCP services as part of its FMI-related functions, further conditions apply. CCPs take on more risk than other FMIs, and are inherently at higher risk of failure. Therefore, the FMI must either legally separate its CCP functions from other critical (non-CCP) FMI-related functions, or have satisfactory policies and procedures in place to manage additional risks appropriately to ensure the FMI's financial and operational viability.
- Legal separation of critical functions is intended to maximize their bankruptcy remoteness and would not necessarily preclude integration of common organizational management activities such as IT and legal services across functions as long as any related risks are appropriately identified and mitigated.

2) Independence of governance and risk management

- FMIs and non-FMIs may have different corporate objectives and risk management appetites which could conflict at the parent level. For example, non-FMI-related functions, such as trading venues, are generally more focused on profit generation than risk management and do not have the same risk profile as FMI-related functions. A trading venue in a vertically integrated entity may benefit from increased participation in its service if its associated clearing function lessens its participation requirements.
- To mitigate potential conflicts, in particular the ability of other functions to negatively influence the FMI's risk controls, each FMI subsidiary should have a governance structure and risk management decision-making process that is separate and independent from the other functions and should maintain an appropriate level of autonomy from the parent and other functions to ensure efficient decision making and effective management of any potential conflicts of interest. In addition, the consolidated entity's broad governance arrangements should be reviewed to ensure they do not impede the FMI-related function's observance of the CPMI-IOSCO principle on governance.

3) Comprehensive management of risks

- Although risk management governance and decision-making should remain independent, it is nonetheless necessary that the consolidated entity is able to manage risk appropriately across the entity. At a consolidated level, the entity should have an appropriate risk management framework that considers the risks of each subsidiary and the additional risks related to their interdependencies.
- An FMI should identify and manage the risks it bears from and poses to other entities as a result of interdependencies. Consolidated FMIs should also identify and manage the risks they pose to one another as a result of their interdependencies. Consolidated FMIs may have exposures to the same participants, liquidity

[14] Available at http://www.bis.org/cpmi/publ/d92.pdf.
[15] FMI-related functions are CCP, SSS, and CSD functions, including other aspects of clearing and settlement necessary to perform the CCP, SSS, and CDS functions (see the CPMI-IOSCO glossary definitions of "clearing" and "settlement", available at http://www.bis.org/cpmi/publ/d00b.pdf).

providers, and other critical service providers across products, markets and/or functions. This may increase the entity's dependence on these providers and may heighten the systemic risk associated with the consolidated entity compared to a stand-alone FMI. Where possible, the consolidated entity and its FMIs should consider ways to mitigate risks arising from shared dependencies. The consolidated entity and its FMIs should also consider conducting entity-wide operational risk testing related to identifying and mitigating these risks.

4) Sufficient capital to cover potential losses

- Consolidated entities face the risk that a single participant defaults in more than one subsidiary simultaneously. This could result in substantial losses for the consolidated entity which will then also need to replenish resources for the FMIs to continue to operate. FMIs should consider such risks in developing their resource replenishment plan.
- Consolidated entities may face higher or lower business risk than individual FMIs depending on size, complexity and diversification across affiliates. Consolidated entities should consider these impacts in their general business risk profiles and in determining the appropriate level of liquid assets needed to cover their potential general business losses.[16]

- Standard 5: Collateral

Box 3:
Joint Supplementary Guidance –
Collateral

Context

The PFMIs establish the form and attributes of collateral that an FMI holds to manage its own credit exposures or those of its participants. This note provides additional guidance for Canadian FMIs to meet the components of the collateral principle related to: (i) acceptance of collateral with low credit, liquidity and market risk; (ii) concentrated holdings of certain assets; and (iii) calculating haircuts. In certain circumstances, regulators may allow exceptions to the collateral policy on a case-by-case basis if the FMI demonstrates that the risks can be adequately managed.

(i) Acceptable collateral

The following text has been extracted directly from the PFMIs, from Principle 5 - Key Considerations 1 and 4:

> *An FMI should conduct its own assessment of risks when determining collateral eligibility. In general, collateral held to manage the credit exposures of the FMI or those of its participants should have minimal credit, liquidity and market risk, even in stressed market conditions. However, asset categories with additional risk may be accepted when subject to conservative haircuts and adequate concentration limits.*

The following clarifies regulators' expectations on what is acceptable collateral by specifying:

1) minimum requirements for all assets that are acceptable as collateral;
2) the asset categories that are judged to have minimal credit, liquidity and market risk; and
3) additional asset categories that could be acceptable as collateral if subject to conservative haircuts and concentration limits.

1) An FMI should conduct its own internal assessment of the credit, liquidity and market risk of the assets eligible as collateral. The FMI should review its collateral policy at least annually, and whenever market factors justify a more frequent review. At a minimum, acceptable assets should:

- **i) be freely transferable without legal, regulatory, contractual or any other constraints that would impair liquidation in a default;**
- **ii) be marketable securities that have an active outright sale market even in stressed market conditions;**
- **iii) have reliable price data published on a regular basis;**
- **iv) be settled over a securities settlement system compliant with the Principles; and**
- **v) be denominated in the same currency as the credit exposures being managed, or in a currency that the FMI can demonstrate it has the ability to manage.**

An FMI should not rely only on external opinions to determine what acceptable collateral is. The FMI should

[16] Liquid assets held for general business losses must be funded by equity (such as common stock, disclosed reserves, or retained earnings) rather than debt.

conduct its own assessment of the riskiness of assets, including differences within a particular asset category, to determine whether the risks are acceptable. Since the primary purpose of accepting collateral is to manage the credit exposures of the FMI and its participants, it is paramount that assets eligible as collateral can be liquidated for fair value within a reasonable time frame to cover credit losses following a default. The annual review of the FMI's collateral policy provides an opportunity to assess whether risks continue to be adequately managed. Owing to the dynamic nature of capital markets, the FMI should monitor changes in the underlying risk of the specific assets accepted as collateral, and should adjust its collateral policy in the interim period between annual reviews, when required.

At a minimum, an asset should have certain characteristics in order to provide sufficient assurance that it can be liquidated for fair value within a reasonable time frame. These characteristics relate primarily to the FMI's ability to reliably sell the asset as required to manage its credit exposures. The asset should be unencumbered, that is, it must be free of legal, regulatory, contractual or other restrictions that would impede the FMI's ability to sell it. The challenges associated with selling or transferring non-marketable assets, or those without an active secondary market, preclude their acceptance as collateral.

2) Assets generally judged to have minimal credit, liquidity and market risk are the following:

- **i) cash;**
- **ii) securities issued or guaranteed by the Government of Canada;[17]**
- **iii) securities issued or guaranteed by a provincial government; and**
- **iv) securities issued by the U.S. Treasury.**

In general, the assets judged to have minimal risk are cash and debt securities issued by government entities with unique powers, such as the ability to raise taxes and set laws, and that have a low probability of default. Total Canadian debt outstanding is currently dominated by securities issued or guaranteed by the Government of Canada and by provincial governments. The relatively large supply of securities issued by these entities and their generally high creditworthiness contribute to the liquidity of these assets in the domestic capital market. Securities issued by the U.S. Treasury are also deemed to be of high quality for the same reasons. The overall riskiness of securities issued by the Government of Canada and the U.S. Treasury is further reduced by their previous record of maintaining value in stressed market conditions, when they tend to benefit from a "flight to safety."

