Note: [19 Jun 2020] *– The following is a consolidation of 24-102CP. It incorporates changes to this document that came into effect on June 3, 2016 and June 19, 2020. This consolidation is provided for your convenience and should not be relied on as authoritative.*

Companion Policy 24-102CP

CLEARING AGENCY REQUIREMENTS

TABLE OF CONTENTS

PART 1
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 this section, sections 1.2 and 1.3 of this CP, and Annexes I and II to 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 in this CP to a Part, section, subsection, paragraph or defined term is a reference to the corresponding Part, section, subsection, paragraph or defined term of the Instrument. The CP also makes references to certain paragraphs in the April 2012 report *Principles for financial market infrastructures* (the PFMIs or PFMI Report, as the context requires) and the PFMI Principles set out therein. A reference to a PFMI Principle may include a reference to an applicable key consideration (see definition of "PFMI Principle" in section 1.1).

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. Part 3 adopts the PFMI Principles generally but does restrict their application only to a clearing agency that operates as a central counterparty (CCP), securities settlement system (SSS) or central securities depository (CSD), as relevant. Part 4 applies to a clearing agency whether or not it operates as a CCP, SSS or CSD. The PFMI Principles were developed jointly by the Committee on Payments and Market Infrastructures (CPMI)[2] and the International Organization of Securities Commissions (IOSCO).[3] The PFMI Principles harmonize and strengthen previous international standards for financial market infrastructures (FMIs).[4]

---

1 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*

(3) Annexes I and II to this CP include supplementary guidance that applies to recognized domestic clearing agencies that are also overseen 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 PFMI Principles 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 clearing house and settlement system within the meaning of the Québec *Derivatives Act.* See section 1.4. 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.[5] The CSA considers that a recognized clearing agency, which is not a CCP, CSD or SSS, should not be subject to the application of Part 3. Such a clearing agency is, however, subject to provisions in Part 2 and all of Parts 4 and 5.

(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.

1.5 Section 1.5 provides clarity on the application of the different parts of the Instrument to a clearing agency that has been recognized by a securities regulatory authority, or exempted from recognition, as is further described in section 2.0 of this CP. Unless otherwise specified, Parts 1, 2, and 5 to 7 generally apply to both a recognized clearing agency and one that is exempted from recognition.

---

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 *Securities Act* or the *Derivatives Act*.

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 from the recognition requirement. 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) The CSA takes 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, would generally need to be recognized by a securities regulatory authority.[6] 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;[7] risk exposures (particularly credit and liquidity) of the clearing agency to its participants; complexity of the clearing agency;[8] and centrality of the clearing agency with respect to its role in the market, including its substitutability, relationships, interdependencies and interactions.[9] 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.[10]

(3) Because of the approach described in subsection 2.0(2) of this CP, a securities regulatory authority may require a foreign-based clearing agency to be recognized if the clearing agency's proposed business activities in the local jurisdiction are systemically important to the jurisdiction's capital markets, even if it is already subject to comparable regulation in its home jurisdiction. In such circumstances, the recognition decision would focus on key areas that pose material risks to the jurisdiction's market and rely, where appropriate, on the current regulatory requirements and processes to which the entity is already subject in its home jurisdiction. Terms and conditions of a recognition decision that require a foreign clearing agency to report information to a Canadian securities regulatory authority may vary among foreign clearing agencies. Among other factors, they will depend on whether Canadian securities regulatory

---

6 We would consider comparable regulation by another regulatory body to be regulation that generally results in similar outcomes in substance to the requirements of Part 3 and 4.

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

8 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.

9 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.

10 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.

authorities have entered into an agreement or memorandum of understanding with the home regulator for sharing information and cooperation.

- ***Exemption from recognition***

(4) 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 changes to information provided to the securities regulatory authority that are material.

Application and initial filing of information

2.1 The application process for both recognition and exemption from recognition as a clearing agency is similar in both substance and process, though its oversight program may differ. 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 comprehensive and appropriate documentation. This will include the items listed in subsection 2.1(1). Together, the application materials for either recognition or exemption should present a detailed description of the history, regulatory structure, 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 PFMI Principle 23, key consideration 5.

Significant changes, fee changes, and other changes in information

2.2 Section 2.2 is subject to the application provisions of subsections 1.5(3) and (4). For example, where the terms and conditions of a recognition decision made by a securities regulatory authority require a recognized clearing agency to obtain the approval of the authority before implementing a new fee for a service, the process to seek such approval set forth in the terms and conditions will apply instead of the prior notification requirement in subsection 2.2(4).

(2) The written notice should provide a reasonably detailed description of the significant change (as defined in subsection 2.2(1)), the expected date of the implementation of the change, and an assessment of how the significant change is consistent with the PFMI Principles applicable to the clearing agency (see subsection 2.2(3)). It should enclose or attach updated relevant documentation, including clean and blacklined versions of the documentation that show how the significant change will be implemented. If the notice is being filed by a foreign-based clearing agency, the notice should also describe the approval process or other involvement by the primary or home-jurisdiction regulator for implementing the significant change. The clearing agency is required to file concurrently with the notice any changes required to be made to the clearing agency's PFMI Disclosure Framework Document as a result of implementing the significant change, in accordance with subsection 2.2(3).

Ceasing to carry on business

2.3 A recognized or exempt clearing agency that ceases to carry on business in a local jurisdiction as a clearing agency, either voluntarily or involuntarily, must file a completed Form 24-102F2 *Cessation of Operations Report for Clearing Agency*. 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.[11]

Financial statements

2.4 Financial statements filed under sections 2.4 and 2.5 must disclose the accounting principles used to prepare them. For clarity, financial statements prepared either in accordance with Canadian GAAP applicable to publicly accountable enterprises or in accordance with IFRS should include:

(a) in the case of annual financial statements, an unreserved statement of compliance with IFRS;

(b) in the case of interim financial statements, an unreserved statement of compliance with International Accounting Standard 34 *Interim Financial Reporting*.

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

Filing of interim financial statements

2.5 The term "interim period" in subsection 2.5(2) means a period commencing on the first day of the recognized or exempt clearing agency's financial year and ending nine, six or three months before the end of the same financial year, or otherwise in accordance with the regulatory requirements of the jurisdiction in which the clearing agency's head office or principal place of business is located.

PART 3
PFMI PRINCIPLES APPLICABLE TO RECOGNIZED CLEARING AGENCIES

Introduction

3.0 (1) Section 3.1 adopts the PFMI Principles generally but excludes the application of specific PFMI Principles for certain types of clearing agencies. We have adopted only those PFMI Principles that are relevant to clearing agencies operating as a CCP, CSD or SSS.[12]

(2) Part 3, together with the PFMI Principles, is intended to be consistent with a flexible and principles-based approach to regulation. In this regard, Part 3 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.

