

Principles for Financial Market Infrastructures (PFMI) Disclosure Framework

December 2023



*The information within has been compiled by ASX management.
Please note that the RBA and ASIC separately assess ASX
Group's CS licensees' compliance with the PFMI and ESS.*

ASX Limited ABN 98 008 624 691

ASX Group – Financial Market Infrastructures (FMIs)

| | |
|---|--|
| ASX Clearing Houses | ASX Clear Pty Limited (ASX Clear) ASX Clear (Futures) Pty Limited (ASX Clear (Futures)) |
| ASX Securities Settlement Facility | ASX Settlement Pty Limited (ASX Settlement) |
| ASX Fixed Income Depository | Austraclear Limited (Austraclear) |

Australian Regulatory Authorities

| | |
|--|---|
| Australian Securities and Investments Commission (ASIC) | <ul style="list-style-type: none"> regulator of securities and derivatives markets focus on market integrity |
| Reserve Bank of Australia (RBA) | <ul style="list-style-type: none"> Australia’s central bank focus on financial and systemic stability determine the Financial Stability Standards (FSS) |
| Australian Prudential Regulation Authority (APRA) | <ul style="list-style-type: none"> the prudential regulator of the Australian financial services industry focus on safety and soundness of financial institutions |

This document is best viewed online as there are number of active hyperlinks throughout. Please note, if printing is required you will need to refer back to this digital version to obtain the web addresses.

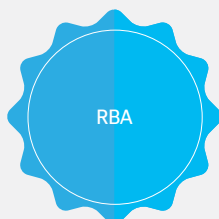
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KEY FACTS ABOUT ASX'S FINANCIAL MARKET INFRASTRUCTURES

Domestic Standards

- ASX Clear
- ASX Clear (Futures)
- ASX Settlement
- Austraclear



Financial Stability Standards compliance

International Standards

- ASX Clear
- ASX Clear (Futures)
- ASX Settlement
- Austraclear



PFMI compliance

- ASX Clear
- ASX Clear (Futures)



Recognition April 2015

QCCP

- ASX Clear
- ASX Clear (Futures)



Qualifying CCP (QCCP) Status confirmed



- ASX Clear (Futures)



Recognition December 2017



Designation August 2020



Exemption from Derivatives Clearing Organisation (DCO) registration August 2015

PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURES (PFMI) DISCLOSURE FRAMEWORK

I. EXECUTIVE SUMMARY: OUR BUSINESS & CUSTOMERS

The ASX Group (ASX), which includes ASX Limited and its related entities, provides critical market infrastructure to Australia and New Zealand's financial markets. As an integrated exchange, ASX provides a full suite of services, including listings, trading, clearing, settlement, technical and information services, and other post-trade services. It operates markets for a wide range of asset classes including equities, fixed income, commodities and energy.

ASX is home to some of the world's leading resources, finance and technology companies. As the first major financial market to open each day, ASX is a world leader in raising capital, a top 10 global securities exchange by market capitalisation, and the largest interest rate derivatives market in Asia.

ASX operates in a world-class regulatory environment. Companies, corporates and issuers of capital from Australia and around the world engage with ASX to manage risk and to raise capital to grow. The certainty of our clearing and settlement activities underpins the systemic stability of the Australian economy.

ASX also provides benchmarks, data and technology services to intermediaries, banks, information vendors and software developers to help them make informed decisions, offer services to their clients and connect with one another.

ASX's business is conducted through a number of regulated legal entities. ASX holds market operator licences and clearing and settlement licences to undertake its activities in Australia. ASX is subject to oversight by ASIC and the RBA.

Confidence in the operations of the companies within ASX is reinforced by the whole-of-market regulation undertaken by ASIC across all trading venues and clearing and settlement facilities, as well as the financial system stability oversight by the RBA of ASX's Clearing and Settlement (CS) facilities. ASIC also supervises ASX Limited's own compliance with the ASX Listing Rules as a listed company.

The ASX Clearing and Settlement subsidiary boards provide oversight of risk management processes, internal controls and compliance systems in respect of the management of clearing and settlement risks (including clearing counterparty credit risk, treasury investment risk and liquidity risk of ASX Clear and ASX Clear (Futures), and the settlement risks within ASX Settlement and Austraclear). Further details regarding ASX's corporate governance arrangements are set out in Section III under "General Organisation of the FMIs (Governance)".

ASX's risk division is responsible for ensuring ASX identifies, analyses and effectively manages the entire range of risks

inherent in all the group's activities while having direct responsibility to specifically manage clearing related risks.

Clearing risk management activities for ASX's central counterparty services (CCP) are designed to ensure the integrity of the marketplace is maintained through the continued operation of the clearing houses irrespective of events such as the insolvency of a clearing participant whilst minimising impact on other clearing participants and their clients. These activities are primarily focused on credit risk (the likelihood of a clearing participant becoming insolvent) and market risk (the exposure of the clearing house to a clearing participant were it to become insolvent), and include minimum participant capital requirements, participant admission criteria, margins and position monitoring, and stress testing of the capital and liquidity of the clearing houses.

ASX's securities settlement facilities (SSF) assist ASX participants to more effectively mitigate their settlement and operational risk. ASX's two settlement facilities provide a 'delivery versus payment' (DvP) settlement service, secure asset holding services, and a wide network that enables 'straight through processing'. Both of ASX's SSFs play a central role in their respective markets, helping to increase reliability and reduce systemic risk.

ASX utilises the *3 Lines of Defence* risk management strategy across the enterprise. Further details are set out in Section III "General Organisation of the FMIs (Governance)".

II. SUMMARY OF MAJOR CHANGES SINCE DECEMBER 2021

Regulatory change

In June 2021, the Australian Government released the report of the Council of Financial Regulator's (CFR's) review into FMI Regulatory Reforms and [announced](#) a regulatory reform package to ensure financial regulators have sufficient powers to intervene and manage a crisis. The CFR's Report builds on a number of consultations with the industry and feedback received through the consultation process. The Government's reform package will allow the RBA powers to manage a failure at a domestic clearing and settlement facility and will enhance ASIC's supervisory and licensing powers in respect of FMIs. On 15 December 2023 the Government released for consultation draft legislation to implement the reform package covering these matters.

In September 2023, the Treasury Laws Amendment (2023 Measures No. 3) Act 2023 was introduced which includes reforms to support competition in clearing and settlement. The Act will provide ASIC with powers to implement and enforce CS services rules. The rules are intended to achieve competitive-like outcomes (where the provider is a monopoly

provider) and ensure safe and effective competition in clearing and/or settlement should a competitor emerge. The Act will also provide the Australian Competition and Consumer Commission (ACCC) with the power to conduct binding arbitrations to resolve disputes regarding access to CS services.

Strategic change

Equities Clearing & Settlement System (CHESS) replacement

In mid-November 2022, ASX decided to reassess all aspects of the CHESS replacement project following completion of an external review and its own internal assessment. Since the decision to pause the project, ASX has been assessing different solution archetypes and options to replace CHESS. The decision, along with indicative timelines was published on 20 November 2023. Details can be found in the [ASX Media Centre](#).

In February 2023, ASX established a new industry forum, the CHESS Replacement Technical Committee, as a key channel for ASX to communicate and seek input from impacted stakeholders on topics such as project scope, implementation approach and testing. The Technical Committee is provided with key updates on project status, risks and issues. Refer to the [CHESS replacement website](#) for further details.

In September 2023, ASX established the Cash Equities Clearing and Settlement Advisory Group (Advisory Group). The Advisory Group is a stakeholder forum for input to the Boards of ASX Clear and ASX Settlement on strategic matters related to cash equities clearing and settlement services and associated infrastructure, including the replacement of CHESS. The Advisory Group is independently chaired by Mr Alan Cameron AO.

In a letter on 29 August 2023, ASIC and the RBA set out the regulatory expectations for the Advisory Group, including that ASX Clear and ASX Settlement will not make any final decisions on key strategic clearing and settlement issues (including CHESS replacement) until the Advisory Group has had a reasonable opportunity to consider these issues. Further information is available on the Advisory Group website pages.

In October 2023, ASX published the CHESS Governance Statement on its website. The statement provides a guide to the governance framework that applies to CHESS. It is intended to help stakeholders understand the roles and responsibilities of the different ASX governance forums relevant to CHESS, including the delivery of the CHESS replacement project and the CHESS Roadmap.

Delivery Excellence

In August 2021, a response action plan to the IBM Independent Review of the ASX Trade Refresh Project Report, was prepared and presented to the ASX Limited Board Audit and Risk Committee (ARC). A project, IBM Recommendations (IBMR), was approved and initiated to address all 59 recommendations identified by IBM. The uplift to ASX's project execution capability delivered through this work is seen across the following:

- Ensuring diverse thinking, avoidance of group think and challenge through strengthening line 2 risk capabilities, engaging external experts and strengthening line 1 control functions

- Increasing resourcing in Enterprise Risk, Delivery and Testing and Quality Assurance
- Upgrading policies, standards and frameworks in Enterprise Risk, Delivery and Testing and Quality Assurance
- Educating staff across the organisation on standards, practices and their own accountabilities
- Strengthening the monitoring of individual projects and the portfolio for compliance with ASX's policies, standards and frameworks
- Improving ASX's testing capability and capacity through education, strengthened policies, metrics and tooling
- Improving ASX's project reporting and quality through increased use of metrics and enhanced dashboards

The IBMR project was concluded in June 2023 and in August 2023 ASX received the final EY report confirming all the recommendations had been closed. In September 2023 ASX received notification from ASIC confirming that pursuant to condition 8(1) of the additional licence conditions, conditions 2 to 5 and 6(1) have ceased to have effect upon the provision of the relevant attestation.

III. GENERAL BACKGROUND ON THE FMIS

General description of the FMIs and the markets they serve

ASX's clearing and settlement infrastructure provides critical risk management services to financial market participants and investors. ASX's post trade operations are backed by significant Australian based capital and collateral, and are overseen by ASX's regulators.

Clearing

ASX provides CCP clearing services to the cash and derivatives markets. It does this through the operation of two licensed subsidiaries, ASX Clear and ASX Clear (Futures). As CCPs, the clearing subsidiaries become the central counterparty to every trade and assume the credit risk of each ASX clearing participant. In effect, they become the seller to every buyer and the buyer to every seller. This occurs through a contractual process known as novation, in accordance with the operating rules of each CCP.

ASX Clear – Legal Entity Identifier (LEI):
549300JQL1BXTGCCGP11

ASX Clear operates a clearing facility and provides CCP services for financial products traded on the ASX market, including equities, listed/quoted investment products, warrants, interest rate securities and equity related derivatives (comprising Over the Counter (OTC) and exchange traded options) and for equities, listed/quoted investment products and warrants traded via an Approved Market Operator (AMO).

ASX Clear is authorised to clear transactions for certain customers located in a number of jurisdictions, including the EU and United States.

ASX Clear uses the Derivatives Clearing System (DCS) to register and clear equity related derivative products and the Clearing House Electronic Subregister System (CHES) to register and clear cash equities, investment products, interest rate securities and warrants.

ASX Clear participants and stakeholders can refer to the ASX Clear section on the ASX website to obtain information regarding ASX Clear.

[ASX Clear \(Futures\) – Legal Entity Identifier \(LEI\): 549300ZD7BBOVZVHK49](#)

ASX Clear (Futures) operates a clearing facility and provides CCP services for derivative products traded on the ASX 24 market and for OTC interest rate derivative products affirmed on an approved affirmation platform.

ASX Clear (Futures) is authorised to clear transactions for certain customers located in a number of jurisdictions, including the EU, Switzerland, New Zealand and the United States.

ASX Clear (Futures) uses Nasdaq’s Genium INET to register and clear futures and options and Calypso for OTC interest rate derivative products.

ASX Clear (Futures) participants and stakeholders can refer to the ASX Clear (Futures) [section](#) on the ASX website to obtain information regarding ASX Clear (Futures).

Settlement

ASX assists participants to effectively minimise their settlement and operational risk via ASX Settlement for cash equities and Austraclear for debt securities and cash transactions. These two settlement facilities provide a DvP settlement service, secure asset holding services as well as a wide network that enables ‘straight through processing’.

[ASX Settlement](#)

ASX Settlement operates the SSFs for cash equities, interest rate securities and warrants traded on the ASX market, and for cash equities traded via an AMO.

ASX’s settlement services provided by ASX Settlement help reduce counterparty and systemic risk, and provide transaction efficiency and certainty for end investors. Settlement occurs on a DvP basis and involves the exchange of cash for delivery of securities.

Cash market settlement is conducted through CHES. The model for cash market settlement used by ASX (known as DvP model 3) maximises efficiency through the netting of settlement obligations in each individual security and the netting of all payment obligations while minimising the risk of settlement failure. The settlement cycle for the cash market is the trade date plus two business days (T+2) from trade.

ASX Settlement participants and stakeholders can refer to the ASX Settlement [section](#) on the ASX website to obtain information regarding ASX Settlement, CHES and its services.

[Austraclear](#)

Austraclear provides a wide range of depository, registration, cash transfer and settlement services for debt instrument

securities in financial markets in Australia and the Asia-Pacific region. The settlement model used by ASX (known as a DvP model 1) for debt securities settles transactions on a trade by trade basis which provides for certainty of settlement.

Austraclear acts as a central securities depository (CSD) for fixed income securities such as asset backed securities, Australian government bonds and semi-government bonds. Settlement on these securities occurs through real-time gross settlement (RTGS).

Austraclear provides registry services including security registration, the holding of relevant documentation and the subsequent cash transfers associated with the terms of the individual securities.

Austraclear uses EXIGO as the technical platform that supports the settlement facility and CSD operational environment.

Austraclear participants and stakeholders can refer to the Austraclear [section](#) on the ASX website to obtain further information.

Code of Practice

The ASX Cash Equities Clearing and Settlement [Code of Practice](#) sets out ASX’s commitments to its customers and other stakeholders in managing cash equities clearing and settlement infrastructure and services for the Australian market. The Code of Practice is aligned with the ‘Regulatory Expectations released by the Council of Financial Regulators.

The Regulatory Expectations provide a framework for ASX’s conduct in operating its cash equities clearing and settlement services while it remains the sole provider of these services. They relate to key governance, pricing and access matters.

ASX’s core commitments under the Code of Practice include providing transparent and non-discriminatory pricing of and access to its cash equities clearing and settlement services, protecting the confidential information of users of these services, and maintaining at least 50% of non-executive directors on the ASX Clear and ASX Settlement Boards who are not also directors of ASX Limited.

Under the Code, ASX also commits to consulting with users of its post-trade services for the purpose of providing input to Management and the Boards of ASX Clear and ASX Settlement on the ongoing operation and development of cash equities clearing and settlement infrastructure and services.

ASX commissions an annual independent audit of its governance, pricing and access arrangements benchmarked against the Regulatory Expectations, and releases the results of the audit on its website.

General Organisation of the FMI’s (Governance)

The ASX Board Charter (published on the [ASX website](#)) sets out its composition, operating procedures and the allocation of responsibilities between the ASX Limited Board, the Clearing and Settlement Boards (CS Boards), Board Committees and management. In performing its responsibilities, the ASX Board has regard to the ASX’s licence obligations and public policy objectives directed at financial market and payment systems integrity. It also has regard to the interests of ASX’s shareholders, customers, employees and regulators.

The CS Boards Charter (also published on the [ASX website](#)) sets out the composition, operating procedures and responsibilities of the CS Boards. The key responsibilities of the CS Boards include to:

- set the operational risk tolerances for the CS facility licensees. In doing so, the CS Boards have regard to the legitimate business interests of ASX Limited as a provider of capital to the central counterparties
- review and approve the risk management framework and oversee the adequacy of internal controls, systems and processes for the management of clearing and settlement risks of the CS facility licensees
- oversee management systems and processes for the purpose of:
 - ongoing compliance with the FSS determined by the RBA and consistency with the international PFMI standards
 - ongoing compliance with the CS facility licensees' statutory and licence obligations
- managing the CS Subsidiaries within the ASX risk appetite and the operational risk tolerances set by the CS Boards.

The CS licensees have intragroup support arrangements in place to provide ongoing resourcing including with respect to compliance and enforcement and conflicts handling arrangements and resourcing.

The CS Boards have delegated the management of the CS Subsidiaries to the Managing Director and Chief Executive Officer (CEO) of ASX, except for those matters reserved by

the CS Boards or delegated by the CS Boards to ASX Board Committees. The Group Executive, Securities and Payments, and the Group Executive, Markets, are identified as the 'CS Lead Executives' responsible for the operation of the CS facilities. The CEO is responsible for allocating sufficient resources to operate the CS facility licensees.