It is essential that an FMI regularly assesses the riskiness of even the specific high-quality assets identified in this section to determine their adequacy as eligible collateral. In some cases, only certain assets within the more general asset category may be deemed acceptable.

3) An FMI should consider its own distinct arrangements for allocating credit losses and managing credit exposures when accepting a broader range of assets as collateral. The following asset classes may be acceptable as collateral if they are subject to conservative haircuts and concentration limits:

- **i) securities issued by a municipal government;**
- **ii) bankers' acceptances;**
- **iii) commercial paper;**
- **iv) corporate bonds;**
- **v) asset-backed securities that meet the following criteria: (1) sponsored by a deposit-taking financial institution that is prudentially regulated at either the federal or provincial level, (2) part of a securitization program supported by a liquidity facility , and (3) backed by assets of an acceptable credit quality;**
- **vi) equity securities traded on marketplaces regulated by a member of the CSA and the Investment Industry Regulatory Organization of Canada; and**
- **vii) other securities issued or guaranteed by a government, central bank or supranational institution classified as Level 1 high-quality assets by the Basel Committee on Banking Supervision.**

An FMI should take into account its specific risk profile when assessing whether accepting certain assets as collateral would be appropriate. The decision to broaden the range of acceptable collateral should also consider the size of collateral holdings to cover the credit exposures of the FMI relative to the size of asset markets. In cases where the total collateral required to cover credit exposures is small compared with the market for high-quality assets, there is less potential strain on participants to meet collateral requirements.

Accepting a broader range of collateral has certain advantages. Most importantly, it provides participants with more flexibility to meet the FMI's collateral requirements, which may be especially important in stressed market

[17] Guarantees include securities issued by federal and provincial Crown corporations or other entities with an explicit statement that debt issued by the entity represents the general obligations of the sovereign.

conditions. A broader range of collateral diversifies the risk exposures faced by the FMI, since it may be easier to liquidate diversified collateral holdings when liquidity unexpectedly dries up for a particular asset class. It also diversifies market risk by reducing potential exposure to idiosyncratic shocks. Accepting a broader range of assets recognizes the increased cost to market participants of posting only the highest-quality assets, as well as the increasing encumbrance of these assets in order to meet new regulatory standards.[18]

(ii) Concentration Limits

The following text has been extracted directly from the PFMIs, from Principle 5 - Key Considerations 1 and 4:

> *An FMI should avoid concentrated holding of assets where this could potentially introduce credit, market and liquidity risk beyond acceptable levels. In addition, the FMI should mitigate specific wrong-way risk by limiting the acceptance of collateral that would likely lose value in the event of a participant default, and prevent participants from posting assets they or their affiliates have issued. The FMI should measure and monitor the collateral posted by participants on a regular basis, with more frequent analysis required when more flexible collateral policies have been implemented.*

The following points clarify regulators' expectations regarding the composition of collateral accepted by an FMI by specifying:

1) broad limits for riskier asset classes to mitigate concentration risk;
2) targeted limits for securities issued by financial sector entities to mitigate specific wrong-way risk; and
3) the level of monitoring required for collateral posted by participants.

1) An FMI should limit assets from the broader range of acceptable assets identified in section (i)3) to a maximum of 40 per cent of the total collateral posted from each participant. Within the broader range of acceptable assets, the FMI should consider implementing more specific concentration limits for different asset categories.

An FMI should limit securities issued by a single issuer from the broader range of acceptable assets to a maximum of 5 per cent of total collateral from each participant.

The guidance limits the acceptance of collateral from the broader range of assets to a maximum of 40 per cent because a higher proportion could potentially create unacceptable risks to FMIs and their participants. This limit is currently applied to the Bank's Standing Liquidity Facility and the Liquidity Coverage Ratio under Basel III. The benefits of expanding collateral—namely, providing participants with more flexibility and achieving greater diversification—are achieved within the limit of 40 per cent, with collateral in excess of this limit increasing the overall risk exposures with less benefit. In some circumstances, regulators may permit an FMI to accept more than 40 per cent of total collateral from the broader range of assets if the risk from a particular participant is low. Employing a limit of 5 per cent of total collateral for securities issued by a single issuer is a prudent measure to limit exposures from idiosyncratic shocks. It also reduces the need for procyclical adjustments to collateral requirements following a decline in value.

An FMI should consider implementing more stringent concentration limits, as well as imposing limits on certain asset categories, depending on the FMI's specific arrangements for managing credit exposures. The considerations described in section (i) 3) for accepting a broader range of assets as collateral apply equally to the decision over whether more stringent concentration limits should be implemented.

2) An FMI should limit the collateral from financial sector issuers to a maximum of 10 per cent of total collateral pledged from each participant. The FMI should not allow participants to post their own securities or those of their affiliates as collateral.

An FMI is exposed to specific wrong-way risk when the collateral posted is highly likely to decrease in value following a participant default. It is highly likely that the value of debt and equity securities issued by companies in the financial sector would be adversely affected by the default of an FMI participant, introducing wrong-way risk. This is especially the case for interconnected FMI participants with activities that are concentrated in domestic financial markets. Implementing a limit on financial sector issuers mitigates potential risk exposures from specific wrong-way risk. More stringent limits should be implemented where appropriate.

3) In cases where only the highest-quality assets are accepted, an FMI is required to measure and monitor the collateral posted by participants during periodic evaluations of participant creditworthiness. The FMI should measure and monitor the correlation between a participant's creditworthiness and the collateral

[18] The encumbrance of high-quality assets is expected to increase through a number of regulatory reforms, including Basel III, over-the-counter derivatives reform and the Principles.

posted more frequently when a broader range of collateral is accepted. The FMI should have the ability to adjust the composition and to increase the collateral required from participants experiencing a reduction in creditworthiness.

When only the highest-quality assets are accepted as collateral, there is less risk associated with the composition of collateral posted by a participant; hence, such risk does not need to be monitored as closely. The FMI should monitor the composition of collateral pledged by participants more frequently when riskier assets are eligible, since such assets are more likely to be correlated with the participant's creditworthiness. FMIs should also consider the general credit risk of their participants when deciding how frequently monitoring should be conducted. In all circumstances, the FMI should have the contractual and legal ability to unilaterally require more collateral and to request higher-quality collateral from a participant that is judged to present a greater risk.

(iii) Haircuts

The following text has been extracted directly from the PFMIs, from Principle 5 - Key Considerations 2 and 3:

An FMI should establish stable and conservative haircuts that consider all aspects of the risks associated with the collateral. An FMI should evaluate the performance of haircuts by conducting backtesting and stress testing on a regular basis.