PFMI Principles

3.1 The definition of PFMI Principles in the Instrument includes the applicable key considerations for each principle. Annex E to the PFMI Report provides additional guidance on how each key consideration will apply to the specified types of clearing agencies. In interpreting and implementing the PFMI Principles, regard is to be given to the explanatory notes in the PFMI Report and other reports or explanatory material published by CPMI and IOSCO that provide supplementary guidance to FMIs on the application of the PFMI Principles, as appropriate, unless otherwise indicated in section 3.1 or this Part 3 of the CP.[13] 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 PFMI Principles within the Canadian context. The Joint Supplementary Guidance is directed at recognized domestic clearing agencies that are also overseen by the BOC. The Joint Supplementary Guidance is included in Annex I to this CP under the relevant headings of the PFMI Principles. Except as otherwise indicated in this Part 3 of the CP, other recognized domestic clearing agencies should assess the applicability of the Joint Supplementary Guidance to their respective entity as well.

---

[12] PFMI Principles that are relevant to payment systems and trade repositories, but not CCPs, SSSs and CSDs, are not adopted in Part 3.

[13] For example, the Instrument uses specialized terminology related to the clearing and settlement area. Not all such terminology is defined in the Instrument, but instead may be defined or explained in the PFMI Report. Regard should be given to the PFMI Report in understanding such terminology, as appropriate, including Annex H: *Glossary*.

PFMI Principle 5: Collateral

Notwithstanding section 3.1 of the CP and the Joint Supplementary Guidance relating to PFMI Principle 5: *Collateral*, we are of the view that letters of credit may be permitted as collateral by a recognized domestic clearing agency operating as a CCP serving derivatives markets that is not also overseen by the BOC, provided that the collateral and the clearing agency's collateral policies and procedures otherwise meet the requirements of PFMI Principle 5: *Collateral*. However, the recognized clearing agency must first obtain regulatory approval of its rules and procedures that govern the use of letters of credit as collateral before accepting letters of credit.

PFMI Principle 14: Segregation and portability for CCPs serving cash markets

PFMI Principle 14: *Segregation and portability* requires, pursuant to section 3.1, that a CCP have rules and procedures that enable the segregation and portability[14] of positions and related collateral of a CCP participant's customers, particularly to protect the customers from the default or insolvency of the participant. The explanatory notes in the PFMI Report offer an "alternate approach" to meeting PFMI Principle 14. The report notes that, in certain jurisdictions, cash market CCPs operate in legal regimes that facilitate segregation and portability to achieve the protection of customer assets by alternate means that offer the same degree of protection as the approach in PFMI Principle 14.[15] The features of the alternate approach are described in the PFMI Report.[16]

- *Customers of IIROC dealer members:*

Currently, most participants of domestic cash market CCPs that clear for customers are investment dealers.[17] They are required to be members of the Investment Industry Regulatory Organization of Canada (IIROC)[18] and to contribute to the Canadian Investor Protection Fund (CIPF).[19] The CSA is of the view that the customer asset protection regime applicable to investment dealers (IIROC-CIPF regime) is an appropriate alternative framework for customers of investment dealers that are direct participants of a cash-market CCP. The IIROC-CIPF regime

---

[14] 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.

[15] See paragraph 3.14.6 of the PFMI Report, at p. 83.

[16] Features of such 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.

[17] 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*.

[18] IIROC is the national self-regulatory organization (SRO) which oversees all investment dealers and trading activity on debt and equity marketplaces in Canada. It is a recognized SRO in all 10 provinces in Canada and is subject to regulation and oversight by the CSA.

[19] CIPF is an investor compensation protection fund that is sponsored by IIROC and approved by the CSA.

meets the criteria for the alternate approach for CCPs serving certain domestic cash markets 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.

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,[20] provides protection to eligible customers for losses up to $1 million per account.[21]

- *Customers of other types of participants:*

A recognized clearing agency operating as a cash market CCP for participants that are not IIROC investment dealers will need to have segregation and portability arrangements at the CCP level that meet PFMI Principle 14. Where the clearing agency is proposing to rely on an alternate approach for the purposes of protecting the customers of such participants, the clearing agency will need to demonstrate how the applicable legal or regulatory framework in which it operates achieves the same degree of protection and efficiency for such customers that would otherwise be achieved by segregation and portability arrangements at the CCP level described in PFMI Principle 14. See the PFMI Report, at paragraph 3.14.6.

[20] 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.

[21] 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.

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 recognized clearing agency whether or not it operates as a CCP, SSS or CSD.

Division 1 – Governance:

Board of directors

4.1 (4) Consistent with the explanatory notes in the PFMI Report (see paragraph 3.2.10), we are of the view that the following individuals have a relationship with a clearing agency that would, absent exceptional circumstances, be expected to interfere with the exercise of the individual's independent judgment:

(a) an individual who is, or has been within the last year, an employee or officer of the clearing agency or any of its affiliated entities;

(b) an individual whose immediate family member is, or has been within the last year, an officer of the clearing agency or any of its affiliated entities;

(c) an individual who beneficially owns, directly or indirectly, voting securities carrying more than 10% of the voting rights attached to all voting securities of the clearing agency or any of its affiliated entities for the time being outstanding;

(d) an individual whose immediate family member beneficially owns, directly or indirectly, voting securities carrying more than 10% of the voting rights attached to all voting securities of the clearing agency or any of its affiliated entities for the time being outstanding;

(e) an individual who is, or has been within the last year, an officer of a person or company that beneficially owns, directly or indirectly, voting securities carrying more than 10% of the voting rights attached to all voting securities of the clearing agency or any of its affiliated entities for the time being outstanding; and

(f) an individual who accepts or who received within the last year, directly or indirectly, any audit, consulting, advisory or other compensatory fee from the clearing agency or any of its affiliated entities, 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.

For the purposes of paragraph (f) above, compensatory fees would not normally 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. Also, 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 affiliated entities.

In addition, an individual appointed to the board of directors or board committee of the clearing agency or any of its affiliated entities or of a person or company referred to in paragraph (e) above would 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.

Chief Risk Officer (CRO) and Chief Compliance Officer (CCO)

4.3 Section 4.3 is consistent with PFMI Principle 2, key consideration 5, which requires a clearing agency to have an experienced management with a mix of skills and the integrity necessary to discharge its operations and risk management responsibilities.

