



# **ICE Clear Canada, Inc. Disclosure Framework**

**April 25, 2018**

**Responding institution:**  
ICE Clear Canada, Inc.

**Jurisdiction(s) in which the FMI operates:**  
Canada

**Authority regulating, supervising or overseeing the FMI:**  
The Manitoba Securities Commission

**LEI:** 549300MDWJV6LDHP3U32

The date of this disclosure is **April 25, 2018**. This disclosure can also be found at **www.theice.com**. For further information, please contact ICE Clear Canada, Inc. at [icecanada@theice.com](mailto:icecanada@theice.com) or 204.925.5000.

**Abbreviations:**

ACT	Allocation and Claim Transaction System
Board	ICE Clear Canada Board of Directors
BCP	Business Continuity Plan
CAD	Canadian dollars
CFA	<i>The Commodity Futures Act (Manitoba)</i>
CCP	Central Counterparty
CIPF	Canadian Investor Protection Fund
CP	Clearing Participant
CPMI	Committee on Payments and Market Infrastructures
ECS	Extensible Clearing System
FCM	Futures Commission Merchant
GF	Guaranty Fund
ICCA or ICE Clear Canada	ICE Clear Canada, Inc.
ICE Inc.	Intercontinental Exchange, Inc.
ICE	Intercontinental Exchange Holdings, Inc.
IFCA or ICE Futures Canada	ICE Futures Canada, Inc.
IOSCO	International Organization of Securities Commissions
IIROC	Investment Industry Regulatory Organization of Canada
MSC	The Manitoba Securities Commission
ORF	Operational Risk Framework
PFMI	Principles for Financial Market Infrastructure
PTMS	Post Trade Management System
Rules	By-laws, Rules and Operations Manual of ICE Clear Canada, Inc.
SB	Settlement Bank

## I. Executive summary

The objective of this document (“Disclosure Framework”) is to provide relevant disclosure to market participants on the methods used by ICE Clear Canada, Inc. (“ICCA” or “ICE Clear Canada”) to manage the risks it faces as a central counterparty (“CCP”).

The Disclosure Framework is prepared in accordance with the internationally recognized “Principles for Financial Market Infrastructure” (“PFMIs”) published in February 2012 and developed jointly by the Committee on Payment and Market Infrastructures (“CPMI”) <sup>1</sup> and the Technical Committee of the International Organization of Securities Commissions (“IOSCO”). No disclosure is provided with respect to Principles 11 and 24 as they do not apply to CCPs.

ICE Clear Canada has been providing efficient and reliable clearing services since 1998 for ICE Futures Canada, Inc. (“IFCA” or “ICE Futures Canada”). ICCA was originally known as WCE Clearing Corporation. In August 2007, IntercontinentalExchange, Inc. (now known as Intercontinental Exchange Holdings, Inc.) (“ICE”) acquired both ICE Futures Canada (formerly known as the Winnipeg Commodity Exchange) and ICE Clear Canada (a wholly owned subsidiary of IFCA). ICCA is ultimately owned by Intercontinental Exchange, Inc. (“ICE Inc.”). ICCA is recognized as a clearinghouse by The Manitoba Securities Commission (“MSC”) and is subject to the primary regulatory jurisdiction of the MSC.

## II. Summary of major changes since the last update of the disclosure

Major changes to ICCA’s Disclosure Framework since the initial version published on April 11, 2014 are:

- changes to intra-day margin call procedures (*System design and operations*);
- addition of gross customer margining (*Principles 4, 6 and 19*);
- changes to Guaranty Fund deposit and withdrawal procedures (*Principle 4*);
- introduction of Corporate Governance Committee (*General organization of FMI, Principles 1 and 2*);
- changes to collateral haircut risk model for Margin and Guaranty Fund Deposits (*Principle 5*);
- introduction of Corporation Priority Contribution (*Principles 4, 7, and 13*);
- introduction of Stress Loss Charge (*Principle 4*);
- requirements under National Instrument 24-102, *Clearing Agency Requirements* regarding implementation of Rules (*Principle 1*);
- changes to determination of collateral haircuts for Margin and Guaranty Fund Deposits (*Principle 5*).

Further details can be found at VI. Revision History.

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<sup>1</sup> The Committee on Payment and Settlement Systems changed its name to the Committee on Payments and Market Infrastructures on September 1, 2014.

### III. General background on the FMI

#### General description of the FMI and the markets it serves

ICCA provides clearing services for derivatives contracts by (1) reconciling and clearing futures and options on futures transactions executed on IFCA and (2) assuring the financial integrity of each transaction and resulting position. When a trade has been matched and accepted for clearing, ICCA is substituted as the counterparty to the trade, thereby guaranteeing financial performance of the contract to the Clearing Participants (“CPs”) on each side of the trade. ICCA CPs clear contracts for both their own house trading as well as customer transactions. A list of current CPs is available on the ICCA website.

ICCA maintains comprehensive by-laws, rules, operations manual, and policies and procedures designed to ensure the safety of CP capital and the certainty of financial performance to the marketplace.

ICCA provides the following key functions:

Clearing	Establish appropriate Clearing Participant requirements and support effective and efficient operations
Settlement	Ensure contractual and financial obligations to CPs are met
Custody	Safeguard CP deposits by ensuring qualification of acceptable collateral and approved depositories and counterparties

ICCA utilizes clearing applications and technology owned and operated by itself and ICE. ICCA continuously monitors its clearing systems’ reliability and notes such systems availability is consistently at a rate of +99%.

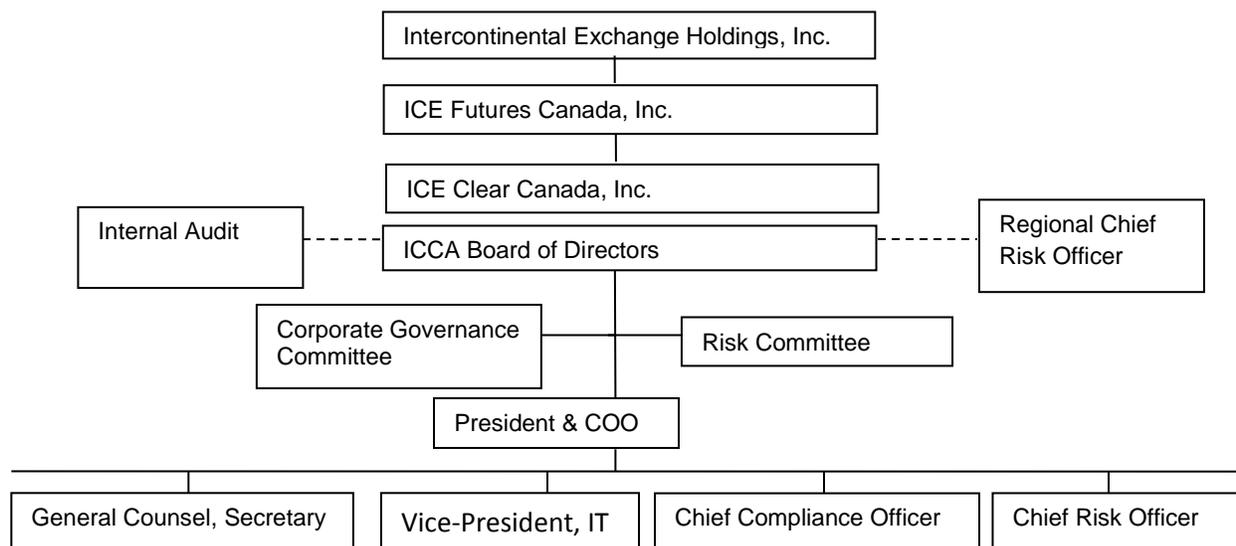
ICCA clears all futures and options on futures contracts traded on IFCA, a commodity futures exchange registered with the MSC. During the calendar year 2017, ICCA cleared over 5.5 million contracts. Additional data regarding volume by product type and ICCA open interest is available on the ICCA website.