The following points clarify regulators' expectations regarding the calculation and testing of haircuts by outlining:

1) requirements for calculating haircuts; and
2) requirements for testing the adequacy of haircuts and overall collateral accepted.

1) An FMI should apply stable and conservative haircuts that are calibrated against stressed market conditions. When the same haircut is applied to a group of securities, it should be sufficient to cover the riskiest security within the group. Haircuts should reflect both the specific risks of the collateral accepted and the general risks of an FMI's collateral policy.

Including periods of stressed market conditions in the calibration of haircuts should increase the haircut rate. In addition to representing a conservative approach, this helps to mitigate the risk of a procyclical increase in haircuts during a period of high volatility. Typically, FMIs group similar securities by shared characteristics for the purposes of calculating haircuts (e.g., Government of Canada bonds with similar maturities). An FMI should recognize the different risks associated with each individual security by ensuring that the haircut is sufficient to cover the security with the most risk within each group. Haircuts should always account for all of the specific risks associated with each asset accepted as collateral. However, the FMI should also consider the portfolio risk of the total collateral posted by a participant; the FMI may consider employing deeper haircuts for concentration and wrong-way risk above certain thresholds.

2) An FMI should perform backtesting of its collateral haircuts on at least a monthly basis, and conduct a more thorough review of haircuts quarterly. The FMI's stress tests should take into account the collateral posted by participants.

FMIs are expected to calculate stable and conservative haircuts by considering stressed market conditions. In general, including stressed market conditions in the calibration of haircuts should provide a high level of coverage that does not require continuous testing and verification. Nonetheless, backtesting on a monthly basis allow the adequacy of haircuts to be evaluated against observed outcomes. A quarterly review of haircuts balances the objective of stable haircuts with the need to adjust haircuts as required. Including changes to collateral values as part of stress testing provides a more accurate assessment of potential losses in a default scenario.

- ***Standard 7: Liquidity risk***

Box 4:
Joint Supplementary Guidance –
Liquidity Risk

Context

The PFMIs define liquidity risk as risk that arises when the FMI, its participants or other entities cannot settle their payment obligations when due as part of the clearing or settlement process. This note provides additional guidance for Canadian FMIs to meet the components of the liquidity-risk principle related to: (i) maintaining sufficient liquid resources and (ii) qualifying liquid resources.

(i) Maintaining sufficient liquid resources

The following text has been extracted directly from the PFMIs, from Principle 7 - Key Considerations 3, 5, 6 and 9:

> *An FMI should maintain sufficient qualifying liquid resources to cover its liquidity exposures to participants with a high degree of confidence. An FMI should maintain additional liquid resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible conditions. Liquidity stress testing should be performed on a daily basis. An FMI should verify that its liquid resources are sufficient through comprehensive stress testing conducted at least monthly.*

The information provided in this section clarifies regulators' expectations of sufficient qualifying liquid resources by specifying:

1) the degree of confidence required to cover liquidity exposures;
2) the total liquid resources that should be maintained; and
3) how the FMI should verify that its liquid resources are sufficient and adjust liquid resources when necessary.

1) Qualifying liquid resources should meet an established single-tailed confidence level of at least 97 per cent with respect to the estimated distribution of potential liquidity exposures.[19] The FMI should have an appropriate method for estimating potential exposures that accounts for the design of the FMI and other relevant risk factors.

The guidance requires a high threshold for covering liquidity exposures with qualifying liquid resources, while also considering the expense associated with obtaining these resources. A 97 per cent degree of confidence is equivalent to less than one observation per month (on average) in which a liquidity exposure is greater than the FMI's qualifying liquid resources. However, if it is to meet the required threshold, the FMI should estimate its potential liquidity exposures accurately. The FMI should account for all relevant predictive factors when estimating potential exposures. While historical exposures are expected to form the basis of estimated potential exposures, the FMI should account for the impact of new products, additional participants, changes in the way transactions settle or other relevant market- risk factors.

2a) An FMI should maintain additional liquid resources that are sufficient to cover a wide range of potential stress scenarios. Total liquid resources should cover the FMI's largest potential exposure under a variety of extreme but plausible conditions. The FMI should have a liquidity plan that justifies the use of other liquid resources and provides the supporting rationale for the total liquid resources that it maintains.

The guidance requires that total liquid resources be determined by the largest potential exposure in extreme but plausible conditions. This implies maintaining total liquid resources sufficient to cover at least the FMI's largest observed liquidity exposures, but the liquidity resources would likely be larger, based on an assessment of potential liquidity exposures in extreme but plausible conditions. The FMI's liquidity plan should explain why the FMI's estimated largest potential exposure is an accurate assessment of the FMI's liquidity needs in extreme but plausible conditions, thereby demonstrating the adequacy of the FMI's total liquid resources.

It is permissible for an FMI to manage this risk in part with other liquid resources because it may be prohibitively expensive, or even impossible, for the FMI to obtain sufficient qualifying liquid resources. FMIs face increased risk from liquid resources that do not meet the strict definition of "qualifying," and thus an FMI should include in its liquidity plan a clear explanation of how these resources could be used to satisfy a liquidity obligation. This additional explanation is warranted in all cases, even when the FMI's dependence on other liquid resources is minimal.

2b) When applicable, the possibility that a defaulting participant is also a liquidity provider should be taken into account.

Generally, the liquidity providers for Canadian FMIs are also participants in the FMI. When a defaulting participant is also a liquidity provider, it is important that the FMI's liquidity facilities are arranged in such a way that it has sufficient liquidity. To do so, the FMI should either have additional liquid resources or negotiate a backup liquidity provider, so that the FMI has sufficient liquidity (as specified in this guidance) in the event that one of its liquidity providers defaults.

3) FMIs should perform liquidity stress testing on a daily basis to assess their liquidity needs. At least monthly, FMIs should conduct comprehensive stress tests to verify the adequacy of their total liquid resources and to serve as a tool for informing risk management. Stress-testing results should be

[19] A "potential liquidity exposure" is defined as the estimated maximum daily liquidity needs resulting from the market value of the FMI's payment obligations under normal business conditions. FMIs should consider potential liquidity exposures over a rolling one-year time frame.

reviewed by the FMI's risk-management committee and reported to regulators on a regular basis.

FMIs should have clear procedures to determine whether their liquid resources are sufficient and to adjust their available liquid resources when necessary. A full review and potential resizing of liquid resources should be completed at least annually.

The annual validation of an FMI's model for managing liquidity risk should determine whether its stress testing follows best practices and captures the potential risks faced by the FMI.

FMIs should assess their liquidity needs through stress testing that includes the measurement of the largest daily liquidity exposure that they face. FMIs should also conduct stress testing to verify whether their liquid resources are sufficient to cover potential liquidity exposures under a wide range of stress scenarios. An annual full review and potential resizing of liquid resources provides adequate time to negotiate with liquidity providers. While it may be impractical for FMIs to frequently obtain additional liquid resources, it is important that FMIs clearly define the circumstances requiring prompt adjustment of their available liquid resources, and have a reliable plan for doing so. Establishing clear procedures provides transparency regarding an FMI's decision-making process and prevents the FMI from delaying required increases in liquid resources beyond what is reasonably acceptable. The review of stress- testing results by the FMI's risk-management committee provides additional assurance that liquid resources are sufficient, and whether an interim resizing is necessary. Reporting results to regulators on a monthly basis allows for timely intervention if liquid resources have been deemed inadequate.