Consistent with PFMI Principle 2, Key Consideration 6, subsection 4.3(1) is not intended to prevent the CRO and the CCO from reporting to both management and the board, provided that there are adequate safeguards in place to ensure that the CRO and the CCO have sufficient independence from the other members of management in performing their functions as CRO and CCO, particularly their obligations under subsections 4.3(2) and 4.3(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. The CSA is of the view that the role of a CCO (or certain aspects of the role) may, in certain circumstances, be performed by the Chief Legal Officer or General Counsel of the clearing agency, where the individual has sufficient time to properly carry out his or her duties and, provided that there are appropriate safeguards in place to avoid conflicts of interest.

Board or advisory committees

4.4 Section 4.4 is intended to reinforce the clearing agency's obligations to meet the PFMI Principles, particularly PFMI Principles 2 and 3. The CSA is of the view that the mandates of the committees should, at a minimum, include 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; and

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

Section 4.4 is a minimum requirement. Consistent with the explanatory notes in the PFMI Principles (see paragraph 3.2.9), a recognized clearing agency should also consider forming other types of board committees, such as a compensation committee. 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. See section 4.1 for the concept of independence. 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.

Division 2 – Default management:

Use of own capital

4.5 The CSA is of the view that a CCP's own capital contribution should be used in the default waterfall, 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 significant enough to attract senior management's attention, and 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:

4.6 to 4.10 Sections 4.6 to 4.10 complement PFMI Principle 17, which requires a clearing agency to identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. PFMI Principle 17 further requires that systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity, and business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.

Systems requirements

4.6 (a) The intent of these provisions is to ensure that controls are implemented to support cyber resilience, information technology planning, acquisition, development and maintenance, computer operations, information systems support and security. Recognized guides as to what constitutes adequate information technology controls may include guidance, principles or frameworks published by the Chartered Professional Accountants - Canada (CPA Canada), American Institute of Certified Public Accountants (AICPA), Information Systems Audit and Control Association (ISACA), International Organization for Standardization (ISO), or the National Institute of Standards and Technology (U.S. Department of Commerce) (NIST). We are of the view that internal controls include controls which support the processing integrity of the models used to quantify, aggregate, and manage the clearing agency's risks.

(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 subsection are to be carried out at least once in each 12-month period. 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 security incident is considered to be any event that actually or potentially jeopardizes the confidentiality, integrity or availability of an information system or the information the system processes, stores or transmits, or that constitutes a violation or imminent threat of violation of security policies, security procedures or acceptable use policies. A failure, malfunction, delay or security 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. Such events would not generally include those that have or would have little or no impact on the clearing agency's operations or on participants, although non-material events may become material if they recur or have a cumulative effect. Any event that requires non-routine measures or resources by the clearing agency would also 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 incident it did not consider material. It is expected that, as part of the notification required under paragraph 4.6(c), the clearing agency will provide updates on the status of the event and the resumption of service. Further, the clearing agency should have comprehensive and well-documented procedures in place to record, analyze, and resolve all systems failures, malfunctions, delays and security incidents. In this regard, the clearing agency should undertake a "post-mortem" 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.[22]

[22] Adapted from the NIST definition of "incident". See https://csrc.nist.gov/Glossary/?term=4730#AlphaIndexDiv

(d) Pursuant to section 5.1, a recognized clearing agency may be asked to provide the regulator or, in Quebec, the securities regulatory authority, with additional information, such as but not limited to reports, logs or other documents related to a systems failure, malfunction, delay, security incident or any other system or process related data.

Auxiliary systems

4.6.1 (2) A recognized clearing agency should also refer to the considerations for paragraph 4.6(c) above with regards to security incidents that arise in connection with auxiliary systems. Pursuant to section 5.1, a recognized clearing agency may be asked to provide the regulator or, in Quebec, the securities regulatory authority, with additional information, such as but not limited to reports, logs or other documents related to a security incident.

Systems reviews

4.7 (1)(a) An independent systems review must be conducted and reported on at least once in each 12-month period by a qualified external auditor in accordance with established audit standards and best industry practices. We consider that best industry practices include the 'Trust Services Criteria' developed by the American Institute of CPAs and CPA Canada. For the purposes of paragraph 4.7(1)(a), we consider a qualified external auditor to be 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. Before engaging a qualified external auditor to conduct the independent systems review, a clearing agency is expected to discuss its choice of external auditor and the scope of the systems review mandate with the regulator or, in Québec, the securities regulatory authority. We further expect that the report prepared by the external auditor include, to the extent applicable, an audit opinion that (i) the description included in the report fairly presents the systems and controls that were designed and implemented throughout the reporting period, (ii) the controls stated in the description were suitably designed, and (iii) the controls operated effectively throughout the reporting period.

(1)(b) The clearing agency must also establish and perform effective assessment and testing methodologies and practices and would be expected to implement appropriate improvements where necessary. The assessments and testing required in this section, such as vulnerability assessments and penetration tests, are to be carried out by a qualified party on a reasonably frequent basis and, in any event, at least once in each 12-month period. For the purposes of paragraph 4.7(1)(b), we consider a qualified party to be 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. We consider that qualified parties may include external auditors or third party information system consultants, as well as employees of the clearing agency or an affiliated entity of the clearing agency, but may not be persons responsible for the development or operation of the systems or capabilities being tested. The securities regulatory authority may, in accordance with securities legislation, require the clearing agency to provide a copy of any such assessment.

Clearing agency technology requirements and testing facilities

4.8 (1) The technology requirements required to be disclosed under subsection 4.8(1) do not include detailed proprietary information.

(5) We expect the amended technology requirements to be disclosed 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 at least once in each 12-month period. 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 expects that the clearing agency will also facilitate and participate in industry-wide testing of the business continuity plan (domestically-based recognized clearing agencies are required to participate in all industry-wide business continuity tests, as determined by a regulation services provider, regulator, or in Québec, the securities regulatory authority, pursuant to National Instrument 21-101 *Marketplace Operation*). 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 affiliated entities 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 Section 4.11 complements PFMI Principle 18, which requires a clearing agency to have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

(1)(b) We consider an indirect participant to be an entity that relies on the services provided by other entities (participants) to use a clearing agency's clearing and settlement facilities. As defined in the Instrument, a participant (sometimes also referred to as a "direct participant") is an entity 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. While indirect participants are generally not bound by the rules of the clearing agency, their transactions are cleared and settled through the clearing agency in accordance with the clearing agency's rules and procedures. The concept of indirect participant is discussed in the PFMI Report, at paragraph 3.19.1.