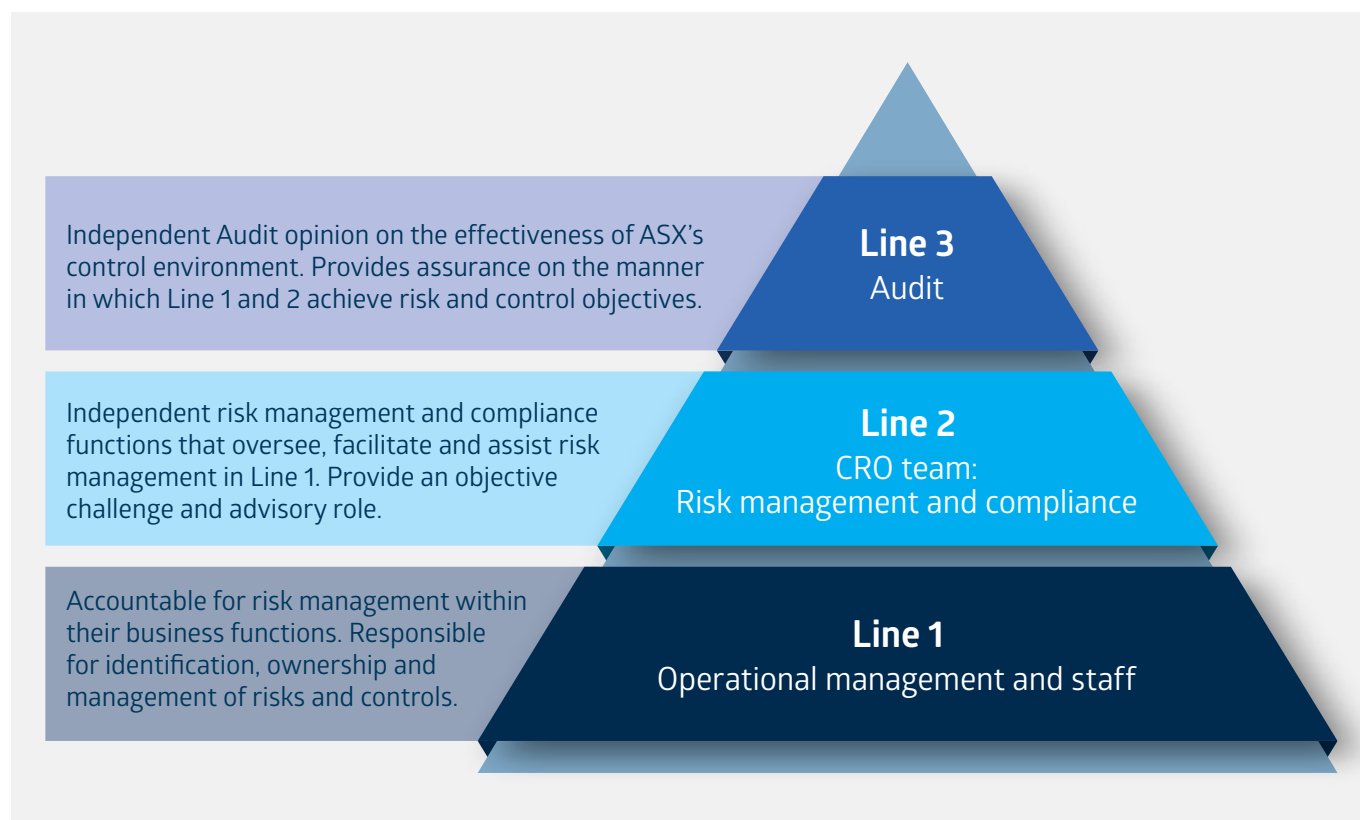
In October 2023, ASX published on the ASX website, the CHESSE Governance Statement. The CHESSE Governance Statement provides a guide to the governance framework that applies to CHESSE.

Further details about the governance arrangements of the ASX are available on the [ASX website](#), including ASX's constitution, ASX's Corporate Governance Statement, Board and Committee Charters and certain ASX Policies.

3 Lines of Defence

ASX's risk management strategy is founded on the 3 Lines of Defence model, which provides a clear organisational structure and clarifies responsibilities for managing risks and controls across the business. Having clear responsibilities also provides the Boards and executive management with appropriate assurance that risks are identified and managed, that the control environment is operating effectively and that ASX is able to meet its business objectives.

The first line is risk management within the business functions; the second line is the independent risk management and compliance functions that develop risk and compliance frameworks and policy and oversee risk management in the first line; and the third line is independent assurance (i.e. internal audit), as depicted below.



Enterprise Risk (Line 2)

Enterprise Risk is an independent function responsible for establishing and maintaining a formal framework, and appropriate training and advice aimed at improving risk management and the effectiveness of ASX's control environment, to enable effective risk-based decisions. Enterprise Risk acts in a Line 2 assurance and advisory role, working with management to effectively deal with uncertainty and related risk and opportunity, and to ensure the business has appropriately identified, measured, and managed risk within its risk appetite. This includes:

- providing a robust fit-for-purpose Enterprise Risk Management (ERM) Framework (including periodic benchmarking against industry standards) along with associated policies, i.e. establishing and developing corporate risk principles, frameworks and systems
- maintaining an integrated approach to enterprise risk, while working with other assurance functions
- oversight and review of company-wide risk profiles for senior management and Boards
- providing training and fostering awareness across the company of risks applicable to ASX
- promoting enterprise risk requirements and best practice risk management and risk culture across ASX
- undertaking continuous improvement in the effectiveness and efficiency of the enterprise risk program

Enterprise Compliance (Line 2)

Enterprise Compliance is an independent Line 2 assurance and advisory function designed to assist Line 1 functions in enhancing how ASX meets its compliance obligations. Enterprise Compliance assists management and the Boards by bringing a systematic and disciplined approach to identifying and embedding compliance obligations and evaluating and improving the effectiveness of ASX's governance, compliance risk management and internal control processes. While providing ASX with a robust fit-for-purpose compliance framework, Enterprise Compliance also maintain effective relationships with domestic and international regulatory agencies.

The General Manager, Enterprise Compliance reports to the CRO and for conflict sensitive matters, to the non-ASX CS directors, and:

- may be required by the CS Boards to attend any CS Board meetings; and
- has a direct reporting line to the Chair of the ARC of the ASX Board.

Clearing risk function (Line 2)

The Clearing risk function reports to the CRO and has responsibility for:

- Developing and maintaining the clearing risk policy framework;
- Assessing the credit risk from clearing participants, setting credit limits for them and monitoring their compliance with ASX CCP capital requirements;

- Developing, maintaining and enhancing the ASX CCP models and methodologies for pricing, margining, collateral haircuts, credit and liquidity stress testing;
- Ongoing review of effectiveness of margin levels and parameters and periodic re-calibration of margin parameters;
- Oversight and management of risk exposures to clearing participants;
- Reporting of ASX CCP risk exposures;
- Development and maintenance of the default management framework including periodic default management fire-drills; and
- Management and monitoring of model risk in relation to clearing risk models and tools.

Internal Audit (Line 3)

Internal Audit is an independent assurance (third line) function established by ASX management. The principal objective of Internal Audit is to provide independent, objective assurance and consulting services designed to add value and improve the operations of ASX. Internal Audit helps ASX accomplish its objective by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management and internal control and governance processes.

The CS Boards are responsible for oversight of risk management (including internal controls and Internal Audit matters) relevant to the licensed clearing and settlement facilities and the ARC is responsible for oversight of ASX enterprise wide risk. The ARC reviews and concurs on the appointment, replacement, dismissal and remuneration of the General Manager, Internal Audit.

The ARC reviews the performance, objectivity, independence and effectiveness of the Internal Audit function, and also reviews and approves the overall annual risk based internal audit plan. The annual plan for the audits that relate to clearing and settlement are also reviewed by the CS Boards.

The General Manager, Internal Audit reports to the Chairman of the ARC and, for administrative purposes, to the Chief Financial Officer (CFO). The General Manager, Internal Audit also has a direct line of reporting access to the CS Boards. Internal Audit personnel report to the General Manager, Internal Audit and have no line responsibility or authority over any of the activities or operations that they audit. The [Internal Audit Charter](#) provides a documented escalation process for audit reporting.

Internal Audit work is performed regularly throughout the financial year. All audit work is performed with reference to an Internal Audit Methodology that requires the auditor to obtain and document the underlying processes, risks and controls. The function, including the Internal Audit Methodology, is quality reviewed by an external party every five years. A determination to defer an external review must be recorded and approved by the ARC.

External Audit

The ARC consider and review the scope of work, reports and activities of the external auditor including interaction with Internal Audit. The ARC also review the findings of the audit with the external auditor.

PricewaterhouseCoopers (PwC) is the appointed external auditor of ASX Limited and all subsidiaries. ASX Clear Operating Rule 1.22.1 requires an independent auditor to conduct an annual review of the clearing system(s) the CCP uses. ASX Clear uses DCS to register and clear equity related derivative products and CHESS to register and clear cash equities, interest rates securities and warrants. The PwC audits of [DCS](#) and [CHESS](#) are available on the ASX website.

Austraclear Regulation 18.3 requires the auditor to issue an annual report to Austraclear based on the auditor's latest audit of Austraclear's information technology control environment procedures in relation to the system. PwC's annual audit of [Austraclear](#) is available on the ASX website.

Legal and regulatory framework

Overview and key regulators

ASX operates in a highly regulated environment overseen by two independent government agencies, the RBA and ASIC. These government regulators have extensive powers to enforce the laws and regulations that govern financial markets in Australia. The RBA and ASIC are members of the Committee on Payments and Market Infrastructures (CPMI) and the International Organisation of Securities Commissions (IOSCO) respectively, and are responsible for implementing the CPMI-IOSCO Principles for Financial Market Infrastructures in Australia.

The relevant Government Minister (the Minister) has primary responsibility for licensing CS facilities operating in Australia and for granting exemptions from the requirement to hold a CS facility licence. The Minister (or their delegate) has the power to disallow amendments to the operating rules of the CS facilities, which must be submitted by the CS facilities for review as soon as practicable after being made. ASIC is the principal regulatory authority advising the Minister in relation to the exercise of their functions and powers. ASIC assesses each CS facility licensee on its compliance with its licence obligations under the Corporations Act. The RBA determines the [Financial Stability Standards](#) that apply to the CCPs and SSFs, assesses CS facility licensees on their compliance with them and advises the Minister in relation to certain matters. The Department of Treasury advises the Minister on clearing and settlement policy.

The FSS are determined by the RBA under the Corporations Act. A CS facility licensee that operates a CCP or SSF must comply with the applicable FSS. As of the date of this document, the FSS are aligned with the CPMI-IOSCO Principles for FMI.

The RBA has responsibility for assessing whether licensed clearing and settlement facilities, including those operated by ASX, have complied with the RBA's FSS and done all other things necessary to reduce systemic risk.

ASIC is responsible for the supervision of real-time trading on Australia's domestic markets, including those operated by the ASX. ASIC is also responsible for enforcing the laws against misconduct on Australia's financial markets, as well as supervising Australian Financial Services Licence (AFSL) holders.

[The Council of Financial Regulators](#) is the coordinating body for Australia's main financial regulatory agencies. Its members are the RBA (Chair), the Australian Prudential Regulation Authority (APRA), ASIC and Treasury. It aims to facilitate cooperation and collaboration between RBA, APRA, ASIC and Treasury.

The ACCC will have the power to conduct binding arbitration to resolve disputes regarding access to clearing and settlement services.

Regulatory Assessments

ASX is subject to assessments of certain ASX group licensees by both ASIC and the RBA.

ASIC

The scope of ASIC assessments can include any or all of the obligations of a market operator or CS facility licensee under s792A(c) and 821A(c) of the Corporations Act 2001 (Cth) to have adequate arrangements for operating a market or facility. The assessments may also include ensuring that there are adequate arrangements for handling conflicts of interest and monitoring and enforcing operating rules, as well as having sufficient financial, technological and human resources to properly operate the facilities. At the conclusion of each assessment, ASIC releases a Market Assessment Report.

Since 2013, ASIC has adopted a thematic approach to assessing licensees. The most recent assessment relevant to ASX's CS facilities was the Review of ASX's technology governance and operational risk management standards, released in September 2018. The report made a number of recommendations designed to improve ASX's technological and operational risk management arrangements, which were implemented by ASX.

RBA

The RBA conducts compliance assessments against the FSS on an annual basis for the ASX CCPs and every two years for the ASX SSFs. The RBA publishes its findings after having reported to the Minister with portfolio responsibility for Corporations Law.

In their most [recent assessment](#) of ASX's CS facilities against the FSS, the RBA observed that all four CS facilities either observed or broadly observed many of the FSS during FY23, with the exception of the Standards relating to Governance (CCP/SSF Standard 2), the Framework for the Comprehensive Management of Risks (CCP/SSF Standard 3), and the Operational Risk Standard (CCP Standard 16, SSF Standard 14), which were rated as 'partly observed' for each CS facility.

PFMI – Joint assessment

ASIC and the RBA share joint responsibility for assessing how well ASX's CS facilities observe the requirements of the PFMI, though ASIC holds sole responsibility for certain PFMI that have not been incorporated into the FSS.

As part of their commitment to periodically carry out assessments of licensed domestic CS facilities against the PFMI, the RBA and ASIC released the findings of their first (and only, thus far) joint assessment of ASX's CS facilities in September 2014.

The assessment deemed all four ASX licensed CS facilities to be systemically important to the Australian financial system and concluded that ASX's CS facilities either observe or broadly observe all relevant PFMI. Please refer to [the joint assessment of ASX's CS facilities against the PFMI](#) for further details.

The Corporations Act

The Corporations Act 2001 (Cth) (the Act) is the principal Australian legislation for the regulation of post trade infrastructure (CS facilities). In Part 7.3 the Act provides a licensing framework for domestic as well as overseas CS facilities that seek to operate in Australia.

Within ASX:

- ASX Clear and ASX Clear (Futures) are separately licensed to operate CCPs;
- ASX Settlement and Austraclear are separately licensed to operate SSFs.

The terms of these CS facility licences are publicly available.

Under the Act, a CS facility licensee must (among other things):

- to the extent that it is reasonably practicable to do so:
 - comply with the FSS and do all other things necessary to reduce systemic risk; and
 - do all things necessary to ensure that the facility's services are provided in a fair and effective way;
- comply with the conditions on the licence;
- have adequate arrangements (whether they involve a self regulatory structure or the appointment of an independent person or related entity) for supervising the facility, including arrangements for:
 - handling conflicts between the commercial interests of the licensee and the need for the licensee to ensure that the facility's services are provided in a fair and effective way; and
 - enforcing compliance with the facility's operating rules; and
- have sufficient resources (including financial, technological and human resources) to operate the facility properly and for the required supervisory arrangements to be provided.

Payment Systems and Netting Act

The Payment Systems and Netting Act 1998 (PSNA) provides certain protections under Australian law, from reversal or invalidation under the laws of any jurisdiction, for the transfer of property, rights and obligations, the termination, netting and settlement of obligations and enforcement of security effected in accordance with the operating rules of ASX's CS facilities, where a participant in the CS facility goes into external administration, as follows:

- Part 2 protects RTGS effected through an approved RTGS system (each of Austraclear and the CHES (operated by ASX Settlement) has this approval, although CHES does not routinely offer RTGS functionality);
- Part 3 protects net settlements effected through an approved netting arrangement (each of Austraclear Limited

and ASX Settlement has this approval, although Austraclear does not routinely offer net settlement functionality); and

- Part 5 protects the transfer of property, rights and obligations, the termination, valuation and netting of obligations, and enforcement of security, by a CCP that operates an approved "netting market" (each of ASX Clear and ASX Clear (Futures) has this approval). This includes protecting a CCP's novation rules which effect the transfer and termination of rights and obligations. Part 5 also protects the porting of client positions and collateral by the CCP in the event that a clearing participant defaults.

Status of the ASX CCPs as Qualifying Central Counterparties (QCCPs)

ASIC and the RBA have [confirmed publicly](#) that they apply domestic regulations that are consistent with the CPMI-IOSCO Principles for Financial Market Infrastructures to domestically licensed clearing and settlement facilities, including ASX Clear and ASX Clear (Futures). On the basis of that advice, in 2013 APRA [confirmed publicly](#) that it considered each of ASX Clear and ASX Clear (Futures) to meet the criteria for a "Qualifying CCP" (or QCCP) as defined under *Prudential Standard APS 112 Capital Adequacy: Standardised Approach to Credit Risk* (APS 112). (The QCCP eligibility criteria prescribed by APS 112 in 2013 are consistent with those applicable under the Basel III regulatory framework for banks and are now reflected in *Prudential Standard APS 180 Capital Adequacy: Counterparty Credit Risk* (APS 180)). As required by APS 180, the ASX CCPs make available the necessary data to allow Authorised Deposit-taking Institutions (ADIs) that are clearing participants to calculate their default fund capital charge where they make contributions. This means that, where an ADI satisfies all applicable conditions under APS 180, the ADI may apply concessional risk weightings for centrally cleared transactions, as prescribed by APS 180, to eligible trade exposures that are cleared through ASX Clear or ASX Clear (Futures).

Each of ASX Clear and ASX Clear (Futures) has operating rules that give its clearing participants legal certainty that obligations under novated contracts may be terminated and netted in the event of the CCP's insolvency. These rules are intended to satisfy preconditions under APS 180 (and corresponding conditions under the bank prudential rules of other jurisdictions, based on the Basel III framework) for ADIs that are clearing participants, or have subsidiaries that are clearing participants, to calculate their capital requirements based on net (instead of gross) trade exposures to the CCP. ASX has obtained and makes available to its clearing participants Australian law legal opinions that, subject to the assumptions and qualifications in the opinions, confirm that, if ASX Clear or ASX Clear (Futures) was subject to an insolvency proceeding, close-out netting of obligations under novated contracts in accordance with the operating rules would be validated under Australian law.