Comprehensive stress testing should also encompass a broad range of stress scenarios, not just to verify whether the FMI's liquid resources are sufficient, but also to identify potential risk factors. Reverse stress testing, more extreme stress scenarios, valuation of liquid assets and focusing on individual risk factors (e.g., available collateral) all help to inform the FMI of potential risks. The annual validation of the FMI's risk-management model enables it to fully assess the appropriateness of the stress scenarios conducted and the procedures for adjusting liquid resources.

(ii) Qualifying liquid resources

The following text has been extracted directly from the PFMIs, from Principle 7 - Key Considerations 4, 5 and 6:

Qualifying liquid resources should be highly reliable and have same-day availability. Liquid resources are reliable when the FMI has near certainty that the resources it expects will be available when required. Qualifying liquid resources should be available on the same day that they are needed by the FMI to meet any immediate liquidity obligation (e.g., a participant's default). Qualifying liquid resources that are denominated in the same currency as the FMI's exposures count toward its minimum liquid-resource requirement.

The following section clarifies regulators' expectations as to what is considered a qualifying liquid resource by:

1) identifying the assets in the possession, custody or control of the FMI that are considered qualifying liquid resources; and
2) setting clear standards for liquidity facilities to be considered qualifying liquid resources, including more-stringent standards for uncommitted liquidity facilities.

1) Cash and treasury bills[20] in the possession, custody or control of an FMI are qualifying liquid resources for liquidity exposures denominated in the same currency.[21]

Cash held by an FMI does not fluctuate in value and can be used immediately to meet a liquidity obligation, thereby satisfying the criteria for liquid resources to be highly reliable and available on the same day.[22] Treasury bills issued by the Government of Canada or the U.S. Treasury also meet the definition of a qualifying liquid resource. By market convention, sales of treasury bills settle on the same day, allowing funds to be obtained immediately, whereas other bonds can settle as late as three days after the date of the trade. Treasury bills can also be transacted in larger sizes with less market impact than most other bonds. In addition, the shorter-term nature of treasury bills makes them more liquid than other securities during a crisis (i.e., they benefit from a "flight to liquidity"). Thus, there is a high degree of certainty that the FMI would obtain liquid resources in the amount expected following the sale of treasury bills.

2a) Committed liquidity facilities are qualifying liquid resources for liquidity exposures denominated in the

[20] "Treasury bills" refers to bonds issued by the Government of Canada and the U.S. Treasury with a maturity of one year or less.
[21] This section refers to unencumbered assets free of legal, regulatory, contractual or other restrictions on the ability of the FMI to liquidate, sell, transfer or assign the asset.
[22] "Cash" refers to currency deposits held at the issuing central bank and at creditworthy commercial banks.
"Value" in this context refers to the nominal value of the currency.

same currency if the following criteria are met:

i) facilities are pre-arranged and fully collateralized;
ii) there is a minimum of three independent liquidity providers;[23] and
iii) the FMI conducts a level of due diligence that is as stringent as the risk assessment completed for FMI participants.

For liquidity facilities to be considered reliable, an FMI should have near certainty that the liquidity provider will honour its obligation. Pre-arranged liquidity facilities provide clarity on terms and conditions, allowing greater certainty regarding the obligations and risks of the liquidity providers. Pre- arranged facilities also reduce complications associated with obtaining liquidity, when required. Furthermore, a liquidity provider is most likely to honour its obligations when lending is fully collateralized. Therefore, only the amount that is collateralized will be considered a qualifying liquid resource. A liquidity facility is more reliable when the risk of non-performance is not concentrated in a single institution. By having at least three independent liquidity providers, the FMI would continue to diversify its risks should even a single provider default. To monitor the continued reliability of a liquidity facility, the FMI should assess its liquidity providers on an ongoing basis. In this respect, an FMI's risk exposures to its liquidity providers are similar to the risks posed to it by its participants. Therefore, it is appropriate for the FMI to conduct comparable evaluations of the financial health of its liquidity providers to ensure that the providers have the capacity to perform as expected.

2b) Uncommitted liquidity facilities are considered qualifying liquid resources for liquidity exposures in Canadian dollars if they meet the following additional criteria:

i) the liquidity provider has access to the Bank of Canada's Standing Liquidity Facility (SLF);
ii) the facility is fully collateralized with SLF-eligible collateral; and
iii) the facility is denominated in Canadian dollars.

More-stringent standards are warranted for uncommitted facilities because a liquidity provider's incentives to honour its obligations are weaker. However, the risk that the liquidity provider will be unwilling or unable to provide liquidity is reduced by the requirement that it needs to be a direct participant in the Large Value Transfer System and that the collateral be eligible for the Standing Liquidity Facility (SLF). This is because the collateral obtained from the FMI in exchange for liquidity can be pledged to the Bank of Canada under the SLF. This option significantly reduces the liquidity pressures faced by the liquidity provider that could interfere with its ability to perform on its obligations. A facility in a foreign currency would not qualify because the Bank does not lend in currencies other than the Canadian dollar. The increased reliability of liquidity providers with access to routine credit from the central bank is recognized explicitly within the PFMIs.

- ***Standard 15: General business risk***

Box 5:
Joint Supplementary Guidance –
General Business Risk

Context

The PFMIs define general business risk as any potential impairment of the financial condition (as a business concern) of an FMI owing to declines in its revenue or growth in its expenses, resulting in expenses exceeding revenues and a loss that must be charged against capital. These risks arise from an FMI's administration and operation as a business enterprise. They are not related to participant default and are not covered separately by financial resources under the Credit or Liquidity Risk Principles. To manage these risks, the PFMIs state that FMIs should identify, monitor and manage their general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses. This note provides additional guidance for Canadian FMIs to meet the components of the general business risk principle related to: (i) governing general business risk; (ii) determining sufficient liquid net assets; and (iii) identifying qualifying liquid net assets. It also establishes the associated timelines and disclosure requirements.

(i) Governance of general business risk

Principle 15, Key Consideration 1 of the PFMIs states:

An FMI should have robust management and control systems to identify, monitor, and manage general business risk.

[23] The Liquidity providers should not be affiliates to be considered independent.

The following points clarify the authorities' expectations on how an FMI's governance arrangements should address general business risk.

An FMI's Board of Directors should be involved in the process of identifying and managing business risks.

Management of business risks should be integrated within an FMI's risk-management framework, and the Board of Directors should be responsible for determining risk tolerances related to business risk and for assigning responsibility for the identification and management of these risks. These risk tolerances and the process for the identification and management of business risk should be the foundation for the FMI's business risk-management policy. Based on the PFMIs, the policies and procedures governing the identification and management of business risk should meet the standards outlined below.