#### General organization of the FMI

The ICCA Rules set forth the ICCA governance structure and provide for the ICCA Board and board designated committees (including the ICCA Corporate Governance Committee and ICCA Risk Committee). ICCA is a wholly-owned subsidiary of IFCA which is ultimately owned by ICE Inc. ICE Inc. is the leading global network of exchanges and clearing houses offering the broadest portfolio of services for trading, clearing and listings. ICCA’s governance structure is summarized below.

The ICCA Board of Directors is advised by the Corporate Governance Committee, the Risk Committee and ICCA management. The corporate governance and personnel organization chart is illustrated on the next page.

ICE Clear Canada, Inc.  
Corporate Governance and Personnel Organization Chart as of January 2018



### Legal and regulatory framework

ICCA is incorporated under *The Corporations Act (Manitoba)*. It is subject to the primary regulatory jurisdiction of the MSC. In addition, in Canada, it has reporting obligations to the Ontario Securities Commission, the Autorité des marchés financier du Québec, and the Alberta Securities Commission. ICCA also has certain reporting obligations to the U.S. Commodity Futures Trading Commission (CFTC).

The MSC reviews, assesses, and enforces ICCA’s adherence to the provisions of *The Commodity Futures Act (Manitoba)* (“CFA”) and the rules and regulations promulgated thereto, on an ongoing basis. ICCA is subject to ongoing examination and inspection by the MSC with regard to MSC Orders Nos. 5719 and 6878, which, in part, state that “*ICE Clear Canada shall operate in compliance with the Principles for Financial Market Infrastructures issued jointly by the Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO) as the same may be amended, or any successor standards, principles and guidance for central counterparties and financial market infrastructures adopted jointly by CPSS and the IOSCO Technical Committee, in the manner determined by the Commission*”. The MSC also reviews, assesses and enforces ICCA’s adherence to the provisions of National Instrument 24-102, *Clearing Agency Requirements* and the Companion Policy to National Instrument 24-102.

The MSC is mandated to enforce the CFA. It monitors ICCA’s operations and receives from ICCA reports relating to, among other things, volume and open interest, quarterly financial information, default events, and determinations to transfer/liquidate positions. The MSC conducts periodic on-site examinations of ICCA.

### System design and operations

ICCA’s risk management program recognizes five types of risk: Systemic Risk, Collateral Risk, Market Risk, Operational Risk and Settlement Risk. ICCA’s risk management program and

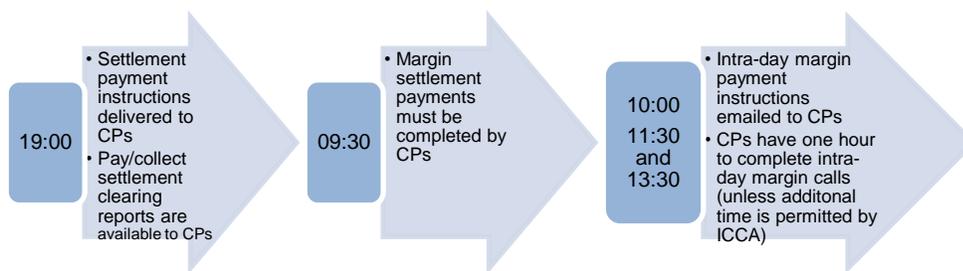
governance structure ensures that ICCA mitigates and has appropriate controls for each type of risk.

The ICCA clearing systems encompass a number of integrated systems, most importantly the Post Trade Management System (“PTMS”) and the Extensible Clearing System (“ECS”). PTMS provides real time trade processing services enabling CPs to offer real time risk management services. Within PTMS, if trades are marked for give-ups they go into the Allocation and Claim Transaction System (“ACT”) where CPs can initiate allocations and monitor the status. Give-up transactions are recorded in the clearing system and reflected on the CP records and fed into the DINO system (proprietary data base system) for billing.

ECS supports open position and delivery position management, real-time trade and post trade accounting, risk management (daily and intraday cash, mark-to-market/option premium, and original margin using algorithms based on the ICE Risk Model), collateral management, daily settlement and banking. ECS is a state-of-the-art system offering open, Internet-based connectivity and integration options for CP access to user and account management, position reporting and collateral management.

ICCA offers real-time trade confirmation of trades booked for clearing over standard FIXML formatted messages and supports a multitude of post trade management functions including trade corrections, trade adjustment, position transfers, average pricing and give-up processing. ICCA takes a proactive approach to enhancing the reliability, capacity and performance of its clearing systems.

The ICCA risk management systems calculate real-time original margin and variation margin requirements of intra-day trade activity. Daily, ICCA operations follow a consistent sequence of events illustrated as follows (all times are Central Time):



Margin payments are due no later than 9:30 AM CT the following day, regardless of the time zone in which a CP is located. CPs receive e-mail notification of intra-day margin payment amounts at approximately 10:00 AM, 11:30 AM and 1:30 PM CT if payment is due, and have one hour to complete intra-day margin calls unless additional time is permitted by ICCA. By 5:30 PM CT, all trades have been accepted for clearing for the day and reports are issued by approximately 7:00 PM CT. By 7:00 PM CT, settlement instructions are emailed to CPs and clearing reports indicating the pay/collect settlement amounts are available to CPs.

*Principle 1: Legal Basis*

*An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.*

**Summary narrative**

ICCA has a well-founded, transparent, and enforceable legal basis for each aspect of its activities in all relevant jurisdictions.

ICCA is a Manitoba corporation in good standing. ICCA is governed by its Articles of Incorporation and ICCA By-laws and Rules (construed in accordance with Manitoba law). ICCA is subject to the laws of Manitoba and the federal laws of the Government of Canada, as applicable. ICCA conducts business solely in Canada and only permits Canadian corporations to obtain CP status. ICCA is recognized as a third country CCP by the European Securities Markets Authority in accordance with European Markets Infrastructure Regulation. On an ongoing basis, ICCA assesses and assures its compliance with all relevant regulations.

Each ICCA CP is required to enter into a Clearing Participant Agreement whereby it agrees to observe, comply with and be bound by all ICCA Rules as amended from time to time. The ICCA Rules address the material aspects of ICCA's activities and include: acceptance of trades, trade offsets, margin requirements, default, netting, guaranty fund, portability, physical settlement, and segregation.

The ICCA By-laws and Rules are publicly available on the ICCA website. As a MSC-recognized clearinghouse, ICCA files all changes to the Rules with the MSC for approval. Prior to filing with its primary regulator, all Rule changes must be approved by the ICCA Board. The ICCA Corporate Governance Committee (as described in Principle 2) will provide recommendations to the ICCA Board on matters pertaining to governance, conflicts of interest, and related matters. The ICCA Risk Committee (as also described in Principle 2), if a risk related matter, will provide recommendations to the ICCA Board. This governance process allows multiple stakeholders to provide input and feedback regarding ICCA Rule amendments.