(1)(d) We are of the view that a requirement on participants of a clearing agency serving the derivatives markets to use a trade repository that is an affiliated entity to report derivatives trades would be unreasonable.

PART 5
BOOKS AND RECORDS AND LEGAL ENTITY IDENTIFIER

Legal Entity Identifiers

5.2 (1) The Global Legal Entity Identifier System defined in subsection 5.2(1) is a G20 endorsed system[23] that is intended to serve as a public-good utility responsible for overseeing the issuance of legal entity identifiers (LEIs) globally in order to uniquely identify parties to transactions. It was designed and implemented under the direction of the LEI Regulatory Oversight Committee, a governance body endorsed by the G20.

PART 6
EXEMPTIONS

Exemptions

6.1 As Part 3 adopts a principles-based approach to incorporating the PFMI Principles into the Instrument, the CSA has sought to minimize any substantive duplication or material inefficiency due to cross-border regulation. Where a recognized foreign-based clearing agency does face some conflict or inconsistency between the requirements of sections 2.2 and 2.5 and Part 4 and the requirements of the regulatory regime in its home jurisdiction, the clearing agency is expected to comply with the Instrument. However, where such a conflict or inconsistency causes a hardship for the clearing agency, and provided that the entity is subject to requirements in its home jurisdiction resulting in similar outcomes in substance to the requirements of sections 2.2 and 2.5 and Part 4, an exemption from a provision of the Instrument may be considered by a securities regulatory authority. The exemption may be subject to appropriate terms or conditions.

[23] See http://www.financialstabilityboard.org/list/fsb_publications/tid_156/index.htm for more information.

ANNEX I

TO COMPANION POLICY 24-102CP

JOINT SUPPLEMENTARY GUIDANCE DEVELOPED BY THE BANK OF CANADA AND CANADIAN SECURITIES ADMINISTRATORS

ON THE PFMI PRINCIPLES

Joint Supplementary Guidance has been developed by the BOC and the securities regulatory authorities to provide additional clarity on certain aspects of selected PFMI Principles within the Canadian context. It is found on the BOC website and in annexes to the Companion Policy (to the CSA National Instrument 24-102 *Clearing Agency Requirements*).

The Joint Supplementary Guidance applies in respect of recognized domestic clearing agencies that are designated as systemically important by the BOC and jointly overseen by the BOC and one or more securities regulatory authorities (referred to in this Joint Supplementary Guidance as an "FMI").

Beyond observation of the PFMI Principles, an FMI is expected to take into account the "Explanatory Notes" for each applicable PFMI Principle, other reports and explanatory materials published by CPMI and IOSCO that supplement the PFMI Report and that provide guidance to FMIs on the application of the PFMI Principles, as well as this Joint Supplementary Guidance or any future guidance published jointly by the BOC and the securities regulatory authorities.

The Joint Supplementary Guidance below appears under the relevant headings for each applicable PFMI Principle (referred to by the BOC as its "Risk-Management Standards for Designated FMIs").

PFMI Principle 3: Framework for the comprehensive management of risks

a. Joint Supplementary Guidance for PFMI Principle 3 has been developed by the BOC and CSA pertaining to FMI recovery planning. This guidance can be found separately on the BOC website and in Annex II to the Companion Policy.

PFMI Principle 5: Collateral

a. An FMI should not rely solely on external opinions to determine collateral eligibility.

b. In general, most of the FMI's collateral pools should be composed of cash and debt securities issued or guaranteed by the Government of Canada, a provincial government or the U.S. Treasury.

c. Additional asset classes may be acceptable as collateral if they are subject to conservative haircuts and concentration limits. An FMI should limit such assets to a maximum of 40% of the total collateral posted from each participant. It should also limit securities issued by a single issuer to a maximum of 5% of total collateral from each participant. Such assets are:

- Securities issued by a municipal government;
- Bankers' acceptances;
- Commercial paper;
- Corporate bonds;
- 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;
- Equity securities traded on marketplaces regulated by a member of the CSA; and
- 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.

d. Since it is highly likely that the value of debt and equity securities issued by companies operating in the financial sector would be adversely affected by the default of an FMI participant – introducing wrong-way risk for an FMI that has accepted such securities as collateral – an FMI should:

- Limit the collateral from financial sector issuers to a maximum of 10% of total collateral pledged from each participant; and
- Not allow a participant to pledge as collateral securities issued by itself or an affiliate.

PFMI Principle 7: Liquidity risk

a. Liquidity facilities should include at least three independent liquidity providers to ensure the FMI has access to sufficient liquid resources even in the event one of its liquidity providers defaults.

b. Uncommitted liquidity facilities are considered qualifying liquid resources for liquidity exposure in Canadian dollars if they meet all of the following additional criteria:

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

PFMI Principle 15: General business risk

a. Liquid net assets funded by equity must be held at the level of the FMI legal entity to ensure they are unencumbered and can be accessed quickly.

PFMI Principle 16: Custody and investment risks

a. It is paramount that an FMI have prompt access to assets held for risk-management purposes with minimal price impact. For the purposes of PFMI Principle 16, financial instruments can be considered to have minimal credit, market and liquidity risk if they

are debt instruments that are:

- Securities issued or guaranteed by the Government of Canada;
- Marketable securities issued by the U.S. Treasury;
- Securities issued or guaranteed by a provincial government;
- Securities issued by a municipal government;
- Bankers' acceptances;
- Commercial paper;
- Corporate bonds; and
- Asset-backed securities that are:
  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.

b. Investments should also, at a minimum, observe the following:

- • To reduce concentration risk, no more than 20% of total investments should be invested in any combination of municipal and private sector securities. Investment in a single private sector or municipal issuer should be no more than 5% 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% of total investments. An FMI should not invest assets in the securities of its own affiliates.
- • For investments that are subject to counterparty credit risk, an FMI should set clear criteria for choosing investment counterparties and setting exposure limits.