Foreign recognition of the ASX CCPs

The ASX CCPs, ASX Clear and ASX Clear (Futures) are recognised in a number of offshore jurisdictions in order to provide services to clearing participants and their clients domiciled in those jurisdictions:

| ASX CS Facility | Jurisdiction/ Regulator | Form of recognition / Commencement Date | Scope |
|----------------------------------|--|---|--|
| ASX Clear ASX Clear (Futures) | European Union / ESMA | Third Country CCP – April 2015 | Allows the ASX CCPs to provide clearing services to clearing participants and clients established in the European Union. |
| ASX Clear (Futures) | United States / CFTC | Exempt Derivatives Clearing Organisation – August 2015 | ASX Clear (Futures) is permitted to clear proprietary swap positions (including interest rate swaps denominated in USD/EUR/JP¥/GBP/AUD/NZD) for its U.S. clearing participants (including transactions of a parent or affiliate of a U.S. clearing participant). |
| ASX Clear (Futures) | Switzerland / FINMA | Foreign Central Counterparty – December 2017 | ASX Clear (Futures) may grant Swiss market participants supervised by FINMA direct access to its facilities as clearing participants. |
| ASX Clear (Futures) | New Zealand / RBNZ & FMA | Designated Settlement System – August 2020 | Designation provides ASX Clear (Futures) with additional protections if a clearing participant with a New Zealand branch defaults. In May 2021, new laws governing FMIs in New Zealand were passed. While ASX Clear (Futures)' current designation remains in place during a transitional period, re-designation of ASX Clear (Futures) under the new FMI framework will occur effective 1 March 2024. |
| ASX Clear ASX Clear (Futures) | United Kingdom / Bank of England | Eligible for Temporary Recognition Regime (following Brexit). | Provides the ASX CCPs with temporary recognition as non-UK CCPs in the United Kingdom to continue to provide clearing services for clearing participants and clients domiciled in the United Kingdom. |

Operating rules

Each of the ASX CS facility licensees maintains operating rules for its facility. The operating rules govern matters including participation, capital requirements (where applicable), record keeping, margining and payments, trade capture and maintenance, (daily) settlement and default management. The Act provides that the operating rules of a licensed CS facility have effect as a contract under seal:

- between the licensee and each issuer of financial products in respect of which the facility provides its services;
- between the licensee and each participant in the facility;
- between each issuer of financial products in respect of which the facility provides its services and each participant in the facility; and
- between a participant in the facility and each other participant in the facility,

under which each of those persons agrees to observe the operating rules to the extent that they apply to the person and to engage in conduct that the person is required by the operating rules to engage in.

A comprehensive set of ASX's Rules, Guidance Notes and Waivers can be found on [ASX's website](#).

The operating rules and procedures which govern the operation of each CS facility and specifically the rights and obligations of participants can be found at the following links:

- [ASX Clear](#), outlining the rights and obligations of participants at Section 4;
- [ASX Clear \(Futures\)](#), with participant obligations generally covered under the various sections of Part 2 of the Operating Rules;

- [ASX Settlement](#), outlining the rights and obligations of the FMI, Issuers and Participants at Sections 3, 5 and 6, respectively; and,
- [Austraclear](#), with the rights and obligations of participants covered under Regulations 2, 3 and 4, and the rights and obligations of the FMI outlined at Regulation 6.

Further information regarding participant arrangements and requirements are set out in Guidance Note 1 *Admission as a Participant* under the Operating Rules of the relevant facility.

Policies and procedures

ASX has implemented a number of policies and procedures to ensure it is able to achieve its commitment to conducting the company's business ethically and in a way that is open and accountable to shareholders and the marketplace. Some of these policies include:

Ethics and Integrity

ASX's Code of Conduct, Anti-Bribery and Corruption, Remuneration Adjustment, Fraud Control and Whistleblower Protection policies promote ethical and responsible decision-making by all directors and employees of the ASX. All ASX employees must complete periodic training on ASX policies promoting ethical behaviour, including fraud, workplace diversity and inclusion, conflicts handling and dealing rules.

Anti-Money Laundering

ASX entities comply with the requirements of the Anti-Money Laundering and Counter-Terrorism Financing Act 2006 (Cth) to the extent that those requirements are applicable to group activities.

Privacy

ASX Limited and its related bodies corporate are bound by the Australian Privacy Principles as set out in the Privacy Act 1988 (Cth). The ASX Privacy Statement covers how and when Personal Information is collected, stored and distributed by the ASX.

Modern Slavery

ASX is committed to ensuring that the group's supply chain and business operations do not involve modern slavery. The ASX Modern Slavery policy articulates ASX's commitment to identifying and addressing risks of modern slavery occurring in our operations or supply chain, and provides guidance to staff with respect to the identification and assessment of any modern slavery risks.

Other Policies

ASX has comprehensive policies in place to cover areas such as:

- Identity and Access Management
- Internet and Email Use
- Data Management
- Physical Security
- Workplace Surveillance
- Records Retention

These policies are reviewed regularly to ensure that they remain up to date and reflect current requirements.

System design and operations

ASX Operations Pty Limited (ASX Operations) provides service arrangements across the ASX.

ASX operates four clearing systems:

- CHES (providing clearing, settlement, depository and registry services for eligible financial products executed on the market of an approved market operator);
- Derivatives Clearing System (used for clearing derivatives traded on ASX);
- Genium INET (providing clearing processing for the derivatives traded on ASX 24); and
- Calypso (providing clearing processes for OTC interest rate derivative products).

ASX employs two main settlement technologies:

- Exigo (providing settlement, depository and registry services for the Australian OTC debt market, and facilitating the settlement of the Australian dollar leg of foreign exchange transactions); and,
- CHES (providing clearing, settlement, depository and registry services for eligible financial products executed on the market of an approved market operator).

Further information can be found online and in the [Overview of CHES brochure](#).

Key statistics

Most key CS systems operate to a 99.80% minimum availability target, while Exigo operates to a 99.90% minimum availability target. Capacity utilisation is continually monitored to maintain capacity headroom of 50% above peak utilisation.

Please refer to the [ASX Group Monthly Activity Reports](#) for periodic summaries of the CS infrastructure's performance.

Technology Plans & Communication

ASX's business is highly reliant on the information technology platforms utilised to support its various activities. ASX's objective is to provide stable, reliable and innovative technology solutions that meet the regulatory standards, provide efficient connectivity for clients, and are quick to adapt to new and changing business requirements.

ASX has appropriate processes in place to release information technology system management plans to stakeholders (including issuers, investors, market participants, vendors, other market licensees and regulatory authorities). The plans clearly identify mandatory versus optional changes and allow sufficient time for stakeholders to adapt to the changes.

ASX publishes plans for technology releases, as appropriate.

As part of its commitment to stakeholders, ASX takes into account the commercial, technological, supervisory and regulatory impact of the proposed changes to the systems and controls on those stakeholders. ASX also assesses stakeholder readiness to deal with the impact of the changes.

Industry Represented Forums

ASX has established a number of industry-represented forums which provide a platform for discussion of matters pertaining to industry interest and are aimed at facilitating service innovation and improving efficiency in ASX's markets and clearing and settlement facilities.

In addition to the CHES Replacement Technical Committee and Cash Equities Clearing and Settlement Advisory Group referred to in the Equities Clearing & Settlement System (CHES) replacement section of this document, specific examples of industry discussions include:

Business Committee

ASX has established the ASX Business Committee under the ASX Cash Equities Clearing and Settlement Code of Practice. The Business Committee has an important role in providing stakeholder input to ASX management and the Boards of ASX Clear and ASX Settlement in relation to the ongoing operation and development of cash equities clearing and settlement services and associated infrastructure.

ASX Clear (Futures) and ASX Clear Risk Consultative Committees

These Committees provide a forum for clearing participants to make certain proposals and recommendations to the Clearing Board, relating to various matters, including but not limited to the risk models of ASX Clear (Futures) and ASX Clear, changes to the CCPs' Operating Rules, introduction of new asset classes for clearing, changes to admission criteria and all other matters which may have an impact on the risk management of the CCPs and their clearing participants.

Derivative Product Working Groups

These Working Groups allow major users of ASX's Interest Rate and OTC, equity option, energy derivative products and clearing services to provide input to ASX on existing and future product and service design, and to raise any customer or market issues impacting ASX derivative products.

Austraclear User Group

This user group meets twice a year and enables major users of Austraclear to provide input into the design, operation and development of Austraclear and to the forward work program for Austraclear.

Industry Consultation and Discussion

ASX advocates regulatory settings that support investors and growth and which put in place controls that ensure Australia maintains world class financial market infrastructures.

ASX is actively engaged in a range of industry discussions and consultations relating to changes to its Operating Rules as well as shaping the regulatory landscape. For a list of public consultations, please refer to the [ASX website](#).

Fees

A comprehensive list of fees and charges associated with utilising ASX's CS facilities can be found on the ASX website in the [Market Information: ASX Fees](#) section.

IV. CPMI-IOSCO PFMI DISCLOSURE

ASX recognises the important role of its CS facilities in maintaining systemic stability in the Australian markets and supports the objectives of the PFMI established by CPMI-IOSCO.

ASX has an open dialogue with the RBA and ASIC to ensure compliance with the Australian regulatory regime.

Details of the way in which each of ASX's CS facilities meet applicable Principles for FMIs and the Australian FSS are set out at Appendix I.

V. LIST OF PUBLICLY AVAILABLE RESOURCES

A range of useful information regarding ASX FMIs can be found at www.asx.com.au and via the links included above.

APPENDIX I

ASX CS Facilities' Compliance with the Principles for Financial Market Infrastructures & the Australian Financial Stability Standards




The information below has been compiled by ASX management and is correct as at the date of publication. Please note that the RBA and ASIC separately assess ASX's CS licensees' compliance with the PFMI and FSS.

How to read this appendix:

All PFMI principles and Key Considerations are listed, along with additional Australian Financial Stability Standards. The latter have been shaded in grey.

Key Considerations relating to:

Bullets accompanying text have been colour coded to differentiate for the reader content covering:

-  blue bullets: both ASX's CCPs and SSFs;
-  green bullets: ASX's CCPs only; and
-  purple bullets: ASX's SSFs only.

1

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.

FSS: A CCP/SSF should be a legal entity which is separate from other entities that may expose it to risks unrelated to those arising from its function as a CCP/SSF.

CCP 1.1, SSF 1.1

As a CCP/SSF:

The ASX operates two CCPs:

- ASX Clear Pty Limited ABN 48 001 314 503, which operates the CS facility known as “ASX Clear”; and,
- ASX Clear (Futures) Pty Limited ABN 91 050 615 864, which operates the CS facility known as “ASX Clear (Futures)”.

The ASX CCPs are separate legal entities, incorporated in Australia.

Neither of the ASX CCPs is exposed to the risks associated with the other’s CCP activities, or the activities of any other ASX entity, for example:

- The two CCPs operate distinct and separate default funds.
- There is no cross-guarantee arrangement in place between the CS facilities. In particular, none of the CS facilities is a party to the ASX’s deed of cross-guarantee, which relates to ASIC’s financial reporting requirements.

The ASX operates two SSFs:

- ASX Settlement Pty Limited ABN 49 008 504 532, which operates the CS facility known as “ASX Settlement”; and,
- Austraclear Limited ABN 94 002 060 773, which operates the CS facility known as “Austraclear”.

The ASX SSFs are separate legal entities, incorporated in Australia.

Neither of the ASX SSFs is exposed to the risks associated with the other’s SSF activities, or the activities of any other ASX Group entity, for example:

- There is no cross-guarantee arrangement in place between the CS facilities. In particular, none of the CS facilities is a party to the ASX’s deed of cross-guarantee, which relates to ASIC’s financial reporting requirements.

Key Consideration 1:

The legal basis should provide a high degree of certainty for each material aspect of an FMI’s activities in all relevant jurisdictions.

CCP 1.2, SSF 1.2

As a CCP/SSF:

The material aspects of the ASX CCP’s/SSF’s activities, and their legal basis, are:

- **Licensing:** The primary activity of the ASX CCPs/SSFs is the provision of clearing and settlement services to their participants. Each of the ASX CCPs/SSFs holds a CS facility licence (under Part 7.3 of the Corporations Act), which provides the legal basis for these services. The relevant licences can be found on [ASIC’s website](#).

- **Legally binding nature of the ASX CCPs/SSFs' operating rules:** Section 822B of the Corporations Act provides that the operating rules of each of the ASX CCPs/SSFs have effect as a contract under seal between:
 - the ASX CCP/SSF and each issuer,
 - the ASX CCP/SSF and each participant,
 - each issuer and each participant, and
 - each participant and each other participant.

The operating rules therefore comprise a statutory contract.

- **Payment Systems and Netting Act:** In the event that a participant in the ASX CCP/SSF enters into external administration, the PSNA provides certain protections under Australian law, from reversal or invalidation under the laws of any jurisdiction, for the transfer of property, rights and obligations, the termination, netting and settlement of obligations, and the enforcement of security effected in accordance with the operating rules of ASX's CCP/SSF, as follows:
 - Part 2 protects real time gross settlements effected through an approved RTGS system (each of Austraclear and the CHES (operated by ASX Settlement) have this approval; the Reserve Bank Information and Transfer System (RITS), in relation to which Austraclear and ASX Settlement are “feeder systems”, is also an approved RTGS system);
 - Part 3 protects net settlements effected through an approved netting arrangement (each of Austraclear and ASX Settlement has this approval);
 - Part 5 protects the transfer of property, rights and obligations, the termination, valuation and netting of obligations, and enforcement of security, by a ASX CCP that operates an approved “netting market” (each of ASX Clear and ASX Clear (Futures) has this approval). This includes protecting an ASX CCP's novation rules which effect the transfer and termination of rights and obligations. Part 5 also protects the porting of client positions and collateral by the ASX CCP in the event that a clearing participant defaults.

The legal bases outlined above apply under Australian law irrespective of the jurisdiction in which a participant in the ASX CCP/SSF may be incorporated.

As a CCP:

Offshore collateral: ASX Clear (Futures) also holds collateral offshore in New Zealand and the United States. To ensure timely access to collateral in New Zealand, ASX Clear (Futures) has obtained designation as a settlement system in New Zealand and implemented processes to support the repatriation of NZD collateral to Australia. ASX has identified no legal impediments to its processes for realising and repatriating USD collateral to Australia for participants that currently post USD collateral.

Novation: The rules of the ASX CCPs clearly set out the points of novation for each type of trade and the limited circumstances in which the ASX CCPs can be relieved of their obligations in respect of novated trades. Part 5 of the PSNA protects the rules of the ASX CCPs relating to novation. The novation rules are summarised in two fact sheets available on the ASX website.

As a SSF:

Title and transfer of securities:

- **ASX Settlement:** Securities are dematerialised (electronic) and held in CHES. Title is held in the name of the Holder (i.e. the person registered as the legal owner of financial products in a CHES Holding (account)).
- **Austraclear:** Acts as a central securities depository for three different classes of securities:
 - **Dematerialised Securities:** These are electronic debt securities created under the Austraclear Regulations. The Owner has good title provided that it has taken it in good faith for value and without notice of any defect in title.
 - **Non-paper Securities and Euro entitlements:** These are electronic debt securities in respect of which Austraclear holds legal title for the Owner as nominee, while the Owner retains beneficial title. Austraclear must deal with the securities in accordance with directions entered in the Austraclear System by the Owner.
 - **Paper Securities:** These are held by Austraclear for the Owner as bailee with the Owner retaining legal and beneficial title. Austraclear does not currently hold any paper securities.
- The rules of the ASX SSFs provide the legal basis for the transfer of title to securities in CHES and Austraclear by way of electronic book entry and a framework for recording encumbrances. Transfers are protected by Parts 2 and 3 of the PSNA.
- In the event of the insolvency of ASX Settlement or Austraclear, the rules and arrangements for title within the ASX SSFs are designed to provide a high degree of assurance that securities in CHES and the Austraclear System would be immune from claims by their respective creditors.

Key Consideration 2:

An FMI should have rules, procedures and contracts that are clear, understandable and consistent with relevant laws and regulations.

CCP 1.3, SSF 1.3

As a CCP/SSF:

Rules, procedures and contracts in place:

- **Rules and procedures.** Each ASX CCP/SSF has its own set of operating rules and procedures which govern the operation of the facility.
- **Contracts.** Under an ASX group intra-group services agreement, ASX Operations Pty Limited (a wholly owned subsidiary of ASX Limited) acts as the group's operating company, entering into contracts on behalf of the ASX and its subsidiaries, and then 'on-supplying' the services to the relevant ASX entity. ASX Limited agrees to ensure that each ASX CCP/SSF is provided with adequate personnel and non-financial facilities to perform its obligations as a CS facility licensee.

Processes in place to ensure that the rules, procedures and contracts are clear and understandable:

- Quality control measures are in place for all amendments to the ASX CCPs'/SSFs' operating rules and procedures. Such measures include:
 - those which are internal to ASX management oversight of the drafting of the amendments, General Manager sign-off for all amendments; and
 - those which are controlled by ASIC and RBA, namely the regulatory clearance process for amendments to the operating rules, under Part 7.3 of the Corporations Act (Division 2, Subdivision B).
- ASX conducts a review of the ASX CCPs'/SSFs' rules and procedures on a five year cycle to identify and make changes that mitigate systemic risk or are otherwise desirable, address stakeholder feedback and replace redundant or inconsistent rules and procedures. This helps to ensure that the rules are clear and understandable.

Processes in place to ensure that the rules, procedures and contracts are consistent with relevant laws and regulations:

- ASX conducts a continuous internal review of amendments to (or introduction of) laws and regulations that affect the ASX CCPs'/SSFs' operations, and works with ASIC and RBA as appropriate to amend its operating rules, procedures and contracts to ensure ongoing consistency with the law.
- The RBA conducts annual assessments of the ASX CCPs'/SSFs' compliance with the FSS, which provides further oversight of the ASX CCPs'/SSFs' consistency with the relevant laws and regulations.

Key Consideration 3:

An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants and, where relevant, participants' customers, in a clear and understandable way.

CCP 1.4, SSF 1.4

As a CCP/SSF:

The legal basis for the activities of the ASX CCPs/SSFs and the facilities' protection under the PSNA are set out on ASX's public website in this Disclosure Framework document and fact sheets for the ASX CCPs that cover topics including default management, novation, client account options on ASX Clear (Futures), and investment risks for clients under the ASX Recovery Rules.

ASX Limited (on behalf of each licensed entity within the ASX, including the ASX CCPs/SSFs) submits an 'Annual Group Licence Report' to ASIC. This report sets out the legal basis for the ASX CCPs/SSFs' activities (namely the licence obligations).