Section 2.2 (2) of National Instrument 24-102, *Clearing Agency Requirements* requires that any material change to ICCA's Rules and Operations Manual are filed with the MSC at least 45 days prior to implementation.

In accordance with the applicable regulation, ICCA posts changes to the ICCA Rules on the ICCA website. In addition, ICCA provides further guidance to CPs, when necessary, through notices or advisories, also posted to the ICCA website.

*Principle 2: Governance*

*An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.*

**Summary narrative**

ICCA has governance arrangements that are clear and transparent, promote its safety and efficiency and support the stability of the broader financial system, other relevant public interest considerations and the objectives of relevant stakeholders.

The ICCA governance structure is set forth in the Rules and provides that the Board has control and management of the affairs and business of ICCA and has all the powers and duties set forth in *The Corporations Act* of the Province of Manitoba. Ultimate responsibility for the operations of ICCA rests with the Board. The Board formulates or approves policy and oversees and directs the overall management of ICCA's business by its officers/management team. The Board may from time to time delegate authority to the ICCA officers/management team or to others to act on behalf of ICCA.

The Board of Directors consists of seven persons: three Independent Board members (Independent members are individuals who are not associated with a Participant of ICCA); three ICE Inc. executives unrelated to ICCA (Non-Independent board members); and the President of ICCA, on an ex officio basis, so as to constitute a Board of no fewer than five and no more than eight Directors. ICCA Directors are elected by ICCA's shareholder, IFCA. In addition, IFCA and ICCA employ the ICE Inc. vetting process for all new Directors. To identify new directors, ICCA utilizes the ICE Inc. Nominating Committee to ensure that all of the Board members nominated have the requisite skill and incentives to fulfill the role. There is an annual review and self-assessment process completed by the Board members which is ultimately provided to the Audit Committee of the ICE Inc.

The Board establishes and annually reviews the charter of the Corporate Governance Committee. The Corporate Governance Committee is appointed by the Board and is comprised of three independent board members, and the President of ICCA on an ex officio basis. The Corporate Governance Committee is directed to:

- review the Board of Directors Governance Principles document at least annually and make recommendations to the Board on any amendments the Committee deems necessary and advisable.
- review the By-laws, Rules, policies and any other relevant documentation pertaining to Conflict of Interest provisions and make such recommendations to the Board as the Committee deems necessary and advisable.
- on at least an annual basis, review and recommend to the Board any amendments to ICCA's corporate governance materials, including, if relevant, those documenting the direct lines of responsibilities and accountabilities of management and the board, as the Committee deems necessary and advisable.

- on an annual basis, review the proposed budget of ICCA with a view to ensuring that it provides sufficient resources to allow ICCA to meet its legal and regulatory obligations and requirements. If the Committee is of the view that the budget requires amendments, it shall request a meeting of the Board in accordance with the relevant provisions in the By-law.
- review and monitor the ICCA's financial performance and make such recommendations to the Board as the Committee deems necessary and advisable.
- on an annual basis, reflect on and discuss factors impacting on ICCA including market and economic factors, industry issues, regulatory and legal developments and similar, with a view to providing the Board with relevant insights and recommendations, where the Committee deems same to be advisable.
- annually review and evaluate the performance of the Committee and propose recommendations to the Board, including any revisions to its Charter.
- perform any other activities consistent with its Charter as are necessary or appropriate, or as the Board shall further delegate to the Committee.

The Board has established the Risk Committee. The Risk Committee is comprised of five individuals, currently including an independent board member, the President of ICCA on an ex officio basis, and representatives from three CPs. The Risk Committee is appointed by the Board. The Risk Committee advises and makes recommendations to the Board with respect to risk management measures designed to protect the integrity, safety and efficiency of ICCA. Members of the Board and the Risk Committee are required to follow established procedures for identifying, addressing, and managing conflicts of interest involving such members.

The Board appoints the ICCA officers and prescribes the authority and duties to be performed by each officer pursuant to the ICCA By-laws. The Board is responsible for appointing officers that have the appropriate experience, skills, and integrity necessary to discharge ICCA operational and risk management responsibilities. In addition, the Board is charged with ensuring that risk management and internal control personnel have sufficient independence, authority, resources, and access to the Board so that the operations of ICCA are consistent with the Operational Risk Framework ("ORF") established by the Board.

The President of ICCA reports to the Board and ICCA officers/management team are accountable to the President. The Internal Audit function is independent from the activities of the business. Internal Audit is an ICE function that has authority to review all areas of the ICE group. The Internal Audit Department provides ICCA with an independent source of assurance on compliance controls, including risk management. Internal Audit reports to the Audit Committee of ICE Inc. with "dotted line" reporting to the ICCA Board. The President supervises the business and affairs of ICCA, subject to the direction of the Board, and is responsible for implementing the decisions of the Board. No less than annually, the Board approves various policies, procedures and frameworks, including an ORF, to provide for the comprehensive management of all material risks to which ICCA is, or may be exposed. Pursuant to

	<p>such policies, procedures and operational risk framework, the President is responsible for crisis management, implementing default rules and procedures, and system safeguard rules and procedures.</p> <p>ICCA Rules concerning governance, along with a list of current ICCA Directors, Risk Committee members and Officers/management team are available on the ICCA website.</p> <p>Non-confidential major decisions of the Board are clearly disclosed in a timely manner to CPs, other relevant stakeholders, the MSC, and to other regulators ICCA has reporting requirements. Typically such disclosure occurs via the posting of notices or advisories on ICCA's website. Rule amendments are publicly disclosed and available on ICCA's website, as well as notifications by email.</p>
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*Principle 3: Framework for the comprehensive management of risks*

*An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.*

**Summary narrative**

ICCA has a sound risk management framework for comprehensively managing legal, credit, liquidity, operational and other risks.

ICCA 's risk management program includes risk management policies, procedures and systems that enable ICCA to identify, measure, monitor and manage the risks faced by ICCA including legal, credit, liquidity, operational, collateral, custody and settlement risk. The ICCA Risk Committee regularly reviews and recommends Board approval of the risk management framework including CP requirements, margin parameter settings and sensitivity analysis, default management procedures, analysis of Guaranty Fund requirements, collateral management, settlement bank risk reviews, liquidity analysis and stress scenarios.

Legal risk is managed by ICCA through monitoring for amendments and interpretative changes to applicable regulations as well as consistent monitoring for ongoing compliance with existing regulations.

Credit risk management is addressed in detail under Principle 4.

Liquidity risk is measured, monitored and managed by ICCA in accordance with its liquidity risk program as discussed under Principle 7.

Operational risk is addressed by ICCA through setting thresholds and tolerance levels, breaches of which are tracked and reported, as applicable, to the Board and regulators. Operational risk management includes monitoring of ICCA's service providers and planning for business continuity under various scenarios. Operational risk is addressed under Principle 17.

Collateral risk management focuses on the value, quality and liquidity of assets and is discussed in detail under Principle 5.

Investment risk is addressed via compliance with applicable regulations which limit investment instruments to those with high credit quality, high liquidity and low price volatility. Custody and investment risks are covered under Principle 16.

Settlement risk is mitigated through payment deadlines and clearly detailed settlement policies and procedures. Additionally, ICCA monitors the financial stability of its Settlement Banks.

ICCA provides incentives to CPs to monitor and manage the risks they pose to ICCA. The incentives include:

- Rules that require CPs to continuously meet CP status criteria, and ICCA's ability to remove a CP from their clearing participant status should the CP fail to meet the required criteria.