- The FMI's business risk-management policy should be approved by the Board of Directors and reviewed at least annually. The policy should be consistent with the Board's overall risk tolerance and risk-management strategy.
- The Board's Risk Committee should have a role in advising the Board on whether the business risk-management policy is consistent with the FMI's general risk-management strategy and risk tolerance.
- The business risk-management policy should provide clear responsibilities for decision making by the Board, and assign responsibility for the identification, management and reporting of business risks to management.

(ii) Determining sufficient liquid net assets

Principle 15, Key Consideration 2 of the PFMIs states:

An FMI should hold liquid net assets funded by equity […] so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.

Principle 15, Key Consideration 3 of the PFMIs states:

An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses.

The following points clarify the authorities' expectations on how FMIs should calculate their sufficient liquid net assets:

Until guidance for recovery planning and for calculating the associated costs is completed, FMIs are required to hold liquid net assets to cover a minimum of six months of current operating expenses.

In calculating current operating expenses, FMIs will need to:

- **Assess and understand the various general business risks they face** to allow them to estimate as accurately as possible the required amount of liquid net assets. These estimates should be based on financial projections, which take into consideration, for example, past loss events, anticipated projects and increased operating expenses.
- **Restrict the calculation to ongoing expenses.** FMIs will need to adjust their operating costs such that any extraordinary expenses (i.e., unessential, infrequent or one-off costs) are excluded. Typically, operating costs include both fixed costs (e.g., premises, IT infrastructure, etc.) and variable costs (e.g., salaries, benefits, research and development, etc.).
- **Assess the portion of staff from each corporate department required to ensure the smooth functioning of the FMI during the six-month period.** The calculation of operating expenses would include some indirect costs. FMIs would require not only dedicated operational staff, but also various supporting staff. These could include (but are not limited to) staff from the FMI's Legal, IT and HR departments or staff required to ensure the continued functioning of other FMIs that could be necessary to support the FMI.

To fully observe Principle 15, FMIs must hold sufficient liquid assets to cover the greater of (i) funds required for FMIs to implement their recovery or wind-down; or (ii) six months of current operating expenses. In the interim, until recovery planning guidance is published, only the latter amount will apply.

The amount of liquid net assets required to implement an FMI's recovery or wind-down plans will depend on the scenarios or tools available to the FMI. The acceptable recovery and orderly wind-down plans for Canadian FMIs will be articulated by the authorities in forthcoming guidance. Once this guidance on recovery planning has been developed, the guidance on general business risk will be updated to provide FMIs with additional clarity on how to

calculate the costs associated with these plans and determine the amount of liquid net assets required.

(iii) Qualifying liquid net assets

Explanatory Note 3.15.5 of the PFMIs states:

> *An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. Equity allows an FMI to absorb losses on an ongoing basis and should be permanently available for this purpose.*

Principle 15, Key Consideration 4 of the PFMIs states:

> *Assets held to cover general business risk should be of high quality and sufficiently liquid to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.*

Principle 15, Key Consideration 3 of the PFMIs states:

> *These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles.*

The following points clarify the authorities' expectations on which assets qualify to be held against general business risk, and how these assets should be held to ensure that they are permanently available to absorb general business losses.

Assets held against general business risk should be of high quality and sufficiently liquid, such as cash, cash equivalents and liquid securities.

Authorities have developed regulatory guidance related to managing liquidity and investment risks, which provides additional clarity on the definition of cash equivalents and liquid securities, respectively.

- **Cash equivalents** – are considered to be treasury bills[24] issued by either the Canadian or U.S. federal governments. As noted in the liquidity guidance, by market convention, sales of treasuries settle on the same day, allowing funds to be obtained immediately, whereas other bonds can settle as late as three days after the trade date.
- **Liquid securities** – for the purposes of general business risk, liquid securities are defined by the financial instruments criteria listed in the guidance on the Investment Risk Principle. These criteria outline financial instruments considered to have minimal credit, market, and liquidity risk.

Liquid net assets must be held at the level of the FMI legal entity to ensure that they are unencumbered and can be accessed quickly. Liquid net assets may be pooled with assets held for other purposes, but must be clearly identified as held against general business risk.

FMIs may need to accumulate liquid net assets for purposes other than to meet the General Business Risk Principle. However, assets held against general business risk cannot be used to cover participant default risk or any other risks covered by the financial resources principles.

Liquid net assets can be pooled with assets held for other purposes, but must be clearly identified as held against general business risk in the FMI's reports to its regulators.

(iv) Timelines for assessing and reporting the level of liquid net assets

Explanatory Note 3.15.8 of the PFMIs states:

> *To ensure the adequacy of its own resources, an FMI should regularly assess and report its liquid net assets funded by equity relative to its potential business risks to its regulators.*

The following clarifies the authorities' expectations of the frequency with which FMIs should assess and report their required level of liquid net assets.

FMIs should report to authorities the amount of liquid net assets held against business risk annually, at a minimum.

[24] Treasury bills refer to short-term (i.e., maturity of one year or less) debt instruments issued by the Canadian or U.S. federal government.

An FMI should report to the authorities the amount of liquid net assets funded by equity held exclusively against business risk and quantify its business risks as major developments arise, or at least on an annual basis. This report should include an explanation of the methodology used to assess the FMI's business risks and to calculate its requirements for liquid net assets.

FMIs should recalculate the required amount of liquid net assets annually, at a minimum.

Once FMI operators have established the amount of liquid net assets required to cover six months of operating expenses, FMIs should recalculate the required amount of liquid net assets as major developments occur, or annually, at a minimum. Once the authorities have provided further guidance on recovery and FMIs have developed recovery plans, FMIs should also evaluate the need to increase the amount of liquid net assets they should hold to meet the General Business Risk Principle.

To establish clear procedures that improve transparency regarding an FMI's decision-making process and to prevent the FMI from delaying required increases in liquid resources beyond what is reasonably acceptable, FMIs should maintain a viable capital plan for raising additional acceptable resources should these resources fall close to or below the amount needed. This plan should be approved by the Board of Directors and updated annually, or as major developments occur.

FMIs should review their methodology for calculating the required level of liquid net assets at least once every five years, or as major developments occur.[25]

The methodology for calculating the amount of required liquid net assets should be reviewed at least every five years to ensure that the calculation remains relevant over time.

- ***Standard 16: Custody and investment risks***

Box 6:
Joint Supplementary Guidance –
Custody and Investment Risks

Context

The PFMIs define investment risk as the risk faced by an FMI when it invests its own assets or those of its participants.

- An FMI holds assets for a variety of purposes, some of which are referred to specifically in the PFMIs*:* to cover its business risk (Principle 15), to cover credit losses (Principle 4) and to cover credit exposures (Principle 6) using the collateral pledged by participants.
- An FMI may also hold financial assets for purposes not directly related to the risk management issues addressed within the PFMIs (e.g., employee pensions, general investment assets).