Where appropriate, ASX commissions and makes available to participants and/or clients of participants, on a confidential basis, external legal opinions to (1) confirm the legal efficacy of operating rules that are introduced to support new ASX services or meet regulatory requirements that apply to ASX or its participants, or (2) confirm the impact of new ASX services on participants' existing contractual arrangements.

Key Consideration 4:

An FMI should have rules, procedures and contracts that are enforceable in all jurisdictions.

There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed or subject to stays, including in the event that the securities settlement facility enters into external administration or that one or more of its participants or a settlement bank defaults or is suspended.

CCP 1.5, SSF 1.5

As a CCP/SSF:

Rules and Procedures: Section 822B of the Corporations Act provides that the operating rules of each ASX CCP/SSF have effect as a contract under seal between the ASX CCP/SSF, participants and issuers. The operating rules are enforceable as a statutory contract.

Contracts: The contracts entered into by the ASX CCPs/SSFs and third parties are enforceable under Australian contract law.

Actions taken by a ASX CCP/SSF under its operating rules:

- The status of actions taken by a ASX CCP/SSF which has entered into external administration is expected to be addressed by the introduction into Australian law of a resolution regime for financial market infrastructure, as foreshadowed in consultations undertaken by the Council of Financial Regulators and Treasury in 2011, 2012, 2015 and 2019.
- The status of actions taken by a ASX CCP/SSF under Australian law where one of its participants defaults and enters into administration is addressed by the PSNA, which provides certain protections under Australian law from reversal or invalidation under the laws of any jurisdiction For the transfer of property, rights and obligations, the termination, netting and settlement of obligations, and the enforcement of security (as applicable) effected in accordance with the operating rules of the ASX CCPs/SSFs.

Legal opinions: To ensure legal certainty in connection with their activities, the ASX CCPs/SSFs obtain legal opinions as to the enforceability of key rules in all relevant jurisdictions.

As a CCP:

The ASX CCPs have bank participants incorporated in Australia and several offshore jurisdictions (including, Europe, the United Kingdom and Switzerland). The ASX CCPs also have participants that are subsidiaries of U.S. banks and U.S. bank holding companies. Notwithstanding the bank resolution frameworks that apply to these participants, the ASX CCP default management process is not subject to a stay on termination that local or foreign bank Resolution Authorities may assert, except where an EU bank participant in resolution continues to meet its obligations to the ASX CCP.

Key Consideration 5:

An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflicts of law across jurisdictions.

CCP 1.6, SSF 1.6

As a CCP/SSF:

The operating rules of the ASX CCPs/SSFs are governed by Australian law and participants submit to the jurisdiction of the courts of New South Wales. Accordingly, Australia is the relevant jurisdiction for enforcement of the rules.

The legal bases outlined above apply under Australian law irrespective of the jurisdiction in which a participant in the ASX CCP/SSF may be incorporated.

As a CCP:

Neither of the ASX CCPs operate a clearing facility in any jurisdiction outside of Australia. Recognitions or exemptions have been sought in other jurisdictions, for the purpose of enabling overseas participants to participate in an ASX CCP's clearing facilities, as necessary.

ASX Clear (Futures) holds collateral offshore in New Zealand and the United States. To ensure timely access to collateral in New Zealand ASX Clear (Futures) has obtained designation as a settlement system in New Zealand and implemented processes to support the repatriation of NZD collateral to Australia. ASX has identified no legal impediments to its processes for realising and repatriating USD collateral to Australia for participants that post USD collateral.

2

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.

Key Consideration 1:

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.

CCP 2.1, SSF 2.1

As a CCP/SSF:

ASX’s stated strategy includes ensuring that ASX continues to deliver on its licence obligations and that it has risk, compliance and operating frameworks which are actively maintained at an appropriately high standard.

ASX recognises that as a market operator it is critical that it leads by example, with good corporate governance and effective risk management. As a provider of critical financial infrastructure, it also recognises that it has a responsibility to support the integrity of its markets.

In 2022, ASX adopted a Stakeholder Charter, which includes its commitment to the financial community and communicating how it balances the interests of customers, shareholders, regulators and the broader financial markets.

Each CCP/SSF has a specific strategy document that has been developed by the CS Lead Executives and approved by the CS Boards that explicitly place a high priority on the safety of the facility, supports the stability of the financial system, and other relevant public interest considerations. These strategy documents are reviewed annually, with objectives and goals reset as appropriate.

Progress against CCP/SSF goals is monitored regularly, with updates also provided to the CS Boards.

ASX has prepared a document entitled “Fair and Effective Clearing and Settlement Facilities” articulating how the ASX interprets its obligation under the Corporations Act to do all things necessary, to the extent that it is reasonably practicable to do so, to ensure that the services of each of its licensed clearing and settlement facilities are provided in a fair and effective way. This document is published on the [ASX website](#).

In performing their responsibilities, the ASX CCPs/SSFs will have regard to the stability of the broader financial system, and other relevant public interest considerations as set out in the Clearing and Settlement Boards Charter. The CS Boards Charter also refers to the statutory obligations of the CS Boards under the Corporations Act, which also include, but are not limited to, doing all other things necessary to reduce systemic risk, providing the ASX CCPs/SSFs’ services in a fair and effective way and having adequate conflict handling and compliance arrangements.

Key Consideration 2:

An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants and, at a more general level, the public.

CCP 2.2, SSF 2.2

As a CCP/SSF:

GOVERNANCE ARRANGEMENTS

Governance arrangements are documented in the CS Boards, ASX Limited Board and ASX Board Committee Charters. These, and other relevant governance documents, are published on the ASX website.

The CS Boards provide leadership, guidance and oversight of the clearing and settlement operations of the CS subsidiaries, including management of clearing and settlement risk.

The CS Boards have delegated to the Technology Committee the consideration of technology, data and cyber resilience matters relevant to the CS Boards.

Nomination and remuneration matters have been delegated to the ASX Limited Board Nomination and People and Culture Committees, respectively.

Finally, the CS Boards have delegated to the ASX Limited Board ARC certain matters specified in the CS Boards Charter including assisting the CS Boards to review and oversee the arrangements for the CS facility licensees to achieve compliance with their statutory obligations as licence holders with the exception of the matters carried out by the Technology Committee.

As set out in the CS Boards Charter, the non-ASX directors on the CS Boards:

- manage and make any variations to the decision process for those Boards, to determine whether there is an intra-group conflict;
- meet without the directors who are also directors of ASX, to consult on, and discuss, intra-group conflicts; and
- determine the process for managing the intra-group conflict by those Boards including making any recommendations to those Boards that they consider appropriate.

The CS Boards may establish forums to consult with participants on matters impacting operational or risk management aspects of participants' businesses. The ASX Stakeholder Charter sets out how the ASX seeks to balance the interests of its customers, shareholders, regulators and the broader financial markets and summarises the ASX's approach to engaging with each stakeholder group. The CS Boards have delegated the management of the CS Subsidiaries to the Managing Director and Chief Executive Officer (CEO) of ASX, except for those matters reserved by the CS Boards or delegated by the CS Boards to ASX Board Committees, the CEO may make all decisions and take all action required to manage the CS subsidiaries.

The Group Executive, Securities and Payments, and the Group Executive, Markets, are the 'CS Lead Executives' responsible for the operation of the ASX CCPs/SSFs. The CEO is accountable for ensuring that sufficient resources are made available for the operation of the ASX CCPs/SSFs.

The Chief Risk Officer (CRO) is responsible for developing and maintaining the clearing and settlement risk management framework for the CS subsidiaries. The CRO reports to the CEO.

The CS Boards have delegated the performance of compliance and enforcement functions of the CS facility licensees to the Chief Compliance Officer.

The CRO and CS Lead Executives are appointed and terminated by the CEO, who will consult with the CS Boards on this matter.

ASX has written agreements with executives setting out the terms of their appointment. Accountability statements are also in place for all ASX executives setting out the allocation of responsibilities to executives across ASX's operations.

ASX's CHESSE Governance Statement provides a guide to the governance framework that applies to CHESSE. It is intended to help stakeholders understand the roles and responsibilities of the different ASX governance forums relevant to CHESSE, including the delivery of the CHESSE replacement project and the CHESSE Roadmap. It also contains an outline of the roles and responsibilities of Management and a summary of accountability statements for relevant members of the Executive Team relating to CHESSE operations, the CHESSE Roadmap and the CHESSE Replacement Project.

DISCLOSURE OF GOVERNANCE ARRANGEMENTS

The Charters of the ASX Board, CS Boards and board committees are published on the ASX website, along with the ASX Director and ASX Executive Team members' profiles.

In addition, ASX publishes an annual Corporate Governance Report in the Annual Report. The Corporate Governance Report outlines ASX's principal corporate governance arrangements and practices. It follows the Corporate Governance Council's Principles and Recommendations. The public can access the ASX Annual Report on the ASX website.

ASX's CHESSE Governance Statement is available on the ASX website.

ASX uses a number of avenues to convey important updates and information to its stakeholders (including Customers, Regulators, Partners/Service Providers, Government, Media, Associations, ASX Investment community and ASX People) as set out in the Stakeholder Charter. It also engages with Associations and Government and Public Policy, including working groups and member forums, project/program consultations, and board level engagement with the Government.

Key Consideration 3:

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

CCP 2.3, SSF 2.3

As a CCP/SSF:

ROLES AND RESPONSIBILITIES OF THE BOARD

The key responsibilities of the CS Boards as set out in the CS Boards Charter are to:

- provide leadership, guidance and oversight of the clearing and settlement operations of the CS Subsidiaries;
- review and approve the strategy developed by management to comply with the CS facility licensees' statutory and regulatory obligations and monitor the execution of the strategy;
- oversee management systems and processes for the purpose of ongoing compliance with the FSS, the international PFMI standards and the CS facility licence obligations;
- set the operational risk tolerance for the CS facility licensees;
- review and approve the risk management framework and oversee risk management and the operation of the clearing and settlement facilities within the ASX risk appetite and operational risk tolerances set by the CS Boards;
- review and approve investment mandates;
- review and approve the default management policies, systems and processes applicable to counterparty failure and default;
- review and approve the recovery plan, recovery tools and processes required to enable the CS facilities licensees to continue to provide critical services during situations of extreme financial stress which threaten the provision of those critical services;

- review and provide input to the People and Culture Committee on the remuneration arrangements and performance of the CRO and CS Lead Executives; and
- review and approve assurance related matters including external and internal audit and reports as they relate to CS Subsidiaries.

The responsibilities of each non-executive director of the CS Boards are set out in their accountability statement.

CONFLICTS OF INTEREST (BOARD MEMBERS)

Directors are required to disclose all interests that may conflict with their duties as a director of CS entities. A register of director's interests is provided to the CS Boards at each meeting. A register of committee members' interests is also provided to committee meetings.

If there is a change to a director's material personal interests, the director must notify that change at or prior to the next CS Board meeting.

If a director has a material personal interest in a matter being considered by a board or committee, they must not be present during the consideration of that matter or vote on the matter, unless approved by other directors who do not have a material personal interest in the matter.

Directors are expected to take reasonable steps to avoid actual or perceived conflicts of interest.

BOARD COMMITTEES

The ASX Board has established an ARC which also serves as a committee of the CS Boards. The CS Chair (or another non-ASX director in their absence) is a regular attendee of ARC.

The CS Boards have delegated to ARC certain matters specified in the CS Charter including assisting the CS Board to review and oversee the arrangements for the CS facility licensees to achieve compliance with their statutory obligations as licence holders with the exception of those matters carried out by the Technology Committee.

The Nomination Committee assists the CS Boards in considering nomination matters relevant to the CS Boards.

The People and Culture Committee assists the CS Boards in considering remuneration matters relevant to the CS Boards.

The Technology Committee assists the CS Boards in considering technology, data and cyber resilience matters relevant to the CS Boards.

BOARD AND DIRECTORS PERFORMANCE

The CS Boards assess their performance, and the performance of individual directors annually.

The reviews are conducted to help ensure the CS Boards continue to operate effectively and efficiently.

The CS Boards may, in consultation with the Nomination Committee, determine to engage an external consultant to conduct the performance assessment.

Key Consideration 4:

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

CCP 2.4, SSF 2.4

As a CCP/SSF:

BOARD MEMBERS' SKILLS

The CS Boards are collectively comprised of directors with the skills and expertise necessary to discharge their respective responsibilities.

In consultation with the Nomination Committee, the CS Boards will at least annually review the skills and experience represented by directors on each board to determine whether the CS Boards collectively has the mix of skills and experience which is relevant to fulfil their responsibilities.

The CS Boards have developed the CS Board Skills Matrixes to capture the mix of skills, knowledge and experience relevant to the CS Boards.

The Nomination Committee is responsible for reviewing and recommending to the boards a non-executive director professional development program including having regard to the CS Board Skills Matrix and the corporate strategy and for regularly reviewing the effectiveness of the program.

The respective board members keep up to date with market and industry developments through regular briefings at CS Board and committee meetings, board workshops, meetings with regulators and through site visits.

At CS Board meetings, the Board also receives briefings on material developments in laws, regulations and standards relevant to clearing and settlement activities.

BOARD MEMBERS' REMUNERATION

The People and Culture Committee assists the CS Boards to oversee executive remuneration and non-executive director remuneration arrangements.

Non-executive director fees are set to ensure:

- ASX non-executive directors are remunerated fairly for their services, recognising the workload and level of skill and experience required for the role; and
- ASX can attract and retain talented non-executive directors.

The People and Culture Committee may take advice from an external expert to assist the committee in carrying out its responsibilities. Independent non-executive CS Board directors do not receive any performance-related remuneration.

The CS Boards have approved guidelines on director tenure.

BOARD INDEPENDENCE

The CS Boards are comprised of a majority of directors who are non-executive and have been assessed by the Board as independent. The ASX website discloses which CS Directors are independent.

The ASX Group Board Policy and Guideline to Relationships Affecting Independent Status applies to CS Directors.

In determining independence, the CS Boards consider whether the director is free of interests that could (or could be perceived to) materially interfere with the independent exercise of the director's judgement and the capacity to act in the best interest of the ASX group company that they are director of. Examples of factors considered as part of ASX's independence assessment include employment at ASX in an executive capacity within 3 years, in a material business relationship to ASX group entities, a substantial shareholder, personal close ties, tenure of directorship. These are included in the ASX Group Board Policy and Guideline to Relationships Affecting Independent Status policy as well as materiality thresholds. This policy is published on the ASX website.

Director's interests are tabled at each meeting of the CS Boards.

The CS Boards review the independence of each director prior to their appointment, annually against the ASX Group Board Policy and Guideline to Relationships Affecting Independent Status as well as having regard to disclosures made by directors at board meetings of any new interests, positions, affiliations or other relationships.

The Nomination Committee also reviews and makes recommendations to the CS Boards on the independence of non-executive directors.

The ASX Clear and ASX Settlement Boards comprise at least 50% non-executive directors who are not also directors of ASX (non-ASX directors). The CS Boards ensure that a quorum can be constituted by non-ASX directors.

The CS Board chair of the CS facilities is an independent non-executive director and a non-ASX director.

The CS Boards also have meetings of non-ASX directors to:

- consider competitively sensitive information acquired in the course of providing clearing and settlement services to another market operator or listing venue; and
- oversee the provision of clearing and settlement services to another market operator or listing venue.

The non-ASX directors on the CS Boards shall:

- manage (and make any variations to) the decision process for those Boards to determine whether there is an intra-group conflict;
- meet without the directors who are also directors of ASX, to consult on, and discuss, intra-group conflicts; and
- determine the process for managing the intra-group conflict by those Boards including making any recommendations to those Boards that they consider appropriate.

Key Consideration 5:

The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.

CCP 2.5, SSF 2.5

As a CCP/SSF:

ROLES AND RESPONSIBILITIES OF MANAGEMENT

The Group Executive, Securities and Payments, and the Group Executive, Markets, have been appointed as the 'CS Lead Executives' responsible for the operation of the ASX CCPs/SSFs.

The Group Executive, Securities and Payments is accountable for the management of ASX Clear, ASX Settlement and Austraclear CS facility licences.

The Group Executive, Markets is accountable for the management of the ASX Clear (Futures) CS facility licence.

Each CS Lead Executive is accountable to the CS Boards for the operation of the relevant ASX CCP/SSF, developing objectives, strategies and goals for the CS facility in a manner that aligns with ASX's risk appetite (subject to CS Boards review and approval) and delivering the objectives, strategies and goals approved by the CS Boards.

The main roles and responsibilities of members of the Executive Team relevant to CS operations being the CEO, CS Lead Executives, CRO and CCO are set out in the CS Boards Charter and are more fully documented in accountability statements which set out the allocation of responsibilities to executives across ASX's operations.

The CHES Governance Statement also contains an outline of the roles and responsibilities of Management and a summary of accountability statements for relevant members of the Executive Team relating to CHES operations, the CHES Roadmap and the CHES Replacement Project.

The ASX has established three key internal management committees comprised of senior executives to support the Boards and Executive Management in discharging their responsibilities by providing a forum to accountable executives for discussion and constructive challenge.

- The Risk Committee is chaired by the CRO and has oversight of the implementation of ASX's enterprise risk management framework, approves risk policies and frameworks and considers general risk matters consistent with the ASX Board's risk appetite. The Risk Committee reports to the CS Boards and ARC as appropriate on matters relevant to those bodies.
- The Regulatory Committee is chaired by the Group General Counsel and has oversight of licence compliance matters, develops and approves policies, and considers updates on regulatory and government engagement and ASX rule changes. The Chair of the Regulatory Committee reports to the ASX Boards and Board Committees as appropriate on matters relevant to those bodies.
- The Technology Management Committee is chaired by the Chief Information Officer and has oversight of IT security matters, systems updates and incident management and considers emerging technology, operational and security risks. The Technology Management Committee reports to the ASX Boards and the Board Technology Committee as appropriate on matters relevant to those bodies.