- The ability of ICCA to impose risk mitigation measures such as higher margin and Guaranty Fund requirements upon those CPs who bring greater risk to the clearinghouse.

In addition, ICCA Rules give ICCA powers to discipline and take corrective action against CPs who fail to comply with the ICCA Rules including the Clearing Participant Agreement.

The ICCA default management plan provides for the ongoing provision of clearing services during recovery. Additional information is available under Principle 13 and Principle 15.

*Principle 4: Credit Risk*

*An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes.*

*An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence.*

*In addition, a CCP that is involved in activities with a more complex risk profile or that is systemically important in multiple jurisdictions should 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 two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.*

*All other CCPs should 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 in extreme but plausible market conditions.*

**Summary narrative**

ICCA effectively measures, monitors and manages its credit exposures to CPs and those arising from its payment, clearing and settlement process. ICCA maintains sufficient resources to cover its credit exposure to each CP fully with a high degree of confidence. In addition, ICCA maintains financial resources sufficient to cover a wide range of potential stress scenarios, including the default of one CP that would cause the largest aggregate credit exposure to ICCA in extreme but plausible market conditions.

ICCA maintains a Corporation Priority Contribution of \$1,000,000 Cdn which will take effect in the default waterfall after the funds provided by the defaulting CP(s) but before any of the contributions to the Guaranty Fund of the non-defaulting CP(s).

To mitigate credit risk, ICCA actively monitors its credit exposure to CPs and conducts due diligence on the financial health of ICCA's settlement banks. ICCA's risk management techniques are comprehensive and specifically designed to prevent the accumulation of losses, ensure sufficient resources are available to cover future obligations and promptly detect financial and operational weaknesses.

In its operation as a clearinghouse, ICCA acts as a CCP and rigorously controls the risks it assumes. The ICCA approach to risk management includes detailed requirements (i) in order to become and remain a CP (discussed in detail under Principle 18) and (ii) regarding the calculation and collection of margin requirements designed to cover current and future exposures to each CP with a high degree of confidence( discussed in detail under Principle 6). In addition, as discussed below, ICCA maintains additional financial resources to cover a range of potential stress scenarios.

ICCA requires all CPs to participate in funding the Guaranty Fund ("GF"). The GF mutualizes losses under extreme but plausible market scenarios. The ICCA GF is

designed to provide adequate funds to cover losses associated with the default of the one CP that would cause the largest aggregate credit exposure to ICCA in extreme but plausible market conditions.

ICCA calculates the adequacy of the GF daily using pre-determined parameters and assumptions for different stress scenarios. When a CP's uncollateralized exposure resulting from stress testing exceeds 95% of the prevailing level of the GF (a threshold breach) the CP must deposit additional margin, called Stress Loss Charge (SLC) to cover the difference between the threshold and the uncollateralized exposure calculated from stress testing.

In addition, the ICCA risk management staff provide reports to the Risk Committee and the Board on a quarterly basis, and more frequently when needed. If the Risk Committee determines that changes to the size of GF are necessary, then such changes are recommended to and considered by the Board.

The minimum contribution to the GF by a CP is \$250,000. The Base Guaranty Fund amount is re-allocated to CPs at least once per month, on the first Trading Day of each month.

The Base Guaranty Fund is divided and allocated among Clearing Participants based on the ratio of each Clearing Participant's average position risk in all products to the average of the sum of the total position risk in all products of all Clearing Participants during the last 20 Trading Days prior to the re-calculation date.

The sum of the net Original Margin requirements ("Net OM") calculated on a Clearing Participant's Customer positions plus the Net OM calculated on the Clearing Participant's House positions is used as that Clearing Participant's position risk. Customer accounts are gross margined according to the GCM specification, and Net OM is re-calculated separately each day using the net positions from all customer position accounts and the ICE Risk Model arrays published by ICCA.

Following a GF re-allocation, CPs required to make additional deposits to the Guaranty Fund must make such deposits before 8:30 a.m. (CT) on the Fourth Trading Day following receipt of notice of the Guaranty Fund Re-Allocation. CPs with excess GF funds on deposit are permitted to withdraw deposits that are and will continue to be "excess", following each re-calculation and re-allocation of the Guaranty Fund.

ICCA rules require CPs to replenish contributions to the GF that have been used. The amount required to be replenished (the losses or Aggregate GF Deficit) is allocated pro rata.

*Principle 5: Collateral*

*An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.*

**Summary narrative**

ICCA requires collateral with low credit, liquidity, and market risks to manage its CPs' credit exposure.

ICCA CPs are required to post margin and contribute to the GF to collateralize their individual credit exposure to ICCA. ICCA accepts cash (CAD) and Government of Canada treasury bills and bonds to cover margin and GF requirements. ICCA accepts letters of credit to cover a portion of margin requirements, to a maximum of the lesser of CAD 10 million or 50% of the CP's margin requirements. ICCA Rules require each CP's GF contributions to be a minimum of 50% cash, and a CP may not deposit letters of credit obtained from an Affiliated Company.

When a margin deficiency is determined during end of day processing or as a result of an intra-day margin call, the CP must deposit cash to cover the deficiency. A CP may then substitute another form of acceptable margin deposit for cash margin deposits used to satisfy these requirements. ICCA utilizes the ECS system to provide for the ongoing monitoring and management of collateral.

Government of Canada treasury bills and bonds are marked to market daily and are subject to haircuts as determined by ICCA in the Collateral Haircut Policy. Valuations of collateral held at ICCA include appropriate haircuts designed to account for potential decline in asset liquidation value during stressed market conditions. Haircuts are reviewed monthly but may be updated more frequently if necessary due to significant market condition changes. In setting and monitoring haircut levels, ICCA considers two primary risk measures which are; 5-day 99% Expected Shortfall and 2-day 99.9% Value-at-Risk both derived by analyzing time series that start on March 1<sup>st</sup>, 2005 and extend to the current date. The more conservative risk estimate is chosen to compute the collateral haircut. The specific haircut percentages are published on ICCA's website.

*Principle 6: Margin*

*A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.*

**Summary narrative**

ICCA covers its credit exposures to its CPs for all products through an effective margin system that is risk-based and regularly reviewed.

ICCA holds original margin in respect of all open positions. The original margin requirement is sized to cover potential losses should it become necessary to liquidate a CP's portfolio of positions. CP original margin requirements are re-calculated following the close of business each business day, separately for each CP house and customer account, using the ICE Risk Model.

Original margin is calculated using the historical price volatility of the contract being margined. It is collected to ensure CPs can meet their variation margin obligations for the next day, should the market move significantly against the positions the CPs are carrying. ICCA calculates original margin requirements using a system that determines the largest theoretical loss a CP could incur in two days based on historical market prices and volatility.

ICCA uses a variety of analytical tools and procedures to establish and validate the margin requirement. The targeted minimum confidence interval covers 99% single-tailed confidence level of two-day price moves during the latest 60 to 500 Trading Days. ICCA adjusts the margin requirement for each contract as market volatility changes. If a CP's original margin requirement increases and ICCA is not holding sufficient excess cash or collateral from the CP to cover the increase, ICCA will call that CP for additional original margin to meet the deficiency. This calculation is made daily on the basis of each CP's end-of-day positions.