An FMI's strategy for investing assets should be consistent with its overall risk-management strategy (Principle 16). The purpose of this note is to provide further guidance on regulators' expectations regarding the management of investment risk. This guidance helps to ensure that an FMI's investments are managed in a way that protects the financial soundness of the FMI and its participants*.*[26]

(i) Governance

The PFMIs state that the Board of Directors is responsible for overseeing the risk-management function and approving material risk decisions. An FMI should develop an investment policy to manage the risk arising from the investment of its own assets and those of its participants.

- The FMI's investment policy should be approved by the Board and reviewed at least annually. The policy should be consistent with the Board's overall risk tolerance and considered part of the FMI's risk-management framework.
- The Risk Committee should advise the Board on whether the investment policy is consistent with the FMI's general risk-management strategy and risk tolerance.
- The Board should assess the advantages and disadvantages of managing assets internally or outsourcing them to

[25] In the context of this specific guidance item, "major developments" refers to the major changes to operations, product and service offerings, or classes of participation.
[26] This guidance on investment risk is based on aspects of Principle 2 – Governance, Principle 3 – Comprehensive Framework for the Management of Risk, and Principle 16 – Custody and Investment Risk.

an external manager. The FMI retains full responsibility for any actions taken by its external manager.
- The FMI should establish criteria for the selection of an external manager.[27]

The FMI's investment policy should clearly identify those who are accountable for investment performance. The investment policy should also:

- Provide a clear explanation of the Board's delegated responsibility for investment decision making.
- Specify clear responsibilities for monitoring investment performance (against established benchmarks) and risk exposures (against limits or constraints). Procedures should be established to ensure that appropriate actions are taken when breaches occur, including possible reporting to the Board.
- Investment performance and key risk metrics should be reported to the Board at least quarterly.[28]

(ii) Investment strategy

The investment strategy chosen by an FMI should not allow the pursuit of profit to compromise its financial soundness. As outlined below, additional consideration should be given to the investment strategy governing assets held specifically for risk-management purposes (i.e. Principle 4-7 and Principle 15).

Investment objectives

The investment policy should include appropriate investment objectives for the various assets held for risk-management purposes. The stated expected return and risk tolerance of the investment objectives should reflect the:

- specific purpose of the assets;
- relative importance of the assets in the overall risk management of the FMI; and
- requirement within the PFMIs for FMIs to invest in instruments with minimal credit, market and liquidity risk (see the Appendix for the minimum standards of acceptable instruments).

The investment objectives should also help to determine the appropriate benchmarks for measuring investment performance.

Investment constraints

The importance of assets held for risk-management purposes warrants the use of investment constraints. It is paramount that an FMI have prompt access to these assets with minimal price impact to avoid interference with their primary use for risk management. Investment of these assets should, at a minimum, observe the following:

- To reduce concentration risk, no more than 20 per cent of total investments should be invested in municipal and private sector securities. Investment in a single private sector or municipal issuer should be no more than 5 per cent of total investments.
- To mitigate specific wrong-way risk, investments should, as much as possible, be inversely related to market events that increase the likelihood of those assets being required. Investment in financial sector securities should be no more than 10 per cent of total investments. An FMI should not invest assets in the securities of its own affiliates. An FMI is not permitted to reinvest participant assets in a participant's own securities or those of its affiliates, as specified in Principle 16.
- For investments that are subject to counterparty credit risk, an FMI should set clear criteria for choosing investment counterparties and setting exposure limits.

The investment constraints should be clearly stated in the investment policy in order to provide clear guidance for those responsible for investment decision making.[29]

Link to risk management

FMIs should account for the implications of investing assets on their broader risk-management practices. The following issues should be considered when investing assets held for risk management purposes:

- An FMI's process for determining whether sufficient assets are available for risk management should account

[27] At a minimum, external managers should have demonstrated past performance and expertise, as well as strong risk-management practices such as an internal audit function and processes to protect and segregate the FMI's assets.
[28] Investment performance may also be reported to a Board committee with special expertise to which the Board has delegated the authority to review investment performance (e.g., an Investment Committee).
[29] The use of investment vehicles where investments are held indirectly (e.g. mutual funds and exchange-traded funds) should not result in breaches to the investment constraints listed.

for potential investment losses. For example, investing the assets available to a CCP to cover losses from a participant default could lose value in a default scenario, resulting in less credit-risk protection. An FMI should hold additional assets to cover potential losses from its investments held for risk-management purposes.

- An FMI should account for the implications of investing assets on its ability to effectively manage liquidity risk. In particular, identification of the FMI's available liquid resources should account for the investment of its own and participants' assets. For example, cash held at a creditworthy commercial bank would no longer be considered a qualifying liquid resource under Principle 7 if it were invested in the debt instrument of a private sector issuer.
- The investment of an FMI's own assets and those of its participants should not circumvent related risk management requirements. For example, the reinvestment of participants' collateral should still respect the FMI's collateral concentration limits applicable to those assets.

Appendix

For the purposes of Principle 16, financial instruments can be considered to have minimal credit, market and liquidity risk if they meet *each* of the following conditions:

1. Investments are debt instruments that are:
    a. securities issued by the Government of Canada;
    b. securities guaranteed by the Government of Canada;
    c. marketable securities issued by the United States Treasury;
    d. securities issued or guaranteed by a provincial government;
    e. securities issued by a municipal government;
    f. bankers' acceptances;
    g. commercial paper;
    h. corporate bonds; and
    i. asset-backed securities that meet the following criteria: (1) sponsored by a deposit-taking financial institution that is prudentially regulated at either the federal or provincial level, (2) part of a securitization program supported by a liquidity facility, and (3) backed by assets of an acceptable credit quality.
2. The FMI employs a defined methodology to demonstrate that debt instruments have low credit risk. This methodology should involve more than just mechanistic reliance on credit-risk assessments by an external party.
3. The FMI employs limits on the average time-to-maturity of the portfolio based on relevant stress scenarios in order to mitigate interest rate risk exposures.
4. Instruments have an active market for outright sales or repurchase agreements, including in stressed conditions.
5. Reliable price data on debt instruments are available on a regular basis.
6. Instruments are freely transferable and settled over a securities settlement system compliant with the PFMIs.

- ***Standard 23: Disclosure of rules, key procedures, and market data***

Box 7:
Joint Supplementary Guidance –
Disclosure of rules, key procedures and market data

Context

The PFMIs state that FMIs should provide sufficient information to their participants and prospective participants to enable them to clearly understand the risks and responsibilities of participating in the system. This note provides additional guidance for Canadian FMIs to meet the components of the disclosure principle related to: (i) public qualitative disclosure and (ii) public quantitative disclosure.

Requirements included in the PFMIs

Principle 23 outlines requirements for disclosure to participants as well as the general public. In addition, specific disclosure requirements are listed in the principles to which they pertain.

The following text has been extracted directly from the PFMIs, Principle 23, Key Consideration 5:

> *An FMI should complete regularly and disclose publicly responses to the CPMI-IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.*

To supplement Key Consideration 5, CPMI-IOSCO published two documents: the Disclosure Framework for Financial Market Infrastructures (the Disclosure Framework),[30] and the Quantitative Disclosure Standards for CCPs (the Quantitative Disclosure Standards).[31] This note will refer to the disclosures that result from completing the templates provided in these documents as the Qualitative Disclosure and the Quantitative Disclosure, respectively.