Accountability Statements have been put in place for all members of the Executive Team setting out the allocation of responsibilities to executives across the ASX. The CHES Governance Statement includes, at Appendix 1, a Summary of Accountability Statements for relevant Group Executives as these relate to CHES.

The board sets financial and non-financial goals for the CEO at the start of the financial year, having regard to the strategic objectives set by the board. The CEO is responsible for setting goals for each executive having regard to those objectives, the Group Scorecard and the accountabilities of the executive's role.

Performance evaluation of Group Executives includes:

- The CEO makes recommendations to the People and Culture Committee on the individual performance rating of each member of the Executive Team, including those who are Executive Key Management Personnel, having regard to, among other things, the feedback from the Chief Risk Officer and, where applicable, feedback from CS Boards and board committees.
- The ASX Chair makes recommendations to the People and Culture Committee on the performance of the CEO, having regard to, among other things, the feedback from the CRO and the ASX and CS Non-Executive Directors.
- The People and Culture Committee considers the CEO's and the ASX chair's recommendations and makes final recommendations to the CS Boards on the outcomes of the performance review processes.

EXPERIENCE SKILLS AND INTEGRITY

The members of the Executive Team have breadth and depth of experience, including but not limited to trading, clearing and settlement business, banking, technology, operations, risk management and regulation. The detailed profiles of the Executive Team are published on the ASX website.

The ASX undertakes comprehensive reference checks before appointing a senior executive including education, employment, character, criminal history and bankruptcy checks.

Relevant regulatory agencies are notified of appointments.

Key Consideration 6:

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

CCP 2.6, SSF 2.6

As a CCP/SSF:

RISK MANAGEMENT FRAMEWORK

The ASX Limited Board has delegated the ARC to review the ASX risk management framework for identifying, monitoring and managing significant business risks across the ASX and consider whether the risk management framework and internal controls effectiveness identify areas of potential or material risk.

ASX's Risk Appetite Statement (RAS) is a central component of ASX's risk management framework and describes the risk types encountered in ASX's business. Risk tolerance levels are expressed through Board level Key Risk Indicators (KRI) and organisational KRIs are cascaded throughout ASX to assist staff in its day-to-day management of risk. This helps ensure the whole organisation operates within agreed risk tolerance boundaries.

The CS Chair (or another non-ASX director in their absence) is a regular attendee at the ARC meetings where ASX's risk strategy and appetite on an enterprise-wide level are considered and has the opportunity to provide input at those meetings. The CS Lead Executives are responsible providing input on ASX's risk appetite.

The CS Boards review and approve the risk management framework and oversees the adequacy of internal controls, systems and processes for the management of clearing and settlement risks of the CS facility licensees. They also manage the CS Subsidiaries within ASX risk appetite and risk tolerances set by the CS Boards.

The ARC assists the CS Board fulfil its oversight responsibilities in respect to clearing and settlement risks and it reports to the CS Boards on matters that may impact on CS operations.

Dedicated Enterprise Risk, Enterprise Compliance and Clearing Risk functions are responsible for establishing and maintaining formal risk frameworks, policies and minimum standards, and support the Risk Committee and ARC. These functions report to the CRO, who in turn reports to the CEO.

The ERMF has been developed with reference to leading practice global risk management standards. See Principles 3 and 17 for further details.

The management of clearing and settlement risks are documented and describe policies in respect to financial risks including: credit and counterparty risk, default management, liquidity risk, and investment risk.

Risk profiles are formally self-assessed annually as part of an enterprise-wide risk self-assessment (RSA) program focusing on risks and controls within each business unit. Review of risk and controls is also provided by each line of business as part of quarterly risk working groups. Risk profiles are also reviewed and updated in the event of restructure, process adjustment and/or other material change to a business area.

The Enterprise Risk function facilitates an annual review of major current and emerging “top 10” risks faced by ASX, including risk issues and associated control improvement action plans to ensure risks are being managed within appetite.

The objective of the business RSA and top 10 risk review programs include:

- identifying, assessing and addressing risks on a timely and complete basis;
- ensuring accountability for risks and controls;
- helping management understand their risks, related controls and residual risk tolerance; and
- setting a framework for risk-based decisions that directly or indirectly affect goals and objectives.

The Enterprise Risk function is also responsible for establishing and maintaining a formal framework, and appropriate training, education and guidance aimed at managing extreme but plausible incidents (crisis events) affecting ASX premises where operations are performed, as well as to rapidly recover services and other business functions in the event of a business interruption (business continuity).

Business continuity is a key operational risk for ASX, and Business Continuity Management (BCM) is a key management discipline that aims to build and improve organisational resilience. The Business Continuity Management Framework (BCMF) outlines key elements relating to the approach and oversight of BCM, the fundamental internal activities that cover crisis management, response, business resumption, exercise, and awareness. See Principle 3 and 17 for further details.

AUTHORITY AND INDEPENDENCE OF RISK MANAGEMENT AND AUDIT FUNCTIONS

RISK MANAGEMENT FUNCTION

Enterprise Risk is an independent function responsible for establishing and maintaining a formal framework, and appropriate training aimed at improving risk management and promoting common risk terminology and concepts applicable across ASX.

Enterprise Risk acts in a Line 2 assurance and advisory role, working with management to ensure the business has appropriately identified, measured, and managed risk within its risk appetite. This includes:

- providing a robust fit-for-purpose ERMF (including periodic benchmarking against industry standards) along with associated policies, i.e. establishing and developing corporate risk principles, frameworks and systems;
- maintaining an integrated approach to enterprise risk, while working with other assurance functions;
- oversight and review of company-wide risk profiles for senior management and Boards;
- providing training and fostering awareness across the company of risks applicable to ASX;
- promoting enterprise risk requirements and best practice risk management and risk culture across ASX; and
- undertaking continuous improvement in the effectiveness and efficiency of the enterprise risk program.

INTERNAL AUDIT FUNCTION

The General Manager Internal Audit reports to the Chair of the ARC, the Chief Financial Officer for administrative purposes, and has direct access to the ASX CS Boards.

From performing various assurance activities, Internal Audit provide objective confirmation that the ERMF continues to be designed and operating effectively. Internal audit has responsibilities that cover:

- audit planning and execution;
- assurance reports;
- competence and standards of the Internal Audit team;
- process improvement;
- advice on internal controls and business practices; and
- fraud investigations.

The responsibilities and authority of the Internal Audit function are contained in the Internal Audit Charter which is published on the ASX website.

Internal Audit is authorised to have unrestricted access to all functions' records, property and personnel and the General Manager, Internal Audit is authorised to:

- allocate resources, set frequencies, select areas of focus, determine scopes of work and apply the techniques required to accomplish audit objectives; and
- engage specialist resources (internal and external) to supplement the skills of the internal audit function as required to fulfil the requirements of the audit plan.

As a CCP:

RISK MANAGEMENT OF MODELS

The CS Boards oversee and satisfy themselves that there is adequate governance surrounding the adoption and use of models (such as margining models).

The CS Board has visibility and oversight of the validation of key ASX CCP models which includes:

- KRIs are reported to the CS Boards on initial margin model performance. When performance is outside of appetite, CS Board discuss the reasons and management response.
- Key ASX CCP models are reviewed on a conceptual basis, annually by a third-party. This process is managed by the Internal Audit function. The results of the model review are tabled at the quarterly ARC meetings.

The Model Risk Management Group (MRMG), an internal ASX CCP validation group, part of the Clearing Risk function, independently validates new high and medium risk models as well as existing models on a periodic basis (frequency based on the risk rating of the model i.e. high risk reviewed more frequently than low risk models). Any significant changes that result from this validation are reported to the CS Boards.

FSS Standard: A SSF/CCP's operations, risk management processes, internal control mechanisms and accounts should be subject to internal audit and, where appropriate, periodic external independent expert review. Internal audits should be performed, at a minimum, on an annual basis. The outcome of internal audits and external reviews should be notified to the Reserve Bank and other relevant authorities.

CCP 2.7, SSF 2.7

As a CCP/SSF:

Internal Audit is an independent assurance function. Its role is to provide the ASX Limited Board, CS Boards and management with assurance that ASX has effective, adequate and efficient internal controls in place to support the achievement of its objectives, including the management of risk. It also provides advice on ASX's internal controls and business processes.

- The Internal Audit Charter sets out that the principal objective of Internal Audit is to support the board and management to protect the assets, reputation, resilience and sustainability of the ASX.
- The Internal Audit Plan is approved by the ARC, and by the CS Boards for matters relevant to the CS subsidiaries.
- The ARC reviews and concurs on the appointment, replacement, dismissal and remuneration of the General Manager, Internal Audit and reviews the performance, objectivity, independence and effectiveness of the Internal Audit Function periodically.
- The GM Internal Audit has a direct line of reporting to the CS Boards on relevant matters.
- The external auditor reviews the CS licensee financial statements.
- The RBA and ASIC are notified of the outcomes of the internal audits and external reviews commissioned by Internal Audit on a quarterly basis. Further discussions are held as part of liaison meetings with the Agencies on audits/reviews when requested.

Key Consideration 7:

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

CCP 2.8, SSF 2.8

As a CCP/SSF:

The interests of direct and indirect participants and other relevant stakeholders are recognised in the ASX Limited Board Charter, the CS Boards' Charter and the Stakeholder Charter. The latter:

- represents ASX's commitment to develop genuine engagement and foster strong partnerships within the financial community;
- sets out the key principles that underpin the ASX's approach to stakeholder engagement;
- identifies key stakeholders and communicates how ASX engages with each group; and
- promotes open and transparent communication, through collaborative relationships with all ASX stakeholders, customers, partners, associations, regulators, government, the investment community, media and ASX employees.

The key principles of stakeholder engagement includes:

- transparent and accountable;
- consultative and balanced; and
- proactive and future focused.

ASX's approach to engaging with each stakeholder group includes:

- **Inform** – channels that convey important updates and information including events, information updates, digital channels, publications, reports, statements, announcements and training programs.
- **Involve** – channels which are more collaborative in nature, providing opportunities for ASX to listen and for stakeholders to provide feedback. These include:
 - formal and informal ASX committees and working groups;
 - industry forums and consultation via industry associations;
 - strategic and operational bilateral engagements with ASX executives and dedicated representatives;
 - feedback program facilitate through surveys, the website and dedicated customer service, operational and technical teams; and
 - meetings, events and forums including the ASX AGM.

Consultation processes include operational arrangements, risk controls and default management rules and procedures. Details of all public consultation and non-confidential submissions received are published on the ASX website.

The Business Committee is an advisory body established under the Code of Practice comprising senior representatives from ASX's clearing and settlement participants, and a wide range of other industry stakeholders. The Business Committee provides a mechanism for ASX to seek user input so that the ongoing operation and development of cash market clearing and settlement infrastructure and services meet the needs of users and are aligned with global standards. Further detail about the Code and Business Committee is published on ASX's website.

The Business Committee may appoint and convene technical committees to assist in the performance of its role. Technical committees will report to the Business Committee. Members of the Business Committee and ASX Management may nominate technical committee members. The technical committees may comprise representatives of Business Committee members and/or other individuals with appropriate expertise. For example, in February 2023, ASX established a new industry forum, the CHESSE Replacement Technical Committee, as a key channel for ASX to communicate and seek input from impacted stakeholders on topics such as project scope, implementation approach and testing. The Technical Committee is provided with key updates on project status, risks and issues. Refer to the [CHESSE replacement website](#) for further details.

ASX has established the ASX Cash Equities Clearing and Settlement Advisory Group (Advisory Group). The Advisory Group has an important role in providing stakeholder input to the CS Boards on strategic matters related to cash equities clearing and settlement services and associated infrastructure.

As a CCP:

The ASX Clear and ASX Clear (Futures) Risk Consultative Committee are forums established by ASX Clear and ASX Clear (Futures) for the purpose of consulting with their clearing participants in relation to matters which may have an impact on the risk management of the ASX CCPs and their clearing participants – this includes, but is not limited to, the risk models of the ASX CCPs, the ASX CCPs stress testing frameworks, the ASX CCPs margining approaches, changes to key clearing risk policies, results of clearability assessments and all other relevant matters which may have an impact on the risk management of the ASX CCP and its clearing participants.

The Derivative Product Working Groups allow major users of ASX's Interest Rate, equity, energy and agricultural derivative products and clearing services to provide input to ASX on existing and future product and service design, and to raise any customer or market issues impacting ASX derivative products. These forums are scheduled as and when required.

The ASX Clear (Futures) Clearing Working Group is a two-way forum seeking participant input on commercial, technical and operational aspects of the Derivatives Clearing Service, along with providing details of any upcoming service changes (inclusive of legal, operations, technical and risk changes). These forums are scheduled quarterly.

The ASX Clear (futures) Default Management Group is a pre-nominated group of trading and risk professionals from non-defaulting Counterparties appointed to assist and provide advice to ASX in managing the default of a counterparty.

As a SSF:

ASX also seeks participant input into the design, operation and development of Austraclear through an Austraclear user group.

DISCLOSURE

As a CCP/SSF:

Details of all public consultation and non-confidential submissions received are published on the ASX website.

Separately, ASX is bound by the disclosure obligations in the ASX Listing Rules and Guidance. ASX's commitment to providing the market with full and timely information in compliance with its continuous disclosure obligations, and the processes adopted by ASX to meet this commitment are set out in ASX's Continuous Disclosure Policy.

ASX publishes its Annual Reports, which describes to investors its business objectives, financials and strategic direction.

ASX also releases its financial results on a half yearly basis. This disclosure includes key matters relating to ASX CCPs/SSFs and operations.

FSS Standard: A SSF/CCP's that is part of a group of companies should ensure that measures are in place such that decisions taken in accordance with its obligations as a SSF/CCP's cannot be compromised by the group structure or by board members also being members of the board of other entities in the same group. In particular, such a SSF/CCP's should consider specific procedures for preventing and managing conflicts of interest, including with respect to intragroup outsourcing arrangements.

CCP 2.9, SSF 2.9

As a CCP/SSF:

- Conflict and information handling is specifically addressed in the CS Boards Charter and ASX's Conflicts Management Policy. Arrangements are in place to address the CS entities being part of a corporate group. These documents are published on the ASX website.

- Director information, ASX cross-directorships and independence, is published on the ASX website.

- Directors' interests are tabled at each board meeting.

- ASX Clear and ASX Settlement provide clearing and settlement arrangements to competing market operators or listing venues. These are often referred to as "access arrangements". Transparent and non-discriminatory pricing and access arrangements are in place for competing listing and trading venues.

- The boards of ASX Clear and ASX Settlement are comprised at least 50% non-executive directors who are not also directors of ASX Limited. The only executive director is the ASX CEO.

- The CS Boards meet separately from the ASX Limited Board on each board day for a CS Boards only meeting.

- The CS Boards ensure that a quorum can be constituted by non-ASX directors.

- If the ASX Clear or ASX Settlement Board is required to consider competitively sensitive information acquired in the course of providing clearing and settlement services to another market operator or listing venue, no directors who are also on the ASX Limited Board attend that meeting.

- ASX provides specific guidance to directors of CS Boards on the approach to identification and management of actual or potential conflicts of duty that may arise between a CS Facility Licensee and ASX or between the CS Facility Licensees in addition to the existing general Conflicts Management Policy.

3

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.

Key Consideration 1:

An FMI should have risk management policies, procedures and systems that enable it to identify, measure, monitor and manage the range of risks that arise in or are borne by the FMI. Risk management frameworks should be subject to periodic review.

CCP 3.1, SSF 3.1

As a CCP/SSF:

Risks faced by ASX are considered under seven key risk categories with the objective of providing a common risk lexicon to support business risk identification and assessment and facilitate organisation-wide monitoring, reporting and analysis of risks. The seven risk categories are Strategic, Operational, Technology, Counterparty, Financial, Regulatory and Legal, and Reputation.

ASX's Enterprise Risk Management Framework (ERMF) has been developed with reference to leading practice global risk management standards, in particular ISO 31000:2018. It describes elements that help enable ASX to manage its key risks, and supports assurance that the ASX's risk management and internal control environment is designed appropriately and operating effectively. Core components include: risk profiling and assessment, control testing, key risk indicators, fraud control, incident management, risk issue management, crisis management and business continuity and second line oversight of project risk management. These core elements are complemented by specific risk management processes, minimum standards and practices including establishing the context, identification and assessment, treatment, monitoring, reporting and communicating risk. The ERMF is reviewed on an annual basis with material changes approved by the ARC. Review of the operating effectiveness of the ERMF is also performed every three years by an independent expert.

Management and monitoring of risk profiles, risk issues, KRIs and control improvement action plans is supported by ASX's ERMF system. This system is the core repository for all risks, issues, controls, and action plans across ASX, including risks and controls specifically related to the integrity, resilience, reliability, and security of ASX's CCP and SSF. The system enables both a line of business and aggregated overview of risk and control profiles across the ASX business, and supports and informs quarterly risk reporting information to ARC and CS Boards.

ASX's Compliance Management Framework (CMF), which align with the ISO 37301:2001 compliance management systems, provides processes, systems and tools to facilitate effective regulatory risk management and compliance with obligations applicable to ASX's CCPs/SSFs.

ASX's Clearing Risk Policy Framework sets out a comprehensive set of clearing and treasury risk policies to support the risk management approach of ASX's CCPs, these are reviewed on either an annual or biennial basis with material changes approved by the CS Boards.

ASX's Settlement Risk Policy Framework sets out a comprehensive set of clearing and treasury risk policies to support the risk management approach of ASX's CCPs.