ICCA collects gross margins for customer segregated positions from its CPs. As such, CPs are required to submit customer positions by account to ICCA on a daily basis. The positions reported by the CP are reconciled against the total customer segregated positions in clearing. Those positions that cannot be reconciled will comprise a balancing account which is margined on an outright gross basis.

ICCA receives real time price feeds as well as daily end-of-day settlement prices from the Trading System. IFCA has well established rules regarding the determination of settlement prices.

ICCA has the authority and operational ability to make intra-day margin calls to CPs on both a scheduled and unscheduled basis. Variation margin (end-of-day pay/collect) covers the previous day's open positions and the new positions resulting from the current day's trading activity of the CP. Variation margin for futures contracts are paid to and collected from CPs once each day. The intra-day margin calculation uses a prevailing market price where the end-of-day calculation uses the daily settlement price for each futures contract. In addition to the scheduled intra-day margin calculation, ICCA may initiate additional intra-day margin calls, for example, in times of great volatility. Intra-day margin payments constitute advance payments

against the end-of-day variation calculation. Calls for intra-day margin payments by CPs are required to be satisfied within one (1) hour of request by ICCA (unless additional time is permitted by ICCA). CPs must pay the end-of-day variation margin (pay/collect) by the morning of the following business day.

ICCA conducts backtesting on a daily basis to review the adequacy of margin requirements. ICCA's backtesting consists of verifying that the number of actual losses that exceed original margin coverage on a per product and CP basis is consistent with the number of projected losses on a per product and CP basis. The total number of exceptions, if any, is evaluated and the model is considered well calibrated if the number of exceptions is consistent and meets an established single-tailed confidence level of at least 99%. If the model consistently demonstrates exceptions, ICCA reviews the models and recommends revisions to the ICCA Risk Committee.

*Principle 7: Liquidity risk*

*An FMI should effectively measure, monitor, and manage its liquidity risk.*

*An FMI should maintain 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 in extreme but plausible market conditions.*

**Summary narrative**

ICCA measures, monitors, and manages its liquidity requirements and resources through its liquidity management program. The program is designed to ensure that ICCA has sufficient liquid resources to meet all of its payment obligations with a high degree of confidence.

ICCA's liquidity management program includes stress testing of liquidity requirements to meet intra-day, same-day, and multi-day settlement obligations under extreme but plausible market conditions. Such stress scenarios include, without limitation, the default of a CP that would generate the largest aggregate liquidity obligation for ICCA. ICCA monitors its liquidity resources to ensure they are sufficient to cover the liquidity requirements identified under the stress test scenarios in ICCA's Liquidity Policy. ICCA compares its qualifying liquidity resources to its daily liquidity requirement determinations and will take immediate action in the event such qualifying resources are less than the liquidity requirements. At any given time, liquidity resources include:

- Cash, Government of Canada securities, and letters of credit deposited for margin by the defaulting Clearing Participant;
- Cash (CAD) and Government of Canada securities in the ICCA Guaranty Fund (GF), which includes GF deposits of the defaulting CP and non-defaulting CPs. (ICCA rules require that CPs deposit a minimum of 50% of their GF requirement in CAD cash);
- ICCA contributions to the default waterfall that are held in cash (CAD) and Government of Canada securities.

ICCA performs stress testing daily. On a monthly basis (and more frequently when markets become volatile or less liquid), ICCA evaluates the scenarios used to determine the liquidity requirements. It looks at the variation margin payments and options premium settlement payments under various conditions to determine the appropriate metric for setting the liquidity requirements. Each scenario is designed to consider relevant peak historical price volatilities and a range of forward looking stress scenarios under extreme but plausible market conditions.

The results of daily stress tests are compared to the available liquid resources and reported to management daily. Stress test results are reported to the Risk Committee at each regularly scheduled meeting (quarterly, and more frequently if needed). ICCA monitors funding flows through the ECS, ICCA's collateral management system. The primary features of ECS include: real time update of positions; overnight mark-to-market valuation; and separate review and approval of collateral change requests initiated by CPs.

*Principle 8: Settlement finality*

*An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.*

**Summary narrative**

ICCA provides clear and certain final settlement upon payment and receipt of funds in real time.

ICCA uses approved Settlement Banks (“SBs”) to manage daily settlements (see Principle 9). Cash settlement is relevant for the payment of original margin, variation margin, option premiums and required GF contributions. Pursuant to its legal agreements with the SBs, settlement fund transfers are irrevocable and unconditional when ICCA’s account at the SBs are debited or credited (subject to certain provisions for corrections of errors).

*Principle 9: Money settlements*

*An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.*

**Summary narrative**

ICCA conducts its money settlements through approved commercial banks. The financial institutions that ICCA uses for the clearinghouse settlement banks (SBs) are the largest banks in Canada. They are reputable organizations that employ accounting practices, safekeeping procedures and internal controls that fully protect the funds they hold.

ICCA monitors the financial status of its SBs.

ICCA's legal agreements with its SBs ensure that all settlements are final when effected. Pursuant to such legal agreements, settlement fund transfers are irrevocable and unconditional when ICCA's accounts at the SBs are debited or credited (subject to certain provisions for corrections of errors).

*Principle 10: Physical deliveries*

*An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.*

**Summary narrative**

The ICCA Rules clearly outline all parties' obligations with respect to physical deliveries. ICCA regularly identifies, monitors and manages the risks associated with such physical deliveries.

All futures contracts traded on IFCA are physically delivered. IFCA Rules address the management of risks and costs of storage and the allocation of risks between the delivery participants related to delivery of the commodities.

For physical delivery, IFCA and ICCA facilitate processing through the DINO system (proprietary database). The physical delivery process for IFCA Contracts is in two parts, 1) the "delivery" stage, and 2) the "shipment" stage.

The *delivery* stage is the responsibility of ICCA. ICCA continues to collect original margin and variation margin from both CP delivery participants until the delivery stage is complete. The short position holder ("short") tenders a delivery notice to ICCA. Upon receipt of a delivery notice, ICCA determines the oldest outstanding long position holder ("long"), and provides it with notice that it has been delivered upon and must provide the appropriate Delivery Day Value.

The long provides the Delivery Day Value to ICCA and is provided with a Delivery Certificate. ICCA provides the short with the Delivery Day Value. At this point the short has been provided with payment for the commodity. At this point ICCA extinguishes the long position and the short position to the delivery and the involvement of ICCA's Rules is completed. Original margin is returned to the CP delivery participants, and variation margin ceases to be collected.

The *shipment* stage is the responsibility of IFCA.

*Principle 12: Exchange-of-value settlement systems*

*If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.*

**Summary  
narrative**

All margin payments, option premium payments and GF contribution payments to and from ICCA do not involve two linked obligations.

*Principle 13: Participant-default rules and procedures*

*An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.*

**Summary narrative**

ICCA has effective and clearly defined Rules and procedures designed to manage a CP default. ICCA Rules and procedures are designed to ensure that ICCA can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

The ICCA Rules define the circumstances for the declaration of a CP default and/or Non-Conforming CP status. These include a CP's failure to meet payment obligations to ICCA. The ICCA Rules and procedures provide for the management of a CP default. As each financial emergency or default is unique, the ICCA Rules and procedures provide ICCA with the authority and flexibility necessary to best implement the default procedures.