ANNEX II

TO COMPANION POLICY 24-102CP

JOINT SUPPLEMENTARY GUIDANCE

DEVELOPED BY THE BANK OF CANADA AND CANADIAN SECURITIES ADMINISTRATORS

ON RECOVERY PLANS

Context

In 2012, to enhance the safety and efficiency of payment, clearing and settlement systems, CPMI and IOSCO released a set of international risk-management standards for FMIs, known as the PFMIs.[1] The PFMIs provide standards regarding FMI recovery planning and orderly wind-down, which were adopted by the Bank of Canada as Standard 24 of the Bank's *Risk-Management Standards for Systemic FMIs*[2] and by the CSA as part of the Instrument.[3] In the context of recovery planning,

> *An FMI is expected 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. This entails preparing appropriate plans for its recovery or orderly wind-down based on the results of that assessment.*

In October 2014, CPMI and IOSCO released its report, "Recovery of Financial Market Infrastructures" (the Recovery Report), providing additional guidance specific to the recovery of FMIs.[4] The Recovery Report explains the required structure and components of an FMI recovery plan and provides guidance on FMI critical services and recovery tools at a level sufficient to accommodate possible differences in the legal and institutional environments of each jurisdiction.

For the purpose of this guidance, FMI recovery is defined as the set of actions that an FMI can take, consistent with its rules, procedures and other ex ante contractual agreements, to address any uncovered loss, liquidity shortfall or capital inadequacy, whether arising from participant default or other causes (such as business, operational or other structural weakness), including actions to replenish any depleted pre-funded financial resources and liquidity arrangements, as necessary, to maintain the FMI's viability as a going concern and the continued provision of critical services.[5,6]

---

1 Available at http://www.bis.org/cpmi/publ/d101a.pdf.

2 See key consideration 4 of PFMI Principle 3 and key consideration 3 of PFMI Principle 15 which are adopted in the Instrument, section 3.1.

3 The Bank of Canada's Risk-Management Standards for Systemic FMIs is available at http://www.bankofcanada.ca/core-functions/financial-system/bank-canada-risk-management-standards-systemic-fmis/.

4 Available at http://www.bis.org/cpmi/publ/d121.pdf.

5. Recovery Report, Paragraph 1.1.1.

6 For a precise definition of orderly wind-down, see the Recovery Report, Paragraph 2.2.2.

Recovery planning is not intended as a substitute for robust day-to-day risk management or for business continuity planning. Rather, it serves to extend and strengthen an FMI's risk-management framework, enhancing the resilience of the FMI against financial risks and bolstering confidence in the FMI's ability to function effectively even under extreme but plausible market conditions and operating environments.

Key Components of Recovery Plans

Overview of existing risk-management and legal structures

As part of their recovery plans, FMIs should include overviews of their legal entity structure and capital structure to provide context for stress scenarios and recovery activities.

FMIs should also include an overview of their existing risk-management frameworks – i.e., their **pre-recovery** risk-management frameworks and activities. As part of this overview, and to determine the relevant point(s) where standard pre-recovery risk-management frameworks are exhausted, FMIs should identify all the material risks they are exposed to and explain how they use their existing pre-recovery risk-management tools to manage these risks to a high degree of confidence.

Critical services[7]

In their recovery plans, FMIs should identify, in consultation with Canadian authorities and stakeholders, the services they provide that are critical to the smooth functioning of the markets that they serve and to the maintenance of financial stability. FMIs may find it useful to consider the degree of **substitutability** and **interconnectedness** of each of these critical services, specifically

- the degree of criticality of an FMI's service is likely to be high if there are no, or only a small number of, alternative service providers. Factors related to the substitutability of a service could include (i) the size of a service's market share, (ii) the existence of alternative providers that have the capacity to absorb the number of customers and transactions the FMI maintains, and (iii) the FMI participants' capability to transfer positions to the alternative provider(s).

- the degree of criticality of an FMI's service may be high if the service is significantly interconnected with other market participants, both in terms of breadth and depth, thereby increasing the likelihood of contagion if the service were to be discontinued. Potential factors to consider when determining an FMI's interconnectedness are (i) what services it provides to other entities and (ii) which of those services are critical for other entities to function

Stress scenarios[8]

7 Recovery Report, Paragraphs 2.4.2–2.4.4.

8 Recovery Report, Paragraph 2.4.5.

In their recovery plans, FMIs should identify scenarios that may prevent them from being able to provide their critical services as a going concern. Stress scenarios should be focused on the risks an FMI faces from its payment, clearing and settlement activity. An FMI should then consider stress scenarios that cause financial stress in excess of the capacity of its existing pre-recovery risk controls, thereby placing the FMI into recovery. An FMI should organize stress scenarios by the types of risk it faces; for each stress scenario, the FMI should clearly explain the following:

- the assumptions regarding market conditions and the state of the FMI within the stress scenario, accounting for the differences that may exist depending on whether the stress scenario is systemic or idiosyncratic;

- the estimated impact of a stress scenario on the FMI, its participants, participants' clients and other stakeholders; and

- the extent to which an FMI's existing pre-recovery risk-management tools are insufficient to withstand the impacts of realized risks in a recovery stress scenario and the value of the loss and/or of the negative shock required to generate a gap between existing risk-management tools and the losses associated with the realized risks.

Triggers for recovery

For each stress scenario, FMIs should identify the triggers that would move them from their pre-recovery risk-management activities (e.g., those found in a CCP's default waterfall) to recovery. These triggers should be both qualified (i.e., outlined) and, where relevant, quantified to demonstrate a point at which recovery plans will be implemented without ambiguity or delay.

While the boundary between pre-recovery risk-management activities and recovery can be clear (for example, when pre-funded resources are fully depleted), judgment may be needed in some cases. When this boundary is not clear, FMIs should lay out in their recovery plans how they will make decisions.[9] This includes detailing in advance their communication plans, as well as the escalation process associated with their decision-making procedures. They should also specify the decision-makers responsible for each step of the escalation process to ensure that there is adequate time for recovery tools to be implemented if required.

More generally, it is important to identify and place the triggers for recovery early enough in a stress scenario to allow for sufficient time to implement recovery tools described in the recovery plan. Triggers placed too late in a scenario will impede the effective rollout of these tools and hamper recovery efforts. Overall, in determining the moment when recovery should commence, and especially where there is uncertainty around this juncture, an FMI should be prudent in its actions and err on the side of caution.

Selection and Application of Recovery Tools[10]

A comprehensive plan for recovery

9 Recovery Report, Paragraph 2.4.8.

10 Recovery Report, Paragraph 2.3.6 – 2.3.7 and 2.5.6 and Paragraphs 3.4.1 – 3.4.7

The success of a recovery plan relies on a comprehensive set of tools that can be effectively applied during recovery. The applicability of these tools and their contribution to recovery varies by system, stress event and the order in which they are applied.

A robust recovery plan relies on a range of tools to form an adequate response to realized risks. Canadian authorities will provide feedback on the comprehensiveness of selected recovery tools when reviewing an FMI's complete recovery plan.