The ERMF, CMF and other policies and procedures are the subject of internal and external review. ASX's Internal Audit department routinely monitors compliance with operational frameworks and policies, reporting to the ARC on a quarterly basis. Audit findings may prompt a review of a framework and/or policy, which would be conducted in consultation with key stakeholders. Internal Audit includes CCP/SSF activities in its risk based audit plan. The Internal Audit Charter is on the ASX website.

ASX has a Policy Design and Review Handbook, which sets out governance arrangements for ASX policies and associated procedures and systems, including a policy cycle review process. Clearing risk specific policies are reviewed either on an annual or biennial basis with material changes approved by the CS Boards. Settlement policies and standards are documented and reviewed biennially and material changes are approved by the CS Boards.

This section should be read in conjunction with Principle 2, key considerations 6 and Principle 17, key considerations 1 and 2.

As a CCP :

Clearing Risk Quantification and Development has systems and reports which identify key risk indicators, including:

- Margins (both overnight and intraday);
- Capital Stress Testing (Capital adequacy);
- Liquidity Stress Testing;
- Clearing participant – CBPL;
- Treasury investment monitoring;
- Commitment Calculations / Emergency Assessments;
- Market movement / Market erosion;
- Collateral Management;
- Counterparty Risk Assessment (Capital monitoring);
- Back Testing;
- Reverse Stress testing; and
- Margin rate setting.

Clearing Risk Quantification and Development provides various reports to clearing participants covering:

- Cash Market Margining (ASX Clear);
- Derivatives Margins and Collateral (ASX Clear);
- Derivatives Margins and Collateral (ASX Clear (Futures));
- Capital Stress Testing Results and CBPL;
- Default Fund Contributions (ASX Clear (Futures)); and
- Recovery Assessments (both ASX CCPs).

Clearing Risk Policy & Management provides summaries of certain risk indicators (together with any breaches of the above risk indicators) to various governing and participant committees, including:

- Clearing and Settlement Boards;
- Risk Committee;
- Risk Quantification Working Group;
- Credit Risk Working Group; and
- Clearing Participant Risk Consultative Committees.

As a CCP :

Operating Rules are designed and implemented in a way to recognise the criticality of the individual participant's activities. The ASX CCPs' Operating Rules are on the ASX website.

FSS Standard: A CCP/SSF should ensure that financial and other obligations imposed on participants under its risk management framework are proportional to the scale and nature of individual participant's activities.

CCP 3.2, SSF 3.2

- Contribution, commitment and margining regimes are aligned to scale and nature of participant risk exposures and activities. For example, margin and contribution requirements vary in size depending on relevant risk exposure or size of the participant's clearing activities.

As a SSF:

- The ASX SSFs' settlement risk policies are aligned to scale and nature of participant risk exposures and activities and subject to periodic review.

Key Consideration 2:

An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.

CCP 3.3, SSF 3.3

As a CCP/SSF:

- Information such as daily gross and net positions, and margin requirements is provided to ASX CCP/SSF participants to allow them to manage their risks and include:

- Penalties for non-compliance with ASX CCP/SSF operating rules and regulations may be applied.
- Participants may be required to seek alternative clearing arrangements if they are unable to manage their risks to a level acceptable to ASX's CCPs/SSFs. The ASX CCP/SSF Operating Rules are on the ASX website.

As a CCP:

- Incentives for participants to manage their risks are made through participant contributions of the default funds, margin requirements and additional initial margin requirements.

As a SSF:

- Incentives for ASX settlement participants to manage their risks are via fees for failed settlements and performance bonds (Settlement Bond for all ASX general settlement participants (that are not clearing participants) and (Sponsorship Bonds for any ASX settlement participant that is not also a market or clearing participant).
- The Austraclear facility provides two messaging alternatives (SWIFT and HTHL) that enable participants to achieve straight through processing of settlement transactions that must be matched bilaterally. This helps mitigate participants' operational and settlement risk through the reduction or elimination of manual processing.

Key Consideration 3:

An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers and service providers) as a result of interdependencies, and develop appropriate risk management tools to address these risks.

CCP 3.4, SSF 3.4

As a CCP/SSF:

- Periodic assessments of material risks posed by external entities to the ASX CCPs/SSFs are performed which include credit, liquidity, general and operational risk management, business continuity arrangements, and recovery planning.

Review of material risks posed by external entities to the ASX CCPs/SSFs are encompassed under the enterprise-wide annual RSA program. Review of risks and controls is also performed as part of quarterly line of business risk working groups, and risk profiles are also reviewed and updated in the event of any organisational restructure, process adjustment and/or other material change to a business area. Further, the RSA program, which is part of the ERMF is subject to internal review.

As a SSF:

Incentives for participants to manage their risks are via capital requirements, fees for failed settlements (ASX Settlement only).

Stress scenario analysis is undertaken periodically as part of recovery plan reviews, including critical service provider interdependencies.

Key Consideration 4:

An FMI should 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. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.

CCP 3.5, SSF 3.5

As a CCP/SSF:

ASX's BCMF has clearly stated objectives and is supported by a range of other internal documents to allow for support ASX CCPs/SSFs rapid recovery and timely resumption of critical operations following a disruption to a service. Examples of these internal documents include the BCM Exercise Framework, BCM Scenario Risk Assessment, ASX Crisis Management Plan, and Incident Management Framework. ASX business continuity arrangements are underpinned by permanent dual-site operational teams in place with sufficient resources, capabilities and functionalities and appropriate staffing arrangements at both the primary and alternate operations sites (including the use of remote working arrangements). One site is located outside of the Sydney Central Business District (CBD). Furthermore, all staff are able to work remotely. The primary and backup data centres are both located outside of the CBD and are geographically separated. These arrangements enable ASX CCPs/SSFs sustain and operate under a broad range of circumstances including wide-scale disruptions.

ASX's CCPs/SSFs conduct periodic business impact analysis and maintain business continuity plans detailing the operational responses to events that pose a significant risk of disrupting operations. The plans identify and address events such as technology failure, staff unavailability, pandemic, cyber-attack, greater CBD inaccessibility and primary site & systems unusable. These plans are reviewed annually.

The ASX CCPs/SSFs regularly test their business continuity arrangements per a BCM Exercise Framework that sets out exercise requirements. Dual site operational teams across the primary and alternate secondary operations sites (including working from home) effectively test backup operational processes on a continuous basis. Live tests, where clearing and settlement services are provided in real time from the alternate backup data centre site, are conducted annually. Refer to Principle 17 Operational Risk, key consideration 6 for further details.

In addition to the BCMF, the ASX CCPs/SSFs maintain a Recovery Plan which sets out how the ASX CCP/SSF plan to ensure they continue to provide their critical operations in recovery situations. In this context "Recovery concerns the ability of an FMI to recover from a threat to its viability and financial strength so that it can continue to provide its critical services without requiring the use of resolution powers by authorities".

The Recovery Plan is reviewed on an annual basis by the ASX CCP and SSF boards. The annual review includes:

- An assessment of the CS facility recovery tools against the "desirable characteristics of recovery tools" set out in the CPMI-IOSCO Recovery of Financial Market Infrastructures guidance.
- An assessment of the operational readiness to actually implement the recovery plan/tools.
- An assessment of ASX's CCPs/SSFs ability to meet its replenishment obligations under the Recovery Rules.

4

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.

Key Consideration 1:

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

CCP 4.1, SSF 4.1

As a CCP:

The ASX CCPs have a robust risk framework to manage their credit risks outlined in their Operating Rules and Procedures, which include, at a high level:

- Clearing participant membership requirements, including capital requirements. This seeks to ensure that only entities with an adequate level of financial resources are admitted, and remain, as clearing participants. Compliance with the capital requirements is monitored on an ongoing basis, primarily through the review of monthly financial returns submitted by clearing participants.
- Daily monitoring of market data relating to a clearing participant or its parent entity (where available) to identify potential deterioration in the creditworthiness of a clearing participant. This data includes share prices, credit default swap spreads and external credit ratings.
- Tools to measure and monitor actual and potential future exposures using the latest available position and price information. ASX actively evaluates the adequacy and appropriateness of its stress testing framework by assessing daily actual market moves observed as well as against industry expert advice on plausible market moves.
- Mark-to-market valuation of positions and collateralise against exposures over 4 intraday margin cycles. This is performed by ASX Clear (Futures) to prevent the build-up of risk exposures.
- Additional margin is called from the participants where exposures, as measured by the stress testing framework exceed pre-established Stress Test Exposure Limits (STELs).

As a SSF:

The ASX SSFs do not enter into arrangements with participants that give rise to credit risk as they do not act as direct counterparty to transactions that settle on the ASX SSFs. Therefore the requirements of this standard are not applicable to ASX SSFs.

Key Consideration 2:

An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk management tools to control these risks.

CCP 4.2, SSF 4.2

As a CCP:

The ASX CCPs' Operating Rules and Procedures detail the ASX CCPs' credit risks and provide the ASX CCPs with processes to control and manage these risks.

The ASX CCPs have the ability, through their robust models and systems, to calculate and monitor participants' credit standing and credit exposures to participants. Types of activity undertaken by the Clearing Risk team include:

- Ensuring initial and variation margin requirements calculated by the ASX CCPs at the end of each business day are accurate.
- Monitoring day-to-day developments in market price moves, open positions and settlement obligations to the ASX CCPs.
- Initiating intraday margining processes and managing credit risk exposures on a timely basis.
- Applying additional margin requirements based on the risk exposures compared to an entity's liquid capital/ Net Tangible Asset (NTA) Capital Based Position Limit (CBPL) or compared to a fixed amount for ASX Clear (Futures) participants that are banks and, subject to certain criteria, bank-affiliated participants.
- Conducting at least on a daily basis Credit Stress Testing (CST) to monitor the effects of extreme but plausible scenarios on participants' portfolios and calling Additional Initial Margins (AIMs) when stress-test results are above a defined limit (stress testing exposure limit or STEL).
- Imposing additional margin requirements as deemed appropriate by ASX management;
- Monitoring, assessing and investigating matters relating to financial requirements (including participants' monthly financial statements).
- Determining and reviewing participants' credit standing, drawing in part on information provided by participants in regular financial returns to ASX.
- Daily monitoring of market data relating to a clearing participant or its parent entity (where available). See Key Consideration 1 above for further information.
- Coordinating a 'watch list' of clearing participants that appear to be experiencing financial, risk, operational, compliance or reputational issues that may impact on their ongoing ability to meet their obligations as a participant and therefore need to be monitored more closely.

As a SSF:

For ASX SSFs, this standard is not applicable. See Key Consideration 1 for further detail.

FSS: A CCP/SSF should have the authority to impose activity restrictions or additional credit risk controls on a participant in situations where the CCP/SSF determines that the participant's credit standing may be in doubt.

CCP 4.3, SSF 4.3

As a CCP:

Under the ASX CCPs' Operating Rules and Procedures, the ASX CCPs have the ability to impose restrictions on their clearing participants' activities and to impose additional credit risk controls where it deems a clearing participant's credit standing is in doubt. Types of restrictions available to the ASX CCPs include imposing higher capital requirements, additional capital reporting requirements, or reducing STELs levels.

In addition to routine calling of Initial Margins, ASX CCPs may also require clearing participants to lodge AIMs as follows:

- For Intra-day Margins, ASX Clear (Futures) makes scheduled intra-day margin calls. In addition, during periods of market volatility, both ASX CCPs may impose an intra-day margin to address any significant erosion of existing margin collateral against current (i.e. intra-day) position exposures and current prices. Intra-day margin calls effectively enables the ASX CCPs to bring forward the daily settlement process which substantially reduces the ASX CCPs' contingent exposure to unrealised participant losses. The ASX CCPs may make ad hoc margin calls at any point during the settlement hours, subject to banking system availability.
- For AIMs, ASX's CCPs may also require clearing participants to deposit AIMs when their relevant position is in excess of, or is likely to exceed, various risk thresholds such as Stress Test Exposure or CBPL.
 - AIMs relating to stress test exposure provide the ASX CCPs with additional protection against potential losses in extreme but plausible market conditions. They are calculated on a daily basis and levied (as required) upon clearing participants in respect of the calculated exposure of their total cleared portfolio relative to their financial capacity and standing.
 - The ASX CCPs' CBPLs are designed to prevent a clearing participant from taking excessive risk relative to its capital, and thereby disproportionately increasing a ASX CCP's risk to its default relative to other clearing participants. Where a clearing participant's initial margin exceeds its limit, the ASX CCP requires AIMs from the clearing participant, the amount called to ensure its risk is adequately supported by its capital. The CBPL is set at a fixed amount for banks and, subject to certain criteria, for bank-affiliated clearing participants on ASX Clear (Futures), otherwise it is three times its NTA on ASX Clear (Futures), or three times liquid capital (or Tier 1 capital for banks) on ASX Clear.
- For Extra Margins, ASX Clear (Futures) may also require clearing participants to deposit extra margins in relation to large open positions or price movements.

ASX Clear has powers under its Operating Rules to require additional margins from its clearing participants. In practice, these powers would be used to protect ASX Clear where it believes that the clearing participant's counterparty standing or open positions requires further risk mitigation.

As an SSF

For ASX SSFs, this standard is not applicable. See Key Consideration 1 for further detail.

Key Consideration 3:

A SSF should cover its current and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources (see SSF Standard 5 on collateral). In the case of a deferred net settlement (DNS) SSF in which there is no settlement guarantee, but where its participants face credit exposures arising from its settlement processes, the facility should maintain, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.

SSF 4.4

As a SSF:

For ASX SSFs, this standard is not applicable. See Key Consideration 1 for further detail.

Key Consideration 4:

A CCP should cover its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources. In addition, 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 to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure for 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 for the CCP in extreme but plausible market conditions.

In all cases, a CCP should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount of total financial resources it maintains.

CCP 4.4

As a CCP:

As set out in the Supplementary Interpretation of the FSS for Central Counterparties (issued 27 October 2014) the RBA considers both of ASX's CCPs to be of systematic importance in multiple jurisdictions. As a result of this Supplementary Interpretation, each ASX CCP is required to maintain financial resources to cover the default of the largest two participants and their affiliates (by credit exposure) in extreme but plausible market conditions.

Both ASX Clear (Futures) and ASX Clear maintain sufficient financial resources to cover the credit exposure in the event of a default of the two clearing participants and their affiliates that generate the largest aggregate credit exposure in extreme but plausible market conditions with a high degree of confidence.

The ASX CCPs' Operating Rules and Procedures provide the ASX CCPs with powers to ensure that the ASX CCPs cover current and potential future exposures to clearing participants with a high degree of confidence using margin and other prefunded financial resources.

The ASX CCPs' Operating Rules and Procedures detail the prefunded financial resources and the order in which these are applied in a default.

The ASX CCPs stress test these financial resources on a daily basis to ensure they are adequate to manage the default of the two largest clearing participants and their affiliates.

Further details of the risk mitigation techniques available to the ASX CCPs to help manage clearing participant default are set out on the [ASX website](#).

Key Consideration 5:

A CCP should determine the amount and regularly test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. A CCP should have clear procedures to report the results of its stress tests to appropriate decision makers at the

CCP and to use these results to evaluate the adequacy of and adjust its total financial resources. Stress tests should be performed daily using standard and predetermined parameters and assumptions.

On at least a monthly basis, a CCP should perform a comprehensive and thorough analysis of stress-testing scenarios, models and underlying parameters and assumptions used to ensure they are appropriate for determining the CCP's required level of default protection in light of current and evolving market conditions.

A CCP should perform this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by a CCP's participants increases significantly.

A full validation of a CCP's risk management model should be performed at least annually.

CCP 4.5

As a CCP:

Both ASX CCPs conduct rigorous stress testing to ensure that sufficient total financial resources are available in the event of the default of the two largest clearing participants and their affiliates. Stress testing results are regularly reported to the RBA.

Both ASX CCPs use standard and predetermined parameters and assumptions in their capital and liquidity stress testing.

The ASX CCPs' Operating Rules and Procedures give the ASX CCPs the power to adjust the stress testing methodology to account for any structural changes in the markets they clear, or to capture significant position concentrations on ASX CCP capital.

Model validation is in line with the ASX CCP Model Risk Framework, which defines validation and reporting methods of model reviews. Model validation is performed on a regular basis in compliance with the RBA's FSS requirement for independent and comprehensive model reviews. For model validation, refer to Principle 2, Key Consideration 6 (Risk Management of Models). Summary reports relating to back-testing and sensitivity analysis are also produced on a monthly basis.

Key Consideration 6:

In conducting stress testing, a CCP should consider the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods.

Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward looking stress scenarios in a variety of extreme but plausible market conditions.

CCP 4.6

As a CCP:

The CST methodology for ASX Clear and ASX Clear (Futures) is reviewed regularly to ensure that the method and assumptions remain conceptually sound, and are reflective of the market and regulatory environment.

As part of that review, the scenarios used in stress testing are confirmed to be sufficiently extreme to rigorously stress all identified sources of credit risk in the event of a default while retaining a level of plausibility that supports using the results for risk management.

Stress scenarios for both ASX CCPs are based on a combination of historical observations of extreme events, theoretical scenarios based on statistical techniques and calibrated to a 1 in 20 year likelihood of occurrence, and hypothetical or forward looking scenarios incorporating a level of expert judgement. In each scenario, every product's price or yield, and where applicable, volatility, is stressed, including collateral.

The stress period of risk (SPOR) for each product depends on the product:

- Liquid futures and cash equity products generally have a 2 to 3 day SPOR.
- Less liquid futures and equity options have a 3 to 4 day SPOR.
- Energy and OTC rates products have a 5 day SPOR.

ASX Clear (Futures) stress testing encompasses 456 historical, 68 theoretical and 151 hypothetical scenarios.