In general, the ICCA default management procedures include: (i) declaring a CP in default; (ii) communicating the default; (iii) suspending the defaulting CP and (iv) conducting hedging and portfolio liquidation. In the event the defaulting CP has customer related positions, ICCA may transfer non-defaulting customer positions from the defaulting CP to a non-defaulting CP(s), to the extent permitted by law and in all cases subject to agreement from the receiving CP(s). If necessary to cover losses from a CP default, ICCA's default resources will be consumed in the following order:

1. Margin Deposits of the Defaulting Clearing Participant.

Only the Margin Deposits of the defaulting CP are utilized in a default. Margin Deposits in the defaulting CP's customer accounts will not be utilized to cover losses incurred in the defaulting CP's house accounts. In addition, on no account will the Margin Deposits of non-defaulting CPs or the customers of non-defaulting CPs be utilized to cover losses due to the default of another CP.

2. Guaranty Fund Deposits of the Defaulting CP.

3. Corporation Priority Contribution

4. The Guaranty Fund Deposits of the non-defaulting CPs.

ICCA would next apply the monies deposited to the GF, by all of the other Non-Defaulting CPs on a pro-rata basis.

In the unlikely event that ICCA's funded default resources are inadequate to resolve a CP default, ICCA Rules provide that ICCA can request that the remaining non-defaulting CPs replenish their contributions to the GF. In the event that ICCA was to recover any losses from the defaulting CP it would reimburse any contributions to the GF made by the non-defaulting CPs.

*Principle 14: Segregation and portability*

*A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.*

**Summary narrative**

ICCA maintains rules and procedures to enable segregation and portability of positions of a CP's customers and the collateral provided to ICCA with respect to those positions.

ICCA Rules and procedures provide that customer funds will be protected at the first level (i.e. direct customer of the CP) from CP default. Under current ICCA Rules, customer funds at the first level are segregated and may be transferred along with related positions by ICCA to another CP in the event of a default.

Customer funds deposited by ICCA at the SBs are held in accounts that clearly identify the funds as belonging to customers. ICCA obtains and retains a written acknowledgement from the SBs stating that the segregated funds deposited by ICCA belong to customers and are not the property of either ICCA or the CP.

The ICCA Rules permit the transfer of customer positions. Pursuant to ICCA Rules, each CP (other than a defaulting CP) that carries customer positions is required, upon request of the customer from whom such positions are carried, to transfer such customer's positions to one or more other CPs designated by the customer. Such transfer does not require the consent of the transferor CP, but is subject to: the consent of the transferee CP; satisfaction by the customer of any margin requirements imposed by the transferor CP on any positions remaining at the transferor CP; and the completion of all required transfer documentation. In addition, in case of default, ICCA may transfer non-defaulting customer positions from the defaulting CP to a non-defaulting CP(s), to the extent permitted by law and in all cases subject to agreement from the receiving CP(s).

*Principle 15: General business risk*

*An FMI should identify, monitor, and manage its general business risk and hold 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 at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.*

**Summary narrative**

ICCA identifies, monitors and manages its general business risks and holds sufficient liquid net assets, funded by equity, to cover general business losses so that it can continue operations and services as a going concern if these losses materialize. Furthermore, these liquid net assets are at all times sufficient to ensure a recovery or orderly wind-down of critical operations and services.

ICCA has robust management and control systems through governance, financial statements and internal audit to ensure that ICCA identifies and is aware of general business risk.

ICCA has determined that its liquid operating resources are sufficient to support its operations during any recovery or wind-down process. Specifically, ICCA believes an orderly wind-down of its business would take no longer than six months and ICCA maintains financial resources to cover at least six months of operating costs. ICCA believes financial resources equal to six months of operating costs will be more than sufficient during wind-down, given the likely reduction in personnel expenses, marketing costs and volume-based expenditures.

In the event of a CP default, ICCA will follow its default management procedures.

*Principle 16: Custody and investment risks*

*An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.*

**Summary narrative**

ICCA safeguards its own and its CPs' assets to minimize the risk of loss on and delay in access to these assets. ICCA's investments are in instruments with minimal credit, market and liquidity risks.

ICCA safeguards its own and its CPs' assets through the use of: a) approved Settlement Banks (SBs); and b) an approved securities settlement system that employ accounting practices, safekeeping procedures and internal controls that protect the deposits and pledged assets, respectively. The financial institutions that ICCA uses for settlement and custody are Schedule I banks (as defined by the *Bank Act (Canada)* and the CDS Clearing and Depository Services Inc. ICCA monitors the status of these entities.

CP collateral posted with ICCA (i.e. cash and Canadian Government securities) has minimal credit, market and liquidity risks. ICCA uses mark-to-market valuations and haircuts to minimize the risk of loss or delay in access to these assets. Further details regarding collateral can be found at Principle 5. ICCA does not invest the cash it receives from CPs.

*Principle 17: Operational risk*

*An FMI should 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. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfillment of the FMI's obligations, including in the event of a wide-scale or major disruption.*

**Summary narrative**

ICCA identifies plausible sources of operational risk, both internal and external, and mitigates their impact through the use of appropriate systems, policies, procedures and controls. ICCA's systems are designed to ensure a high degree of security and operational reliability and have adequate, scalable capacity. ICCA's business continuity management aims for the timely recovery of operations and the fulfillment of ICCA's obligations, including in the event of a wide-scale or major disruption.

ICCA's Operational Risk Framework ("ORF") addresses the risk that deficiencies in information systems or internal processes, human errors, management failures or disruptions from external events will result in the reduction, deterioration, or breakdown of services provided by ICCA. On at least an annual basis, the ICCA Board reviews and approves an ORF for ICCA that includes operational performance standard setting and monitoring, and risk identification, assessment, and mitigation.

ICCA performs comprehensive operational performance standard setting and monitoring. The purpose of operational performance standard setting and monitoring is to establish clearly defined operational reliability objectives that serve as benchmarks to evaluate efficiency and effectiveness, promote confidence among participants and evaluate performance against expectations. ICCA reports breaches to the ICCA Risk Committee and Board on a quarterly basis and will report significant breaches to the MSC as required pursuant to MSC Order Nos. 5719 and 6878. Regular monitoring is performed to determine whether systems meet established objectives and service-level targets. Performance standards are reviewed on at least an annual basis and are established by a working group of management.

ICCA has a risk-scenario based assessment methodology, which reviews comprehensive clearing processes and risk scenarios related to each major clearing process (e.g., new trade intake, position management, treasury functions, risk and pricing, etc.) Each scenario is assigned a risk rating and associated controls to prevent the scenario from occurring. Typical safeguards include programs to ensure adequate expertise, training and supervision of personnel, as well as processes to regularly review internal control procedures. Processes also address the availability, connectivity and capacity of computer systems, communications systems, power sources and data feeds.

At the conclusion of the risk assessment process, recommendations to increase control effectiveness are made where residual risk could be further reduced. Control improvements are documented and prioritized by ICCA management.

ICCA utilizes ICE's robust information security program including policies and

procedures to ensure employee compliance. ICE's information security program includes: physical and environmental security; authorization, authentication and access control management; internet controls, e-mail and data policy management, record retention management; and accountability, compliance and auditability.

ICE reviews, scans and tests the information security systems regularly. In addition, the quality assurance team tests all ICE systems (Including ICCA systems) to ensure reliability and adequate scalable capacity.