Characteristics of recovery tools

In providing this guidance, Canadian authorities used a broad set of criteria (described below), including those from the Recovery Report, to determine the characteristics of effective recovery tools.[11] FMIs should aim for consistency with these criteria in the selection and application of tools. In this context, recovery tools should be:

- Reliable and timely in their application and have a strong legal and regulatory basis. This includes the need for FMIs to mitigate the risk that a participant may be unable or unwilling to meet a call for financial resources in a timely manner, or at all (i.e., performance risk), and to ensure that all recovery activities have a strong legal and regulatory basis.

- Measurable, manageable and controllable to ensure that they can be applied effectively while keeping in mind the objective of minimizing their negative effects on participants and the broader financial system. To this end, using tools in a manner that results in participant exposures that are determinable and fixed provides better certainty of the tools' impacts on FMI participants and their contribution to recovery. Fairness in the allocation of uncovered losses and shortfalls, and the capacity to manage the associated costs, should also be considered.

- Transparent to participants: this should include a predefined description of each recovery tool, its purpose and the responsibilities and procedures of participants and the FMIs subject to the recovery tool's application to effectively manage participants' expectations. Transparency also mitigates performance risk by detailing the obligations and procedures of FMIs and participants beforehand to support the timely and effective rollout of recovery tools.

- Designed to create appropriate incentives for sound risk management and encourage voluntary participation in recovery to the greatest extent possible. This may include distributing post-recovery proceeds to participants that supported the FMI through the recovery process.

Systemic stability

Certain tools may have serious consequences for participants and for the stability of financial

11 Recovery Report, Paragraph 3.3.1.

markets more generally. FMIs should use prudence and judgment in the selection of appropriate tools. Canadian authorities are of the view that FMIs should be cautious in using tools that can create uncapped, unpredictable or ill-defined participant exposures, and which could create uncertainty and disincentives to participate in an FMI. Any such use would need to be carefully justified. Participants' ability to predict and manage their exposures to recovery tools is important, both for their own stability and for the stability of the indirect participants of an FMI.

In assessing FMI recovery plans, Canadian authorities are concerned with the possibility of systemic disruptions from the use of certain tools or tools that pose unquantifiable risks to participants. When determining which recovery tools should be included in a recovery plan, and selecting and applying such tools during the recovery phase, FMIs should keep in mind the objective of minimizing their negative impacts on participants, the FMI and the broader financial system.

Recommended recovery tools

This section outlines recommended recovery tools for use in FMI recovery plans. Not all tools are applicable for the different types of FMIs (e.g., a payment system versus a central counterparty), nor is this an exhaustive list of tools that may be available for recovery. Each FMI should use discretion when determining the most appropriate tools for inclusion in its recovery plan, consistent with the considerations discussed above.

- **Cash calls**

  Cash calls are recommended for recovery plans to the extent that the exposures they generate are fixed and determinable; for example, capped and limited to a maximum number of rounds over a specified period, established in advance. In this context, participant exposures should be linked to each participant's risk-weighted level of FMI activity.

  By providing predictable exposures pro-rated to a participant's risk-weighted level of activity, FMIs create incentives for better risk management on the part of participants, while giving the FMI greater certainty over the amount of resources that can be made available during recovery.

  Since cash calls rely on contingent resources held by FMI participants, there is a risk that they may not be honoured, reducing their effectiveness as a recovery tool. The management of participants' expectations, especially through the placement of clear limits on participant exposure, can mitigate this concern.

  Cash calls can be designed in multiple ways to structure incentives, vary their impacts on participants and respond to different stress scenarios. When designing cash calls, FMIs should, to the greatest extent possible, seek to minimize the negative consequences of the tool's use.

- **Variation margin gains haircutting (VMGH)**

VMGH is recommended for recovery plans because participant exposure under this tool can be measured with reasonable confidence, as it is tied to the level of risk held in the variation margin (VM) fund and the potential for gains. Where recovery plans allow for multiple rounds of VMGH, Canadian authorities will consider the impact of each successive round of haircutting with increasing focus on systemic stability.

VMGH relies on participant resources posted at the FMI as variation margin (VM). Where the price movements of underlying instruments create sufficient VM gains for use in recovery, VMGH provides an FMI with a reliable and timely source of financial resources without the performance risk that is associated with tools reliant on resources held by participants.

VMGH assigns losses and shortfalls only to participants with net position gains; as a result, the pro rata financial burden is higher for these participants. The negative effects of VMGH can also be compounded for participants who rely on variation margin gains to honour obligations outside the FMI. FMIs should seek to minimize these negative effects to the greatest extent possible.

❖ **Voluntary contract allocation**

To recover from an unmatched book caused by a participant default, a CCP can use its powers to allocate unmatched contracts.[12] In the context of recovery, contract allocation is encouraged on a voluntary basis –for example, by auction. Voluntary contract allocation addresses unmatched positions while taking participant welfare into account, since only participants who are willing to take on positions will participate.

The reliance on a voluntary process, such as an auction, introduces the risk that not all positions will be matched or that the auction process is not carried out in a timely manner. Defining the responsibilities and procedures for voluntary contract allocation (e.g., the auction rules) in advance will mitigate this risk and increase the reliability of the tool. To ensure that there is adequate participation in an auction process, FMIs should create incentives for participants to take on unmatched positions. FMIs may also wish to consider expanding the auction beyond direct participants to increase the chances that all positions will be matched.

❖ **Voluntary contract tear-up**

Since eliminating positions can help re-establish a matched book, Canadian authorities view voluntary contract tear-up as a potentially effective tool for FMI recovery. To this end, FMIs may want to consider using incentives to encourage voluntary tear-up during recovery.[13] While contract tear-up undertaken on a voluntary basis is a recommended tool, the forced termination of an incomplete trade may represent a disruption of a critical FMI service, and

12 A CCP "matched book" occurs when a position taken on by the CCP with one clearing member is offset by an opposite position taken on with a second clearing member. A matched book must be maintained for the CCP to complete a trade. An unmatched book occurs when one participant defaults on its position in the trade, leaving the CCP unable to complete the transaction.

13 Recovery Report, Paragraph 4.5.3.

can be intrusive to apply (see the section "Tools requiring further justification" for a discussion of forced contract tear-up).

To the extent that voluntary contract tear-up may disrupt critical FMI services, it can produce disincentives to participate in an FMI. There should be a strong legal basis for the relevant processes and procedures when voluntary contract tear-up is included in a recovery plan. This will help to manage participant expectations for this tool and ensure that confidence in the FMI is maintained.