Supplementary guidance for Canadian FMIs designated by the Bank of Canada

On its public website, an FMI should publish its Qualitative Disclosure and Quantitative Disclosure, as well as any other public disclosure requirements specified in Principle 23 or in other principles. Any public disclosure should be written for an audience with general knowledge of the financial sector.

(a) Qualitative disclosure (*Applies to all types of FMIs*)

A Qualitative Disclosure should provide the public with a high-level understanding of an FMI's governance, operation and risk-management framework.

Summary narrative disclosure

In part four of the Disclosure Framework, FMIs are required to provide a summary narrative of their observance of the Principles. FMIs should provide these narratives at the principle level, and are not required to address Key Considerations or to provide answers to the detailed questions listed in Section 5 of the Disclosure Framework report. Instead, the narrative disclosure should focus on providing a broad audience with an understanding of how each Principle applies to the FMI, and what the FMI has done or plans to do to ensure its observance.

Timing

FMIs should update and publish their Qualitative Disclosures following significant changes[32] to the system or its environment, or at least every two years. Only the most current Qualitative Disclosure needs to be maintained on the FMI's website.

(b) Quantitative disclosure (*Applies only to CCPs*)

Quantitative Disclosures specify the set of key quantitative information required in the Disclosure Framework. They should follow the format provided by CPMI-IOSCO, allowing stakeholders, including the general public, to easily evaluate and compare FMIs.

Currently, CPMI-IOSCO has developed public quantitative disclosure standards only for CCPs. The following guidance applies only to CCPs; Canadian authorities will provide further guidance on the quantitative disclosure requirements of FMIs other than CCPs when such standards have been developed.

Context

Where a general audience may need additional context to properly interpret the data, it should be provided in explanatory notes or addressed in the CCP's Qualitative Disclosure. CCPs are encouraged to provide charts, background information and additional documentation where it may aid the reader's understanding.

Comparability

Regulators recognize that, given the different structures and arrangements among CCPs, an overly homogenized presentation format could lead to inaccurate comparability. Subject to regulatory approval, a CCP may provide analogous data in place of a disclosure requirement that is not applicable to its business or representative of the risks it faces. The CCP must justify to authorities the necessity and selection of the alternative metric.[33] If granted approval,

[30] The Disclosure Framework is part of a document published in December 2012, titled "Principles for Financial Market Infrastructures: Disclosure Framework and Assessment Methodology", and is available at http://www.bis.org/press/p121214.htm.
[31] This document is currently in public consultation, and is available at http://www.bis.org/cpmi/publ/d114.htm. A final version is expected by the end of 2014.
[32] Updated Qualitative Disclosures should be published subsequent to regulatory approval, and prior to the effective date of the significant change. Significant changes can include, but are not limited to: (i) any changes to the FMI's constating documents, bylaws, corporate governance or corporate structure; (ii) any material change to an agreement between the FMI and its participants or to the FMI's rules, operating procedures, user guides, or manuals or the design, operation or functionality of its operations and services; and (iii) the establishment of, or removal or material change to, a link, or commencing or ceasing to engage in a business activity.
[33] If the authorities are satisfied with the justification, the CCP need not resubmit the substitution unless the CCP's structure or arrangements change the applicability of the original disclosure requirement, or the CCP wishes to change its substituted metric. CCPs are responsible for informing authorities of any changes that could affect the applicability of the originally required or substituted data.

the CCP must provide the original data to authorities with the frequency specified in the Quantitative Disclosure Standards, and must explain in each public disclosure why an alternative metric was chosen.

Confidentiality

A CCP's public disclosure obligation does not release it from its confidentiality duties. Where a required disclosure item could reveal (or allow knowledgeable parties to deduce) commercially sensitive information about individual clearing members, clients, third-party contractors or other relevant stakeholders, or where disclosure may amount to a breach of laws or regulations for maintaining market integrity, the data must be omitted. In this case, the CCP must justify the omission to authorities.[34] If granted approval, the CCP must provide the confidential data to authorities with the frequency specified in the Quantitative Disclosure Standards, and must explain the reason for the omission in each public disclosure.

Timing

Quantitative Disclosures should be reported quarterly, and updated with the frequency specified in the Quantitative Disclosure Standards.[35] Even though some required data may already be publicly disclosed in other reports, or may not have changed from the previous quarter, the data should still be included in the disclosure matrix for completeness and consistency. Data should be publicly disclosed no later than 60 days after the end of each fiscal quarter, and should remain available on its website for at least three years so that trends can be examined.

[34] If the authorities are satisfied with the justification, the CCP need not resubmit the omission unless the circumstances change the confidentiality of the disclosure. CCPs are responsible for informing the authorities of any changes that could affect the confidentiality of such data.

[35] According to the Quantitative Disclosure Standards, items under general business risk should be updated annually, and all other items should be updated on a quarterly basis.

PART 4
OTHER REQUIREMENTS OF RECOGNIZED CLEARING AGENCIES

Introduction

4.0 As discussed in section 1.2(2) of this CP, the provisions of Part 4 are in addition to the requirements of Part 3, and apply to a clearing agency whether or not it operates as a CCP, SSS or CSD.

Division 1 – Governance:

Board of directors

4.1 (2) A definition of independence is provided in subsection 4.1(3). The clearing agency should publicly disclose which board members it regards as independent.

(3) Subsection 4.1(3) defines independence to be the absence of any direct or indirect material relationship between an individual and a clearing agency. Under subsection 4.1(4), those relationships which could, in the view of the clearing agency's board of directors, be reasonably expected to interfere with the exercise of a member's independent judgment should be considered material relationships within the meaning of subsection 4.1(3). Subsection 4.1(5) describes those individuals that we believe have a relationship with a clearing agency that would reasonably be expected to interfere with the exercise of the individual's independent judgment. Consequently, these individuals are not considered independent for the purposes of section 4.1.

Documented procedures regarding risk spill-overs

4.2 See the Joint Supplementary Guidance in Box 2 under section 3.1 of this CP.

CRO and CCO

4.3 (3) The reference to "harm to the broader financial system" in subparagraph 4.3(3)(c)(ii) may be in relation to the domestic or international financial system.

Board or advisory committees

4.4 All committees should have clearly assigned responsibilities and procedures. The clearing agency's internal audit function should have sufficient resources and independence from management to provide, among other activities, a rigorous and independent assessment of the effectiveness of its risk-management and control processes. A board will typically establish an audit committee to oversee the internal audit function. In addition to reporting to senior management, the audit function should have regular access to the board through an additional reporting line.

With respect to independence, policies and procedures related to committees should include processes to identify, address, and manage potential conflicts of interest. Conflicts of interest include, for example, circumstances in which a board member has material competing business interests with the clearing agency.