ICCA has a comprehensive business continuity plan (BCP), which includes a disaster recovery program, that supports the continued performance of critical functions in the event ICCA's headquarters or primary data center are unavailable due to significant business interruption. The BCP program serves to: (i) ensure continuity and recovery of critical functions through its secondary/disaster recovery facility; (ii) minimize the disruption to clients and business partners; (iii) protect the firm's books and records; (iv) reduce the number and frequency of ad hoc decisions following a significant business interruption; (v) educate employees about contingency plans and roles and responsibilities in executing the plans; and (vi) comply with regulatory requirements.

ICCA's detailed BCP has four objectives: (i) preserve the health and safety of staff; (ii) avoid confusion and reduce exposure to error during an interruption by providing an organized and consolidated approach to managing response, recovery and resumption activities; (iii) reduce the impact resulting from short-term business interruptions by providing appropriate responses for rapid recovery from unplanned incidents; and (iv) resume essential operations within two hours. ICCA conducts BCP and disaster recovery testing and incorporates CPs.

ICCA's BCP strategy includes remote work, cross-training personnel between geographically diverse locations, and alternate work locations in selected cities which is sufficient to enable ICCA to recover its operations and resume daily processing, clearing, and settlement no later than two hours following a disruption (including in the event of a wide-scale or major disruption).

ICCA conducts regular, periodic testing of its BCP and such testing is subject to audit. ICCA participates in the industry wide disaster recovery testing conducted in coordination with the Futures Industry Association.

*Principle 18: Access and participation requirements*

*An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.*

**Summary narrative**

ICCA maintains objective, risk-based and publicly disclosed criteria for participation, which permits fair and open access.

The Participant requirements of ICCA are publicly disclosed in the ICCA Rules and are designed to permit fair and open access, while protecting ICCA and its CPs. The Participant requirements are the same for all applicants in a given category and include fitness criteria, financial standards, operational standards and appropriate registration qualifications with applicable statutory regulatory authorities. ICCA applies a due diligence process to ensure that all applicants meet the required criteria and conducts on-going monitoring of CPs.

ICCA maintains its Clearing Participant Application Instructions and Forms on its website. Any organization applying for Clearing Participant status with ICCA must satisfy the requirements in the application and summarized below both initially and on an on-going basis.

Participant requirements include:

- Canadian incorporation
- minimum capital requirements
- completion of a Standard ICCA Clearing Participant Application/Agreement
- appropriate regulatory standing and registrations
- appropriate technical and operational systems and controls
- banking and collateral arrangements
- contributions to the GF
- where applicable, have a parent guarantee.

CPs in the category of Futures Commission Merchant (FCM) are required to be registered with the Investment Industry Regulatory Organization of Canada (IIROC). CIPF/IIROC is responsible for reviewing the required financial filings of each FCM Clearing Participant. The minimum financial standards set for Canadian FCMs by IIROC is to have and maintain at all times Risk Adjusted Capital of zero based on a formula set out in Form 1 (per IIROC Rule 17.1).

CPs in the category of General must have a financial position of at least \$2,000,000 of adjusted net capital and a net worth that exceeds the total capacity of all its elevators registered with IFCA multiplied by \$50.00 (in tonnes).

All CPs must also be Direct Access Trading Participant firms of IFCA. Additionally, CPs must institute risk management controls, and in the case of FCMs, must demonstrate the operational capability to handle customer business. All CPs must establish banking connections with an approved SB to facilitate payments to and from ICCA.

CPs in the category of General are required to provide annual audited financial statements within ninety (90) days after the end of the CP's fiscal year, and unaudited monthly financial statements are to be filed within seventeen (17) business days after the end of each month. All financial statements are to be accompanied by the adjusted net capital calculations forms in the IFCA Annexures (Annex 7.A and 7.D). CPs in the category of FCM file such financial statements as are required by IIROC.

ICCA Rules require CPs to provide notice of significant financial, regulatory and organizational events that could impact the financial or operational capacity of a CP. Furthermore, ICCA may, at any time, review the risk management policies, procedures, and practices of its CPs. ICCA Rules publicly set forth CP obligations and procedures for the suspension and orderly exit of a CP that breaches, or no longer meets, ICCA participation requirements.

*Principle 19: Tiered participation arrangements*

*An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.*

**Summary  
narrative**

ICCA does not currently have tiered participation arrangements.

ICCA has legally binding agreements with its CPs, however, ICCA has no legal agreements with CPs' underlying customers. While ICCA does not have a legal relationship with the underlying customers of a CP, ICCA is required to collect and maintain certain underlying customer information sufficient to enable ICCA to conduct risk management and to provide for customer gross margining as detailed under Principle 6.

*Principle 20: FMI links*

*An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.*

**Summary  
narrative**

ICCA has not established links with other CCPs.

*Principle 21: Efficiency and effectiveness*

*An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.*

**Summary narrative**

ICCA is efficient and effective in meeting the requirements of its CPs and the markets it serves.

ICCA's objective is to provide secure, capital-efficient counterparty risk management and post-trade services for IFCA markets.

The ICCA clearing systems encompass a number of integrated systems, most importantly the Post Trade Management System ("PTMS") and the Extensible Clearing System ("ECS"). PTMS provides real time trade processing services enabling CPs to offer real time risk management services. Within PTMS, if trades are marked for give-ups they go into the Allocation and Claim Transaction System ("ACT") where CPs can initiate allocations and monitor the status. Give-up transactions are recorded in the clearing system and reflected on the CP records and fed into the DINO system (proprietary data base system) for billing.

ECS supports open position and delivery position management, real-time trade and post trade accounting, risk management (daily and intraday cash, mark-to-market/option premium, and original margin using algorithms based on the IICE Risk Model), collateral management, daily settlement and banking. ECS is a state-of-the-art system offering open, Internet-based connectivity and integration options for CP access to user and account management, position reporting and collateral management.

ICCA offers real-time trade confirmation of trades booked for clearing over standard FIXML formatted messages and supports a multitude of post trade management functions including trade corrections, trade adjustment, position transfers, average pricing and give-up processing. ICCA takes a proactive approach to enhancing the reliability, capacity and performance of its clearing systems.

ICCA has defined goals and objectives, which are measured by the following metrics:

**Performance Category**

**Operational Activity**

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• End and Start of Day</li><br/><li>• Financial Risk Stability</li></ul> | <ul style="list-style-type: none"><li>ICE Risk Model Production</li><li>Clearing System return to availability</li><li>ECS Clearing System Close</li><li>ECS Report Production</li><li>Pay/Collect Message Generation</li><br/><li>Guaranty Fund Maintenance</li><li>Margin Fund Maintenance Accuracy</li><li>Margin Fund Balance</li><li>Intraday Margin Amount</li><li>ICE Risk Model Parameters</li></ul> |
|--|--|

	<ul style="list-style-type: none"><li>• Financial Integrity</li></ul> <p>Collateral Management Collateral Accuracy</p> <p>ICCA management meets to review the above metrics on a monthly basis and communicates the results to the ICCA Board as required.</p>
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*Principle 22: Communication procedures and standards*

*An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.*

**Summary narrative**

ICCA uses relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement and recording.

ICCA uses the widely accepted and internationally utilized Society for Worldwide Interbank Financial Telecommunication (SWIFT) through RBC Express, and/or CIBC CMO, utilizing Canada's Large Value Transfer System, for messaging of payment transactions.

ICCA utilizes FIXML real-time feeds to communicate trade information. FIXML is an internationally recognized, industry standard messaging protocol used by vendors to automate clearing transaction processing.