Other tools available for FMI recovery include standing third-party liquidity lines, contractual liquidity arrangements with participants, insurance against financial loss, increased contributions to pre-funded resources, and use of an FMI's own capital beyond the default waterfall. These and other tools are often already found in the pre-recovery risk-management frameworks of FMIs. Canadian authorities encourage their use for recovery as well, provided they are in keeping with the criteria for effective recovery tools as found in the Recovery Report and in this guidance.[14] Where system-specific recovery needs necessitate, FMIs can also design recovery tools not explicitly listed in this guidance. The applicability of such tools will be examined by the Canadian authorities when they review the proposed recovery plan.

To the extent that the costs of recovery are shared less equally under some tools (e.g., VMGH), if it is financially feasible, FMIs could consider post-recovery actions to restore fairness where participants have been disproportionately affected. Such actions may include the repayment of participant contributions used to address liquidity shortfalls and other instruments that aim to redistribute the burden of losses allocated during recovery. It is important to note that these actions in the post-recovery period should not impair the financial viability of the FMI as a going concern.

Tools requiring further justification

Due to their uncertain and potentially negative effects on the broader financial system, tools that are more intrusive or result in participant exposures that are difficult to measure, manage or control, must be carefully considered and justified with strong rationale by the FMI when they are included in a recovery plan. Canadian authorities will provide their views on the suitability of any such tools as part of their review of recovery plans.

For example, uncapped and unlimited cash calls and unlimited rounds of VMGH can create ambiguous participant exposures, the negative effects of which must be prudently considered when including them in a recovery plan. In addition, when applied during the recovery process, Canadian authorities will monitor the application of each successive round of cash calls and VMGH with increased focus on systemic stability.

Tools such as involuntary (forced) contract allocation and involuntary (forced) contract tear-up create exposures that are difficult to manage, measure and control. To the extent that these tools are even more intrusive, they have the ability to pose greater risk to systemic stability. Canadian

14 Recovery Report, Paragraph 3.3.1.

authorities acknowledge that such tools have potential utility when other recovery options are ineffective, and could possibly be used by a resolution authority, but expect FMIs to carefully assess the potential impact of such tools on participants and the stability of the broader financial system.

Canadian authorities do not encourage the use of non-defaulting participants' initial margin in FMI recovery plans considering the potential for significant negative impacts.[15] Similarly, a recovery plan should not assume any extraordinary form of public or central bank support.[16]

Recovery from non-default-related losses and structural weaknesses

Consistent with a defaulter-pays principle, an FMI should rely on FMI-funded resources to address recovery from non-default-related losses (i.e., operational and business losses on the part of an FMI), including losses arising from structural weakness.[17] To this end, FMIs should examine ways to increase the loss absorbency between the FMI's pre-recovery risk-management activities and participant-funded resources (e.g., by using FMI-funded insurance against operational risks).

Structural weakness can be an impediment to the effective rollout of recovery tools and may itself result in non-default-related losses that are a trigger for recovery. An FMI recovery plan should identify procedures detailing how to promptly detect, evaluate and address the sources of underlying structural weakness on a continuous basis (e.g., unprofitable business lines, investment losses).

The use of participant-funded resources to recover from non-default-related losses can lessen incentives for robust risk management within an FMI and provide disincentives to participate. If, despite these concerns, participants consider it in their interest to keep the FMI as a going concern, an FMI and its participants may agree to include a certain amount of participant-funded recovery tools to address some non-default-related losses. Under these circumstances, the FMI should clearly explain under what conditions participant resources would be used and how costs would be distributed.

Defining full allocation of uncovered losses and liquidity shortfalls

Principles 4 (credit risk)[18] and 7 (liquidity risk)[19] of the PFMIs require that FMIs should specify rules and procedures to fully allocate both uncovered losses and liquidity shortfalls caused by

15 Recovery Report, Paragraph 4.2.26.

16 Recovery Report, Paragraph 2.3.1.

17 Structural weakness can be caused by factors such as poor business strategy, poor investment and custody policy, poor organizational structure, IM/IT-related obstacles, poor legal or regulatory risk frameworks, and other insufficient internal controls.

18 Under key consideration 7 of PFMI Principle 4, an FMI should establish explicit rules and procedures that fully address 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.

19 Under key consideration 10 of PFMI Principle 7, FMIs should establish rules and procedures that address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking or delaying the same-day settlement of payment obligations.

stress events. To be consistent with this requirement, **Canadian FMIs should consider various stress scenarios and have rules and procedures that allow them to fully allocate any losses or liquidity shortfalls arising from these stress scenarios, in excess of the capacity of existing pre-recovery risk controls**. Tools used to address full allocation should reflect the Recovery Report's characteristics of effective recovery tools, including the need to have them measurable, manageable and controllable to those who will bear the losses and liquidity shortfalls in recovery, and for their negative impacts to be minimized to the greatest extent possible.

Legal consideration for full allocation

An FMI's rules for allocating losses and liquidity shortfalls should be supported by relevant laws and regulations. There should be a high level of certainty that rules and procedures to fully allocate all uncovered losses and liquidity shortfalls are enforceable and will not be voided, reversed or stayed.20 This requires that Canadian FMIs design their recovery tools in compliance with Canadian laws. For example, if the FMI's loss-allocation rules involve a guarantee, Canadian law generally requires that the guaranteed amount be determinable and preferably capped by a fixed amount.[21]

FMIs should consider whether it is appropriate to involve indirect participants in the allocation of losses and shortfalls during recovery. To the extent that it is permitted, such arrangements should have a strong legal and regulatory basis; respect the FMI's frameworks for tiered participation, segregation and portability; and involve consultation with indirect participants to ensure that all relevant concerns are taken into account.

Overall, FMIs are responsible for seeking appropriate legal advice on how their recovery tools can be designed and for ensuring that all recovery tools and activities are in compliance with the relevant laws and regulations.

Additional Considerations in Recovery Planning

Transparency and coherence[22]

An FMI should ensure that its recovery plan is coherent and transparent to all relevant levels of management within the FMI, as well as to its regulators and overseers. To do so, a recovery plan should

- contain information at the appropriate level and detail; and
- be sufficiently coherent to relevant parties within the FMI, as well as to the regulators and overseers of the FMI, to effectively support the application of the recovery tools.

20 PFMI Report, Paragraph 3.1.10.

21 The Bank Act, Section 414(1) and IIROC Rule 100.14 prohibit banks and securities dealers, respectively, from providing unlimited guarantees to an FMI or a financial institution.

22 Recovery Report, Section 2.3

An FMI should ensure that the assumptions, preconditions, key dependencies and decision-making processes in a recovery plan are transparent and clearly identified.