Division 2 – Default management:

Use of own capital

4.5 The CSA are of the view that a CCP should be required to participate in the default waterfall with its own capital contribution, to be used immediately after a defaulting participant's contributions to margin and default fund resources have been exhausted, and prior to non-defaulting participants' contributions. Such equity should be a reasonable proportion of the size of the CCP's total default fund that is significant enough to attract senior management's attention, and should be separately retained and not form part of the CCP's resources for other purposes, such as to cover general business risk.

Division 3 – Operational risk:

Systems requirements

4.6 (a) The intent of these provisions is to ensure that controls are implemented to support information technology planning, acquisition, development and maintenance, computer operations, information systems support, and security. Recognized guides as to what constitutes adequate information technology controls include 'Information Technology Control Guidelines' from the Canadian Institute of Chartered Accountants (CICA) and 'COBIT' from the IT Governance Institute.

(b) Capacity management requires that the clearing agency monitor, review, and test (including stress test) the actual capacity and performance of the system on an ongoing basis. Accordingly, under paragraph 4.6(b), the clearing agency is required to meet certain standards for its estimates and for testing. These standards are consistent with prudent business practice. The activities and tests required in this paragraph are to be carried out at least once a year. In practice, continuing changes in technology, risk management requirements and competitive pressures will often result in these activities being carried out or tested more frequently.

(c) A failure, malfunction or delay or other incident is considered to be "material" if the clearing agency would, in the normal course of operations, escalate the matter to or inform its senior management ultimately accountable for technology. It is also expected that, as part of this notification, the clearing agency will provide updates on the status of the failure and the resumption of service. Further, the clearing agency should have comprehensive and well-documented procedures in place to record, report, analyze, and resolve all operational incidents. In this regard, the clearing agency should undertake a "post-incident" review to identify the causes and any required improvement to the normal operations or business continuity arrangements. Such reviews should, where relevant, include the clearing agency's participants. The results of such internal reviews are required to be communicated to the securities regulatory authority as soon as practicable. Subsection 4.6(c) also refers to a material security breach. A material security breach or systems intrusion is considered to be any unauthorized entry into any of the systems that support the functions of the clearing agency or any system that shares resources with one or more of these systems. Virtually any security breach would be considered material and thus reportable to the securities regulatory authority. The onus would be on the clearing agency to document the reasons for any security breach it did not consider material.

Systems reviews

4.7 (1) A qualified party is a person or company or a group of persons or companies with relevant experience in both information technology and in the evaluation of related internal systems or controls in a complex information technology environment. Qualified persons may include external auditors or third party information system consultants, as well as employees of the clearing agency, but may not be persons responsible for the development or operation of the systems or capabilities being tested.

Clearing agency technology requirements and testing facilities

4.8 (1) The technology requirements required to be publicly disclosed under subsection 4.8(1) do not include detailed proprietary information.

(4) We expect the amended technology requirements to be made publicly available as soon as practicable, either while the changes are being made or immediately after.

Testing of business continuity plans

4.9 Business continuity management is a key component of a clearing agency's operational risk-management framework. A recognized clearing agency's business continuity plan and its associated arrangements should be subject to frequent review and testing. At a minimum, under section 4.9, such tests must be conducted annually. Tests should address various scenarios that simulate wide-scale disasters and inter-site switchovers. The clearing agency's employees should be thoroughly trained to execute the business continuity plan and participants, critical service providers, and linked clearing agencies should be regularly involved in the testing and be provided with a general summary of the testing results. The CSA expect that the clearing agency will also facilitate and participate in industry-wide testing of the business continuity plan. The clearing agency should make appropriate adjustments to its business continuity plan and associated arrangements based on the results of the testing exercises.

Outsourcing

4.10 Where a recognized clearing agency relies upon or outsources some of its operations to a service provider, it should generally ensure that those operations meet the same requirements they would need to meet if they were provided internally. Under section 4.10, the clearing agency must meet various requirements in respect of the outsourcing of critical services or systems to a service provider. These requirements apply regardless of whether the outsourcing arrangements are with third-party service providers, or with affiliates of the clearing agency.

Generally, the clearing agency is required to establish, implement, maintain and enforce policies and procedures to evaluate and approve outsourcing agreements to critical service providers. Such policies and procedures should include assessing the suitability of potential service providers and the ability of the clearing agency to continue to comply with securities legislation in the event of the service provider's bankruptcy, insolvency or termination of business. The clearing agency is also required to monitor and evaluate the on-going performance and compliance of the service provider to which they outsourced critical services, systems or facilities. Accordingly, the clearing agency should define key performance indicators that will measure the service level. Further, the clearing agency should have robust arrangements for the substitution of such providers, timely access to all necessary information, and the proper controls and monitoring tools.

Under section 4.10, a contractual relationship should be in place between the clearing agency and the critical service provider allowing it and relevant authorities to have full access to necessary information. The contract should ensure that the clearing agency's approval is mandatory before the critical service provider can itself outsource material elements of the service provided to the clearing agency, and that in the event of such an arrangement, full access to the necessary information is preserved. Clear lines of communication should be established between the outsourcing clearing agency and the critical service provider to facilitate the flow of functions and information between parties in both ordinary and exceptional circumstances.

Where the clearing agency outsources operations to critical service providers, it should disclose the nature and scope of this dependency to its participants. It should also identify the risks from its outsourcing and take appropriate actions to manage these dependencies through appropriate contractual and organisational arrangements. The clearing agency should inform the securities regulatory authority about any such dependencies and the performance of these critical service providers. To that end, the clearing agency can contractually provide for direct contacts between the critical service provider and the securities regulatory authority, contractually ensure that the securities regulatory authority can obtain specific reports from the critical service provider, or the clearing agency may provide full information to the securities regulatory authority.

Division 4 – Participation requirements:

Access requirements and due process

4.11 (1)(d) We are of the view that a requirement on participants of a CCP serving the derivatives markets to use an affiliated trade repository to report derivatives trades would be unreasonable.

PART 5
BOOKS AND RECORDS AND LEGAL ENTITY IDENTIFIER

Legal Entity Identifiers

5.2 (3) The Global Legal Entity Identifier System defined in subsection 5.2(1) and referred to in subsections 5.2(3) and 5.2(4) is a G20 endorsed system[36] that will serve as a public-good utility responsible for overseeing the issuance of legal entity identifiers (LEIs) globally to counterparties who enter into transactions in order to uniquely identify parties to transactions. It is currently being designed and implemented under the direction of the LEI Regulatory Oversight Committee (ROC), a governance body endorsed by the G20.

(4) If the Global LEI System is not available at the time a clearing agency is required to fulfill their recordkeeping or reporting requirements under securities legislation, they must use a substitute LEI. The substitute LEI must be in accordance with the standards established by the LEI ROC for pre-LEI identifiers. At the time the Global LEI System is operational, a clearing agency or its affiliates must cease using their substitute LEI and commence using their LEI. It is conceivable that the two identifiers could be identical.

[36] See http://www.financialstabilityboard.org/list/fsb_publications/tid_156/index.htm for more information.