ASX Clear scenarios cover 300 historical, 240 theoretical and 98 hypothetical scenarios.

In addition, a subset of each CCP's historical and hypothetical scenarios are common to both clearing houses.

FSS: A CCP should have clearly documented and effective rules and procedures to report stress-test information to appropriate decision-makers and ensure that additional financial resources are obtained on a timely basis in the event that projected stress-test losses exceed available financial resources.

Where projected stress-test losses of a single or only a few participants exceed available financial resources, it may be appropriate to increase non-pooled financial resources; otherwise, where projected stress-test losses are frequent and consistently widely dispersed across participants, clear processes should be in place to augment pooled financial resources.

CCP 4.7

As a CCP:

ASX's CCPs report stress-test information to appropriate decision-makers daily and ensure that additional financial resources are available on a timely basis in the event that a projected stress-test loss on a Cover 2 basis, exceeds available financial resources.

The ASX CCPs' Operating Rules and Procedures allow for AIM to be called from a clearing participant where the ASXCCP deems the current level of cover from that clearing participant to be insufficient.

If stress testing indicates that potential exposures under stressed market scenarios exceed available financial resources, this triggers an automatic AIM call.

To determine the AIM requirements of a clearing participant, calculations take into account stress test scenarios which shift underlying prices (and volatility for options). The results from these calculations determine the Potential Stress Loss for each clearing participant under extreme but plausible market conditions. The Potential Stress Loss is then compared to the STEL assigned to the clearing participant. Each clearing participant is assigned a STEL in accordance with clearing Risk's assessment of their credit risk. Clearing participants with lower credit risk are allocated a higher STEL. A maximum Potential Stress Loss will be calculated for each clearing participant and will be compared against the STEL. Any participant whose Potential Loss exceeds their STEL will be required to lodge STEL related AIM with the ASX CCP. The size of such AIM will equal the excess of stress testing losses beyond the ASX CCP's financial resources, and, in a default, would be available to ASX Clear and ASX Clear (Futures) ahead of their own financial resources.

Factors that ASX would consider when determining an increase or change to default resources would be if stress-test results in excess of prefunded resources were persistent, significant and widespread.

Key Consideration 7:

An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI.

These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.

CCP 4.8, SSF 4.5

As a CCP:

The ASX CCPs have powers through the ASX Recovery Rulebook to fully address any credit losses and liquidity shortfall they may face from participant default and to replenish their financial resources following a participant default.

In addition to the existing powers to utilise the defaulter's collateral and the prefunded mutualised default resources to address credit losses, the new recovery rules provide the ASX CCPs with the following additional loss allocation tools:

- For recovery Assessments, each of the ASX CCPs has the power to call for additional cash contributions from non-defaulting participants. These are capped in aggregate at \$300 million for ASX Clear and \$600 million (less defaulter's contribution) for ASX Clear (Futures), with individual caps also applicable for each participant, for each default period.
- For payment reduction, ASX Clear (Futures) only has additional power to reduce (haircut) a broad range of its payment obligations to participants (e.g. variation margin payments due to participants with net in-the-money positions). This would not apply to obligations to repay initial margin.
- For complete termination, as a last resort, each of the ASX CCPs would have the power to terminate all open contracts at the ASX CCP with any residual losses of the ASX CCP allocated by haircutting settlement payments to participants on a pro-rata basis.

The ASX Recovery Rulebook also contains rules requiring participants and the ASX CCP to replenish the default fund following a default. The default fund would be replenished on an interim basis to a minimum fund size, as soon as reasonably practicable after completion of the final default management process for a default period and to final fund size not less than 22 business days after completion of the default management process. In the interim period until final replenishment, the ASX CCP may also call AIM if required to meet Cover 2 requirements.

As a SSF:

For ASX SSFs, this standard is not applicable. See Key Consideration 1 for further detail.

5

PRINCIPLE 5 – COLLATERAL

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

Key Consideration 1:

An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity and market risks.

CCP 5.1, SSF 5.1

As a CCP:

Acceptable collateral

- The ASX CCPs set strict criteria for the assets they accept as collateral, and ensure that:
 - Collateral is of a high credit standard, to mitigate the risk of a double default event (i.e. the default of a clearing participant and of the collateral issuer), and excessive levels of market volatility.
 - Collateral is liquid, enabling ASX's CCPs to liquidate the collateral in a timely fashion in the event of a default (and without any legal or operational impediments), and mark-to-market the collateral each day, based on good quality market prices prior to any default.
 - Collateral risks are managed through:
 - › valuation haircuts;
 - › related party collateral restrictions (which prevent clearing participants from posting their own debt or equity securities or equity of companies closely linked to them); and
 - › exception limits (where exceptions are granted in respect of related party collateral). Such exceptions are monitored on a regular basis.
- Details of acceptable collateral are set out on the [ASX website](#).
- The ASX CCPs review the eligibility of securities accepted as collateral on at least an annual basis, and more frequently as market circumstances dictate. This is set out in the ASX Collateral Policy.

As a SSF:

ASX SSFs do not act as direct or indirect counterparty to the settlement of transactions between participants of the facility and therefore their activities do not result in credit exposures for the ASX SSFs which need to be collateralised as a risk mitigant.

FSS: In determining its collateral policies, a CCP/SSF should take into consideration the broad effect of these policies on the market. As part of this, a CCP/SSF should consider allowing the use of collateral commonly accepted in the relevant jurisdictions in which it operates.

CCP 5.2, SSF 5.2

As a CCP:

The ASX CCPs take into account market liquidity in determining the eligibility of collateral.

Securities must be sufficiently liquid in order to be eligible as collateral and therefore should not have any material impact on market liquidity or pricing.

ASX Clear (Futures) accepts only fixed income collateral, specifically Australian government and state bonds as well as US Treasury bills (highly liquid and price information is readily available). It also accepts NZD, EUR, JPY, USD and GBP foreign currencies which is highly liquid and commonly accepted and traded in the Australian market.

ASX Clear (Futures) does not accept equity securities as collateral. However, ASX Clear does accept equities as collateral, specifically any security within the ASX200 equities. The acceptance of equities as collateral is a long-standing practice in the Australian equity market. ASX Clear also accepts ETFs as collateral where the ETF is large and liquid and/or the underlying asset is itself liquid and low risk.

As a SSF:

For ASX SSFs, this standard is not applicable. See Key Consideration 1 for further detail.

Key Consideration 2:

An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.

CCP 5.3, SSF 5.3

As a CCP:

The ASX CCPs use stressed market conditions, through-the-cycle approach, to set haircuts, where stress conditions are defined to a 99.9 percentile confidence level over a lookback period of 20 years. There are additional haircuts for collateral denominated in currencies other than either AUD or the currency of the exposure being collateralised (for example NZD).

Haircuts are set and reviewed at least annually.

Collateral is marked-to-marked daily (given the nature of the collateral accepted, valuation issues do not arise).

As a SSF:

For ASX SSFs, this standard is not applicable. See Key Consideration 1 for further detail.

Key Consideration 3:

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

CCP 5.4, SSF 5.4

As a CCP:

The calculation of collateral haircuts using stressed market conditions (see Key Consideration 2 above), means they are stable and not pro-cyclical.

As a SSF:

For ASX SSFs, this standard is not applicable. See Key Consideration 1 for further detail.

Key Consideration 4:

An FMI should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.

CCP 5.5, SSF 5.5

As a CCP:

The impact of concentrations on collateral holdings is mitigated by ASX's CCPs only accepting collateral where credit quality is transparent, either through externally verifiable standards (Government or state debt) or being a constituent of a major index (S&P ASX 200 or highly liquid ETFs). The standard for credit quality is an indication that those high quality instruments are liquid and with transparent and appropriate pricing.

ASX Clear monitors on a periodic basis, aggregate concentration levels for each constituent of the S&P ASX 200, or, for each ETF held as collateral, by each participant, against the following levels:

- 2% of free float adjusted shares outstanding; and
- 30% of two times the 90 day average daily traded volume.

Holdings of collateral from individual participants rarely exceed these levels. However if this occurs, the appropriateness of the holding is reviewed.

As a SSF:

For ASX SSFs, this standard is not applicable. See Key Consideration 1 for further detail.

Key Consideration 5:

An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.

CCP 5.6, SSF 5.6

As a CCP:

ASX's CCPs place a limit on the amount of collateral held by each participant that is denominated in currencies other than the margin requirement currency so as to limit the extent of reliance on the FX markets to swap this collateral into the currency in which it would be required in a default. ASX CCPs have the ability to use FX swaps to ensure that such non-matching currency can be used in a timely manner.

ASX Clear (Futures) holds collateral offshore in New Zealand and the United States. To ensure timely access to collateral in New Zealand ASX Clear (Futures) has obtained designation as a settlement system in New Zealand and implemented processes to support the repatriation of NZD collateral to Australia. ASX has identified no legal impediments to its processes for realising and repatriating USD collateral to Australia for participants that post USD collateral.

ASX Clear holds all cash and non-cash collateral accepted by ASX Clear in Australia.

As a SSF:

For ASX SSFs, this standard is not applicable. See Key Consideration 1 for further detail.

Key Consideration 6:

An FMI should use a collateral management system that is well designed and operationally flexible.

CCP 5.7, SSF 5.7

As a CCP:

ASX's CCPs have collateral management systems that manage collateral lodgement against margins. The systems have the ability to allocate collateral in order to optimally manage collateral coverage of exposures. The systems also facilitate valuation of collateral through an automated daily pricing process.

As a matter of policy, the ASX CCPs do not re-hypothecate collateral to avoid the risk of being unable to return the collateral to the participant on request. However, in the event that a clearing participant defaults, ASX Clear (Futures) may re-hypothecate some or all of the securities deposited with it by the defaulting clearing participant for purposes relating to the management of the clearing participant's default.

As a SSF:

For ASX SSFs, this standard is not applicable. See Key Consideration 1 for further detail.

6

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.

Key Consideration 1:

A CCP should have a margin system that establishes margin levels commensurate with the risks and particular attributes of each product, portfolio and market it serves.

CCP 6.1

As a CCP:

The ASX CCPs operate margin systems that ensure margin levels are commensurate with the risks and particular attributes of each product, portfolio and market.

The choice of margin system is driven by the specific requirements and characteristics of each market/ product class. The systems themselves use proven methodologies:

The margin systems used for Initial Margin are as follows

- **ASX Clear:**
 - Equity Derivatives: Standard Portfolio Analysis of Risk (SPAN)
 - Cash Equities: Combination of Historical Simulation VaR (HSVaR) and Flat Rates
- **ASX Clear (Futures):**
 - Futures and Futures Options: SPAN
 - OTC Interest Rate Derivatives: Filtered Historical Simulation VaR (FHSVAr)

The SPAN methodology involves calculating the change in portfolio value under a range of prescribed potential price and implied volatility scenarios, in which all products are re-valued assuming the price and/or volatility either increases, decreases or stays the same. The size of the price and implied volatility changes are calibrated using a historical VaR approach.

HSVaR is an industry standard methodology that uses realised historical risk factor returns to simulate a distribution of potential future portfolio P&Ls over the risk horizon. The initial margin amount is then taken as the desired quantile of loss. Note that portfolio diversification and spread risk are captured implicitly, and filtered HSVaR is a variant of this approach that allows for different weighting to be attributed to different historical observations.

For major products on ASXCLF, additional margin (Liquidity Margin Add-on) may be charged to participants holding large positions relative to the turnover in the market.

Key Consideration 2:

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

CCP 6.2

As a CCP:

- For listed products, intra-day and official end-of-day settlement prices are used for margining depending on the intra-day or end of day run. Settlement prices are independently reviewed and validated against published price determination rules.

- For OTC Interest Rate Derivatives, standard mark-to-market methodologies in conjunction with end-of-day market interest rates are used for margining. Interest rate curves are updated hourly for pricing and margin.

- For products margined under SPAN (ETDs and ETOs), the margin parameters are calibrated via a VaR approach using closing price returns over the past 1 year and 5 years, at a confidence level of 99.5%. The higher of the two parameters is used, subject to an analytical floor (described below).

- Pricing models are validated. For further information refer to Principle 2, Key Consideration 6 (Risk Management of Models).

Key Consideration 3:

A CCP should adopt initial margin models and parameters that are risk based and generate margin requirements sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin should meet an established single-tailed confidence level of at least 99 per cent with respect to the estimated distribution of future exposure.

For a CCP that calculates margin at the portfolio level, this requirement applies to each portfolio's distribution of future exposure. For a CCP that calculates margin at more granular levels, such as at the sub-portfolio level or by product, the requirement must be met for the corresponding distributions of future exposure.

The model should (a) use a conservative estimate of the time horizons for the effective hedging or close out of the particular types of products cleared by the CCP (including in stressed market conditions), (b) have an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products and, (c) to the extent practicable and prudent, limit the need for destabilising, procyclical changes.

CCP 6.3

As a CCP:

- The ASX CCPs ensure that margin requirements are sufficient to cover their potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default.

- The margin models assume a conservative time horizon for hedging and close out between 2 and 7 days.

A summary of the margin methodology used for each product class, including confidence intervals, lookback periods, anti-procyclicality measures and assumed close out periods, are highlighted in the following table:

| Product Group | Margin Methodology | Confidence Intervals | Lookback Period (Years) | Anti-Procyclicality Measure | Close-out Assumption(Days) |
|-----------------------------|--------------------|----------------------|-------------------------|-----------------------------|-----------------------------------|
| Equity Derivatives | SPAN | 99.5 | 1 and 5 | SVaR Floor | 3 |
| Cash Equity – VaR | HSVaR/Flat Rates | 99.7/95 | 5 | No | 2–3 |
| Exchange-Traded-Derivatives | SPAN | 99.5 | 1 and 5 | SVaR Floor | 2 (rates, equities) 3 (energy) |
| OTC | FHSVAr | 99.7 | To GFC period | No | 5–7 |

Procyclicality in ETD and ETO margins is addressed by including analytical floors for the margin parameter based on stressed periods for all products. The floors are calibrated to the worst 5 year parameter over the past 20 years. To avoid margin parameters always increasing, the floors are calibrated to a confidence level between 99% and 99.5%. The stressed VaR floors ensure that margins do not reduce to very low levels during periods of low volatility.

For OTC margins, the long look back period that incorporates the GFC stressed rates market acts as a floor.

Key Consideration 4:

A CCP should mark participant positions to market and collect variation margin at least daily to limit the build-up of current exposures. A CCP should have the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants.

CCP 6.4

As a CCP:

The ASX CCPs' Operating Rules and Procedures give the ASX CCPs authority to collect margins on an intraday basis in order to limit the build-up of current exposures.

Each of the ASX CCPs has slightly different arrangements for the calling and collecting of margins.

For ASX Clear:

- Cash equities transaction (risk and mark to market) margins are calculated based on end of day prices and settled at 10.30am the following business day. Currently there is no intraday margin called against cash equities transactions.
- Derivatives transaction (Exchange Traded Options) margins are calculated based on end of day prices and settled at 10.30am the following business day. If during the day the S&P/ASX 200 index moves by greater than 1% in either direction then an ad hoc intraday margin call will be made and clearing participants will be called for margin where the initial margin on their portfolio has been eroded by more than 25% and the margin call is greater than \$100,000.

For ASX Clear (Futures):

- Futures (Futures and Options over Futures) margins are calculated based on end of day prices and settled at 11:00 am the following business day.
- There are scheduled intraday margin calls at 7:30am, 11.10am and 1:30pm and clearing participants will be called for margin where the initial margin on their portfolio has been eroded by a certain percentage and the margin call is greater than \$1 million or the shortfall exceeds the dollar margin threshold which is different for house and client and reflects the credit assessment for the participant.
- Overnight margin calls are made at 2am for eligible clearing participants (Refer to ASX website for eligible CPs and the process).

For scheduled and ad hoc intra-day margin calls, the impacted clearing participants are notified via email and given one hour to settle their margin obligation via Austraclear (with the exception of ASX Clear where intra-day calls are required to be settled within two hours), unless otherwise advised.

Key Consideration 5:

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

CCP 6.5

As a CCP:

The margining methodology used by the ASX CCPs allows for margin requirements to be offset between products, recognising that the risk of the combined position may be less than the sum of the outright risks. The size of the margin reduction is related to the degree of correlation observed historically between the two products. The risk reduction is only allowed within a ASX CCP and not across ASX CCPs.

ASX Clear (Futures) Exchange Traded Derivatives and ASX Clear Exchange Traded Options: SPAN methodology allows offsets in the form of 'inter-commodity spread concessions'. These offsets reduce the net margin requirements for combined positions in different products, depending on the level of correlation observed between the pair. Eligibility for inter-commodity spread concessions also considers economic fundamentals (for example no benefits are recognised between different asset classes). ASX uses sensitivity analysis to verify the reliability of correlations between products used in calculating inter-commodity spread concessions.

ASX Clear Cash Market: ASX Clear applies margin at a portfolio (clearing participant) level for its cash market securities using its HSVaR methodology. This implicitly reduces the margin requirements for any products within the portfolio that have displayed negatively correlated risks over the previous 5 years. The use of historical simulation over a 5-year period establishes the significance and reliability of these correlations by taking the worst movements at a certain confidence interval.

ASX Clear (Futures) OTC Market: ASX Clear (Futures) applies FHSVAr methodology in its margining approach for the OTC interest market. This implicitly reduces the margin requirements for any products within the portfolio that have displayed negatively correlated risks over the observation period. The use of historical simulation over an extended period (currently back to the GFC period) establishes the significance and reliability of these correlations taking the worst correlated movements and the set confidence interval to apply margins.