Relevance and flexibility[23]

An FMI's recovery plan should thoroughly cover the information and actions relevant to extreme but plausible market conditions and other situations that would call for the use of recovery tools. An FMI should take into account the following elements when developing its recovery plan:

- the nature, size and complexity of its operations;
- its interconnectedness with other entities;
- operational functions, processes and/or infrastructure that may affect the FMI's ability to implement its recovery plan; and
- any upcoming regulatory reforms that may have the potential to affect the recovery plan.

Recovery plans should be sufficiently flexible to address a range of FMI-specific and market-wide stress events. Recovery plans should also be structured and written at a level that enables the FMI's management to assess the recovery scenario and initiate appropriate recovery procedures. As part of this expectation, the recovery plan should demonstrate that senior management has assessed the potential two-way interaction between recovery tools and the FMI's business model, legal entity structure, and business and risk-management practices.

Implementation of Recovery Plan[24]

An FMI should have credible and operationally feasible approaches to recovery planning in place and be able to act upon them in a timely manner, under both idiosyncratic and market-wide stress scenarios. To this end, recovery plans should describe

- potential impediments to applying recovery tools effectively and strategies to address them; and
- the impact of a major operational disruption.[25]

This information is important to strengthen a recovery plan's resilience to shocks and ensure that the recovery tools are actionable.

A recovery plan should also include an escalation process and the associated communication procedures that an FMI would take in a recovery situation. Such a process should define the

23 Recovery Report, Section 2.3.

24 Recovery Report, Paragraph 2.3.9.

25 This is also related to the FMI's backup and contingency planning, which are distinct from recovery plans.

associated timelines, objectives and key messages of each communication step, as well as the decision-makers who are responsible for it.

Consulting Canadian authorities when taking recovery actions

While the responsibility for implementing the recovery plan rests with the FMI, Canadian authorities consider it critical to be informed when an FMI triggers its recovery plan and before the application of recovery tools and other recovery actions. To the extent an FMI intends to use a tool or take a recovery action that might have significant impact on its participants (e.g. tools requiring further justification), the FMI should consult Canadian authorities before using such tools or taking such actions to demonstrate how it has taken into account potential financial stability implications and other relevant public interest considerations. Authorities include those responsible for the regulation, supervision and oversight of the FMI, as well as any authorities who would be responsible for the FMI if it were to be put into resolution.

Relevant Canadian authorities should be informed (or consulted as appropriate) early on and interaction with authorities should be explicitly identified in the escalation process of a recovery plan. Acknowledging the speed at which an FMI may enter recovery, FMIs are encouraged to develop formal communications protocols with authorities in the event that recovery is triggered and immediate action is required.

Review of Recovery Plan[26]

An FMI should include in its recovery plan a robust assessment of the recovery tools presented and detail the key factors that may affect their application. It should recognize that, while some recovery tools may be effective in returning the FMI to viability, these tools may not have a desirable effect on its participants or the broader financial system.

A framework for testing the recovery plan (for example, through scenario exercises, periodic simulations, back-testing and other mechanisms) should be presented either in the plan itself or linked to a separate document. This impact assessment should include an analysis of the effect of applying recovery tools on financial stability and other relevant public interest considerations.[27] Furthermore, an FMI should demonstrate that the appropriate business units and levels of management have assessed the potential consequences of recovery tools on FMI participants and entities linked to the FMI.

Annual review of recovery plan

An FMI should review and, if necessary, update its recovery plan on an annual basis. The recovery plan should be subject to approval by the FMI's Board of Directors.[28] Under the following circumstances, an FMI is expected to review its recovery plan more frequently:

---

26 Recovery Report, Paragraph 2.3.8.

27 This is in line with key consideration 1 of PFMI Principle 2 (Governance), which states that an FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.

28 Recovery Report, Paragraph 2.3.3.

- ❖ if there is a significant change to market conditions or to an FMI's business model, corporate structure, services provided, risk exposures or any other element of the firm that could have a relevant impact on the recovery plan;

- ❖ if an FMI encounters a severe stress situation that requires appropriate updates to the recovery plan to address the changes in the FMI's environment or lessons learned through the stress period; and

- ❖ if the Canadian authorities request that the FMI update the recovery plan to address specific concerns or for additional clarity.

Canadian authorities will also review and provide their views on an FMI's recovery plan before it comes into effect. This is to ensure that the plan is in line with the expectations of Canadian authorities.

Orderly Wind-Down Plan as Part of a Recovery Plan[29]

Canadian authorities expect FMIs to prepare, as part of their recovery plans, for the possibility of an orderly wind-down. However, developing an orderly wind-down plan may not be appropriate or operationally feasible for some critical services. In this instance, FMIs should consult with the relevant authorities on whether they can be exempted from this requirement.

Considerations when developing an orderly wind-down plan

An FMI should ensure that its orderly wind-down plan has a strong legal basis. This includes actions concerning the transfer of contracts and services, the transfer of cash and securities positions of an FMI, or the transfer of all or parts of the rights and obligations provided in a link arrangement to a new entity.

In developing orderly wind-down plans, an FMI should elaborate on

- ❖ the scenarios where an orderly wind-down is initiated, including the services considered for wind-down;

- ❖ the expected wind-down period for each scenario, including the timeline for when the wind-down process for critical services (if applicable) would be complete; and

- ❖ measures in place to port critical services to another FMI that is identified and assessed as operationally capable of continuing the services.

Disclosure of recovery and orderly wind-down plans

An FMI should disclose sufficient information regarding the effects of its recovery and orderly wind-down plans on FMI participants and stakeholders, including how they would be affected by

29 Recovery Report, Paragraph 2.2.2.

(i) the allocation of uncovered losses and liquidity shortfalls and (ii) any measures the CCP would take to re-establish a matched book. In terms of disclosing the degree of discretion an FMI has in applying recovery tools, an FMI should make it clear to FMI participants and all other stakeholders ahead of time that all recovery tools and orderly wind-down actions that an FMI can apply will only be employed after consulting with the relevant Canadian authorities.

Note that recovery and orderly wind-down plans need not be two separate documents; the orderly wind-down of critical services may be a part or subset of the recovery plan. Furthermore, Canadian FMIs may consider developing orderly wind-down plans for non-critical services in the context of recovery if winding down non-critical services could assist in or benefit the recovery of the FMI.

Appendix: Guidelines on the Practical Aspects of FMI Recovery Plans

The following example provides suggestions on how an FMI recovery plan could be organized.