*Principle 23: Disclosure of rules, key procedures, and market data*

*An FMI should have clear and comprehensive rules and procedures and should provide 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. All relevant rules and key procedures should be publicly disclosed.*

**Summary narrative**

ICCA has clear and comprehensive Rules and procedures that provide sufficient information to enable CPs to have an accurate understanding of the risks, fees and other material costs they incur at ICCA. All Rules and procedures are available to CPs. The ICCA Rules and other pertinent information are publicly available on the ICCA website.

The ICCA Rules clearly and comprehensively detail CP rights, obligations and risks and document the operation of ICCA in general as well as under non-routine, though foreseeable, events (e.g. CP default). In addition, ICCA provides CPs with policies and procedures that provide further detail regarding ICCA's design and operations. As discussed under Principle 1, ICCA has a robust governance process for any changes to the ICCA Rules, inclusive of consultation with multiple stakeholders, public disclosure of all changes. ICCA assures CP understanding of all its Rules and procedures and offers support through its full-service client services and support team that is available at all times. ICCA offers support and training to address any lack of understanding of the ICCA Rules or procedures by a CP.

ICCA's clearing fees are publicly available on the ICCA website and CPs are notified of any changes to such fees.

ICCA most recently amended this Disclosure Framework on the date noted on the cover page. This Disclosure Framework will continue to be updated following all material changes at ICCA and annually. Publicly disclosed information is available on the ICCA website – specific links follow in Section V. All publicly available information is provided in English.

## V. List of publicly available resources

Relevant information pertaining to ICCA can be found at [https://www.theice.com/clear\\_canada.html](https://www.theice.com/clear_canada.html). Links to documents referenced within this Disclosure Framework are below.

ICCA Rules

<https://www.theice.com/clear-canada/regulation#rulebook>

ICCA Clearing Participants

<https://www.theice.com/marketdata/reports/icefuturescanada/ReportContent.shtml?clearParticipantListReport=>

ICCA Clearing Notices

<https://www.theice.com/clear-canada/notices>

ICCA IFCA Data Volume Open Interest (Report Center)

[https://www.theice.com/futures\\_canada.html](https://www.theice.com/futures_canada.html)

ICCA IFCA Fees

[https://www.theice.com/publicdocs/futures\\_canada/Futures\\_Canada\\_Fees.pdf](https://www.theice.com/publicdocs/futures_canada/Futures_Canada_Fees.pdf)

ICCA Cleared Products

<https://www.theice.com/products/All-Product-Codes>

ICCA Permitted Collateral and Haircuts

[https://www.theice.com/publicdocs/clear\\_canada/ICCA\\_Permitted\\_Collateral.pdf](https://www.theice.com/publicdocs/clear_canada/ICCA_Permitted_Collateral.pdf)

ICCA Clearing Participant Application/Information Packet

[https://www.theice.com/publicdocs/clear\\_canada/ICE\\_Clear\\_Canada\\_Clearing\\_Participant\\_Application.pdf](https://www.theice.com/publicdocs/clear_canada/ICE_Clear_Canada_Clearing_Participant_Application.pdf)

ICCA Financial Resources

<https://www.theice.com/clear-canada/regulation#financial-resources>

Joint Statement by Bank of Canada, the Alberta Securities Commission, the Autorité des marchés financiers, the British Columbia Securities Commission, the Manitoba Securities Commission and the Ontario Securities Commission - re QCCPs

<http://www.bankofcanada.ca/2014/07/qualifying-central-counterparties/>

## VI. Revision History

Date	Description of Changes Made	Section
April 11, 2014 (Version 1.1)	Initial version	
July 18, 2014 (Version 1.2)	<ul style="list-style-type: none"> <li>• Added “ORF”</li> <li>• Added summary of changes</li> <li>• Removed 8:30 a.m. Intra-day Margin Call</li> <li>• Added details on gross customer margining</li> <li>• Changed deadline for additional deposits to Guaranty Fund to 8:30 a.m. on the 4<sup>th</sup> Trading Day following receipt of notice of the GF Re-Allocation</li> <li>• Changed withdrawal procedures re GF</li> <li>• Haircuts reviewed quarterly</li> <li>• Updated gross customer margining details</li> <li>• Updated re provision of customer gross margining</li> <li>• Corporate Name Changes</li> </ul>	Abbreviations II. System and design operations Principle 4  Principle 4   Principle 4  Principle 5 Principle 6   Principle 19  Executive Summary; General Organization of FMI; Principles 2, 7 & 17.
November 18, 2014 (Version 1.3)	<ul style="list-style-type: none"> <li>• Name change of Committee on Payment and Settlement Systems</li> <li>• Added link to ICCA Financial Resources webpage</li> <li>• Added weblink to Joint Statement re QCCPs</li> </ul>	Executive Summary V.  V.
January 6, 2015 (Version 1.4)	<ul style="list-style-type: none"> <li>• Added LEI number</li> <li>• Contracts cleared in calendar year 2014</li> </ul>	Introduction III.
February 25, 2015 (Version 1.5)	<ul style="list-style-type: none"> <li>• Added Corporate Governance Committee</li> </ul>	General Organization of FMI; Principles 1 and 2.
May 29, 2015 (Version 1.6)	<ul style="list-style-type: none"> <li>• Change to collateral haircut risk model for Margin and Guaranty Fund Deposits</li> </ul>	Principle 5
August 19, 2015 (Version 1.7)	<ul style="list-style-type: none"> <li>• Addition of Government of Canada Securities as liquidity resources; and removal of Credit Agreement with ICE.</li> </ul>	Principle 7
February 1, 2016 (Version 1.8)	<ul style="list-style-type: none"> <li>• Introduction of Corporation Priority Contribution</li> <li>• Introduction of Stress Loss Charge</li> </ul>	Principles 4, 7 and 13 Principle 4
April 19, 2016 (Version 1.9)	<ul style="list-style-type: none"> <li>• ICCA recognized as third country CCP by ESMA</li> <li>•</li> </ul>	Principle 1

November 15, 2016	<ul style="list-style-type: none"> <li>Adherence to National Instrument 24-102 (<i>Clearing Agency Requirements</i>)</li> <li>Introduction of Collateral Haircut Policy and change in models for setting haircuts</li> <li>Added link to ICCA Permitted Collateral and Haircuts webpage</li> <li>Added Regional Chief Risk Officer to Organization Chart</li> </ul>	<p>III. Legal and Regulatory Framework and Principle 1 Principle 5</p> <p>V. III.</p>
March 21, 2017 (Version 1.10)	<ul style="list-style-type: none"> <li>Updated volume cleared for calendar year 2016</li> </ul>	III.
October 3, 2017 (Version 1.11)	<ul style="list-style-type: none"> <li>Added information on risk model</li> </ul>	III. Principles 4, 6, 21
October 26, 2017 (Version 1.12)	<ul style="list-style-type: none"> <li>Removal of reference to barley, milling wheat and durum wheat contracts</li> </ul>	III.
January 23, 2018 (Version 1.13)	<ul style="list-style-type: none"> <li>Updated volume cleared for calendar year 2017</li> <li>Updated Corporate Governance Committee charter and composition of Risk Committee</li> <li>Revised margin sample period</li> <li>Second Settlement Bank</li> </ul>	<p>III.</p> <p>Principle 2</p> <p>Principle 6 Principles 8, 9,14,16 and 22</p>
April 25, 2018	<ul style="list-style-type: none"> <li>Administrative amendments re ICE Risk Model</li> </ul>	III, Principle 6 and Principle 21