ASX Clear (Futures) also offers OTC participants the ability to choose to cross-margin specific directly cleared interest rate futures by allocating these positions to their OTC derivatives portfolio. If participants choose to do so, the allocated interest rate futures are margined under the OTC IRS FHSVAr model, rather than using the SPAN methodology. FHSVAr margining may result in more conservative estimates of correlations than SPAN, and higher margins (lower offsets) as interest rate futures in the pool under the OTC IRS Historic VaR methodology are subjected to a five-day rather than a one to two day close-out assumption.

During stressed markets correlations between two products can vary (typically they tend to increase, although idiosyncratic stresses can cause otherwise normally correlated risk factors to de-correlate). The SPAN correlation parameters (ICCs and ICSs) are calibrated on a quarterly basis, using 1 year look-back period. The reason for the 1 year look back period is to provide stability in the parameter. For products margined using a portfolio HSVAR approach where the portfolio diversification benefits are incorporated implicitly, the longer lookback period provides stability to the correlation benefit/spread charges contribution. However, a potential drawback with this approach is the slowness of the models to react to correlation breaks. To cover this risk, the CST includes specific stress tests focusing on correlation breaks.

Key Consideration 6:

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

CCP 6.6

As a CCP:

- Both ASX CCPs monitor overall margin coverage in near real time.
- Daily backtesting of margin coverage, both static and dynamic, is performed for both ASX CCPs and is critical to ensuring margin coverage is appropriate for market conditions. Where backtesting indicates that a model is not performing in line with expectations, adjustments may be made to models including the use of scalars and/or overrides. Where such interventions are required, the level of adjustment will be informed by regulatory and internal backtesting requirements, as well as the error term associated with a model's calibration.
- Sensitivity analysis is performed on range of risk parameter inputs into ASX CCPs' margin models, including lookback periods, confidence intervals, inclusion of stressed periods, decay factors, volatility floors, changes to MPOR length, use of relative versus additive returns.
- Backtesting performance is complemented with forward looking market indicators to determine whether current margin model settings are adequately covering risks.
- If a margin model is persistently underperforming according to its backtesting, the model will be investigated to determine whether the issue lies with the margin model, the data used in the margin model or the backtesting itself. In many cases, a single market event can result in multiple breaches being counted due to the use of overlapping returns. In other cases, the relative small sample size (1 year lookback) can mean that a few statistically plausible breaches are treated as backtesting failures. In this case, the backtesting results on their own can be misleading. If, after investigation of the causes of breaches, the margins are deemed insufficient, ASX may increase margins by a factor, chosen such that backtesting performance is satisfactory.

Key Consideration 7:

A CCP should regularly review and validate its margin system.

CCP 6.7

As a CCP:

- There is a model validation standard and an approach which addresses all models including margin models and lays out the framework for independent and internal model validations which are carried out on at least an annual basis. The model validation framework is also subject to periodic review.
- Margin model validation processes are in place. In addition ongoing back testing and sensitivity analysis of margin model inputs and outputs is carried out.
- Model validation also includes the evaluation of model assumptions and conceptual soundness commensurate with the risks and particular attributes of the product and the market in which the model operates.

Note if the margin model has been materially changed or the market materially changed an earlier review may be required.

Principle 2 (Governance), Key Consideration 6 contains further details on the risk management of models.

FSS: In designing its margin system, a CCP should consider the operating hours of payment and settlement systems in the markets in which it operates.

CCP 6.8

As a CCP:

All AUD margin calls must be settled through Austraclear. It is business practice to provide participants with 2 hours' notice on ASX Clear, or 1 hour on ASX Clear (Futures), in which to settle a margin call. Therefore, as Austraclear closes at 4:25pm, the latest that ASX will initiate an intraday margin call is approximately 2pm. In extreme circumstances, the ASX CCPs may elect to shorten the notice period, however, any shortened notice would still be required to meet Austraclear's opening hours, which are stated in the Austraclear Regulations.

The ASX CCPs' Operating Rules and Procedures also state the operating hours of the payment and settlement systems.

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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.

Key Consideration 1:

An FMI should have a robust framework to manage its liquidity risks from its participants, settlement agents, nostro agents, custodian banks, liquidity providers and other entities.

CCP 7.1, SSF 6.1

As a CCP:

ASX Clearing Corporation (ASXCC) manages the investment of clearing participant cash margins and default funds for both of ASX's CCPs.

The ASX CCPs' liquidity risk management framework is set out in the ASX Liquidity Risk Policy and the ASXCC Investment Mandate which is implemented by using appropriate systems, models, processes and procedures.

100% of the capital for both ASX CCPs (from ASX and from participants) is in cash whilst the majority of margin for ASX Clear (Futures) is received as cash.

ASX Clear (Futures) sets a limit for each participant on the proportion of initial margin requirements that can be met with collateral in currencies other than the margin requirement currency to avoid undue reliance on FX markets to generate liquidity when required.

Although not an ADI, ASXCC has a direct Exchange Settlement Account (ESA) with the RBA and a direct Exchange Settlement Account System (ESAS) with the Reserve Bank of New Zealand (RBNZ) (allowing for the repo of investments directly with the RBA and the RBNZ).

ASX's CCPs provide participants with information to help them manage their liquidity needs and risks, which in turn protects the ASX CCPs to the extent this enhances participants' own liquidity risk management.

ASXCC INVESTMENT MANDATE

The primary objective of the investment mandate is to ensure that the ASXCC investment portfolio is made up of highly liquid products with a high credit quality and low levels of market risk. This is driven by the ASX's CCP's requirement to have timely, certain and ease of access to funds at all times, including in the event of clearing participant default.

This objective is achieved by setting appropriate limits and restrictions on products and on the amount and source of credit, liquidity and market risk exposures (including limits for individual issuers/counterparties).

LIQUIDITY REQUIREMENT

The ASX Liquidity Risk Policy requires that the ASXCC CCPs hold sufficient liquid assets to cover the following liquidity requirements:

- The Default Liquidity Requirement (DLR).
 - Liquidity needs resulting from the default of the two clearing participants that would, in extreme but plausible stressed market conditions generate the largest aggregate payment obligation to the CCP. The DLR is further described under Key Consideration 4 below.
- Ordinary Liquidity Requirement (OLR).
 - Daily liquidity needs based on maximum ASXCC cash flows in the previous 12 months.
- Additional Liquidity Requirement (ALR).
 - Potential unexpected non-default related liquidity needs based on maximum historical ASXCC cash outflows.

LIQUID RESOURCES

The aggregate of the DLR and the OLR is the Core Liquidity Requirement (CLR) and is met by holding high quality liquid investments – specifically Cash, Australian Government and State Government Bonds and NZ Government Bonds (directly or via reverse repo); or the G4 equivalent (via repo).

A broader range of liquid investments can be held as Additional Liquidity in addition to high quality liquid investments eligible to meet the CLR. This broader range of liquid investment include Bank Bills, Negotiable Certificate of Deposits and ADI issued securities.

All securities held by ASXCC are highly liquid and can be used to generate same day liquidity:

- all AUD securities held by ASXCC are eligible for a repurchase agreement at the RBA;
- all NZD securities are eligible for a repurchase agreement at the RBNZ; and
- Government securities denominated in EUR, GBP, JPY and USD can be sold for settlement the following business day and have an active repo market providing same day liquidity.

Liquid resources held are further described under Consideration 5 below and Principle 16 “Custody and Investment Risk”.

ADDITIONAL LIQUID RESOURCES

For ASX Clear (Futures):

- There are intraday liquidity facilities are maintained with two commercial banks for EUR, GBP, JPY and USD
- It relies on commercial banks to facilitate the acceptance of cash collateral in EUR, GBP, JPY and USD currencies.

For ASX Clear

- ASX Clear has access to bilateral (unsecured) committed bank facilities provided by highly rated ADIs as additional liquid resources and used for purposes in accordance with its obligations under the Operating Rule Book.
- The ASX Clear rule book gives it the contractual right to use Offsetting Transaction Arrangements (OTAs) with non-defaulting participants who are counterparties to outstanding sale transactions with a defaulting participant.
- OTAs are a form of contingent liquidity from participants available at the option of the CCP and which are “funded” by the sale proceeds due to be received by that participant from the defaulting participant.
- OTAs would be used in a clearing participant default where ASX Clear had insufficient liquidity resources to meet the payment obligations of the defaulting participant.
- ASX Clear also provides monthly disclosures on participants’ cash market contingent liquidity exposures including the potential use of OTAs.

As a SSF:

The SSFs do not act as direct or indirect counterparty to the settlement of transactions between participants of the facility.

All AUD transactions are settled DvP across participants banks’ exchange settlement accounts at the central bank, where the payment leg settles irrevocably, and prior to the settlement of securities.

As settlements are completed DvP, liquidity risks in the operation of each SSF does not arise.

Key Consideration 2:

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

CCP 7.2, SSF 6.2

As a CCP:

The ASX CCPs' daily settlement and funding flows are identified, measured and monitored on a timely basis, including on an intraday basis through a number of systems.

Daily reports of key risk indicators, related to liquidity demands are reviewed to ensure there are no issues. Margin and collateral holding information feeds into ASX's Treasury Management System every morning (or intraday if required). This allows the ASX CCPs' Treasury to view this information and enter trades required to manage daily cash-flows into ASX's Treasury Management System. Clearing and Settlement Operations then use daily settlement reports produced by the Treasury Management System to generate settlement instructions in Austraclear, which results in cash flow movements to be monitored in RITS.

As a SSF:

As settlements are completed DvP, intraday liquidity requirements to be met by each SSF does not arise. For further details see Key Consideration 1 above.

Key Consideration 3:

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

SSF 6.3

As a SSF:

As settlements are completed DvP, intraday liquidity to manage deferred settlement requirements do not arise in the ordinary course of business. For further details see Key Consideration 1 above.

Key Consideration 4:

A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments and meet other payment obligations on time with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of

the participant and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with a more complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.

CCP 7.3

As a CCP:

As set-out in the Supplementary Interpretation of the FSS for Central Counterparties (issued 27 October 2014) the RBA considers both of ASX's CCPs to be of systemic importance in multiple jurisdictions.

Consistent with this Supplementary Interpretation, ASX Liquidity Risk Policy requires that each ASX CCP should maintain, with a high degree of confidence, sufficient liquidity to manage the default of the two largest participants and their affiliates in extreme but plausible market conditions and also meet reasonably foreseeable operational cash flows.

ASX's CCPs primary liquidity requirement is the CLR.

- The CLR is calculated on a currency specific basis and the sum of the currency specific DLR for each ASX CCP and the currency specific OLR across both ASX CCPs.
- The DLR for ASX Clear is in AUD only and is equal to the sum of the ASX CCP's default fund and the aggregate margin requirements of the two largest participants.
- The DLR for ASX Clear (Futures) is calculated for AUD and NZD currencies and is equal to the sum of the AUD and NZD currency specific liquid stress test results and the AUD and NZD aggregate margin requirements respectively of the 2 participants and their affiliates that result in the largest combined payment obligation to the ASX CCP.
- The currency specific OLR is intended to cover day to day liquidity requirements in each currency and is calculated based on maximum ASXCC cash flows in the previous 12 months.

The ASX's CCPs also have an ALR for AUD and NZD currencies which is designed to reflect the potential for unexpected non-default related liquidity needs.

ASXCC's Investment Mandate establishes a clear definition of liquid assets that can be used to meet the ASX CCPs CLR and ALR (see Key Consideration 5).

ASX's CCPs apply haircuts to the value of ASXCC's investments when assessing the adequacy of liquid resources against the currency specific CLR and ALR. The haircuts are based on worst historical price movements and hypothetical forward looking scenarios.

ASX's CCPs measure whether there is sufficient currency specific liquid assets to meet the combined value of the currency specific CLR and ALR on a daily basis.

ASX Clear and ASX Settlement Operating Rules allow for the creation of OTAs with non-defaulting clearing participants in the event that a clearing participant fails to meet a payment obligation in relation to a cash equity transaction. This arrangement settles obligations and entitlements under ASX CCP Batch Instructions which would otherwise fail due to outstanding payment obligations. OTAs would be used in a clearing participant default where ASX Clear had insufficient liquidity resources to meet the payment obligations of the defaulting participant.

ASX Clear has implemented a target minimum cash market liquidity buffer to cover the cash market liquidity needs (in addition to the potential use of OTAs) in the event of the default of the two participants and their affiliates that would generate the largest aggregate payment obligation for derivatives. The setting of this buffer is intended to avoid over-reliance on the use of OTAs.

Key Consideration 5:

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

CCP 7.4, SSF 6.4

As a CCP:

ASXCC is the controlling entity for the treasury investments for both ASX Clear and ASX Clear (Futures).

- ASXCC's AUD denominated investments are settled across ASXCC's ESA held with the RBA.
- NZD denominated investments are settled across the ESAS with the RBNZ.

ASXCC invests funds in accordance with the Investment Mandate - this covers both cash margin collected and prefunded default funds.

The primary driver of the investment mandate is to ensure that the ASXCC investment portfolio is made up of highly liquid products with high credit quality and low levels of Market Risk. This is driven by the ASX CCP's requirement to have timely, certain and ease of access to funds at all times, including in the event of clearing participant default.

ASXCC's Investment Mandate and ASX Liquidity Policy currency specific CLR is met through holding the following investments:

- Cash held in accounts at the RBA, the RBNZ or creditworthy commercial banks that is available for use within two hours.
- Securities issued by the Australian Government or semi-governments or the New Zealand government that are eligible for repurchase transactions with the RBA and the RBNZ.
- Securities issued by the German, Japanese, UK and US governments (held as collateral for repo transactions).

All other AUD and NZD liquid assets held in ASXCC's portfolio, such as bank bills negotiable certificates and ADI issued securities (all eligible for repurchase transactions with the RBA and the RBNZ) are eligible to meet the AUD and NZD currency specific ALR specified in the ASXCC Investment Mandate and Liquidity Policy. Principle 16 "Custody and Investment Risk" contains further detail on the ASXCC Investment Mandate.

As a SSF:

This Key Consideration is not applicable. For further details see Key Consideration 1 above.

Key Consideration 6:

An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme

market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as part of its liquidity plan.

CCP 7.5, SSF 6.5

As a CCP:

As described above, ASXCC has a direct ESA with the RBA and a direct ESAS with the RBNZ.

These accounts allow ASXCC to enter into repo of eligible investments directly with the RBA and RBNZ.

As specified in the ASXCC Investment Mandate:

- All AUD denominated securities held (directly or via repo) must be on the repo eligible securities list of the RBA; and
- All NZD denominated bonds held (directly or via repo) must be on the repo eligible securities list of the RBNZ.

This ability to repo securities held with the RBA and RBNZ provides additional assurance as to ASXCC's ability to generate liquidity from these securities as required.

ASX Clear (Futures) can access, via ASXCC, EUR, GBP, JPY and USD liquidity under intraday liquidity facilities with two commercial banks.

As a SSF:

This Key Consideration is not applicable. For further details see Key Consideration 1 above.

Key Consideration 7:

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

CCP 7.6, SSF 6.6

As a CCP:

ASX's CCPs have access to AUD and NZD liquidity on a secured basis through standing facilities (against eligible collateral) with the RBA and the RBNZ respectively.

ASX's CCPs periodically test their procedures for accessing ASXCC's liquid resources through disposal of securities or generating liquidity via repo.

ASX Clear periodically draws down an element of the committed bank facility to test the readiness of the bank provider to provide funds in line with the timelines in the facility (same day or next day depending on when notice is given).

As a SSF:

This Key Consideration is not applicable. For further details see Key Consideration 1 above.

Key Consideration 8:

An FMI with access to central bank accounts, payment services or securities services should use these services, where practical, to enhance its management of liquidity risk.
CCP 7.7, SSF 6.7

As a CCP:

- All AUD payments (with one exception) and all NZD payments by the ASX CCPs use accounts with the central banks – RBA and RBNZ respectively.
- The only AUD exception relates to ASXCL which, in the event of the default of a clearing participant, would use an account with a commercial bank to provide funds into the batch settlement for cash markets to cover the payment obligations of the defaulting participant.
- Bank accounts for G4 currencies are held with commercial bank accounts as ASXCC is not eligible to maintain an account in the individual currency with the relevant central bank.

As a SSF:

- This Key Consideration is not applicable. For further details see Key Consideration 1 above.

Key Consideration 9:

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

CCP 7.8, SSF 6.8

As a CCP:

- The ASX CCPs use two types of stress tests to assess the adequacy of their liquidity resources:
 - default related stress testing; and
 - non-default related stress testing.
- The adequacy of liquidity resources in the event of clearing participant default is assessed on a daily basis using the Liquidity Stress Testing model.
 - In order to estimate the liquidity resources required to manage clearing participant default events, the clearing participant positions are stressed using possible stress scenarios that reflect adverse market movements in extreme but plausible market conditions (and, in the case of ASX Clear, different settlement/close-out assumptions).

- These scenarios are either historical (i.e. reflecting actual historical market movements) or possible future scenarios (either hypothetical or theoretical).
- The largest liquidity requirement across all these scenarios assuming the default of two clearing participants (and their affiliates) which give rise to the largest payment obligation (irrespective of credit standing of the participant), is taken as the DLR each day (for ASX Clear (Futures)) or used to monitor the adequacy of the liquidity resources (for ASX Clear).
- The LST model is aligned with the ASX CST model which uses a comprehensive range of stress scenarios, however, ASX's assumptions on portability and settlement cashflows differ between CST model and the LST model.

ASX's CCPs supplement their default liquidity stress testing with four currency specific non-default liquidity stress test scenarios. These scenarios consider stresses to currency specific cash margin outflows across the ASX CCPs. The results from the non-default scenarios are used to assess the adequacy of liquidity composition of the ASXCC investment portfolio.

The LST model (i.e. default liquidity) and the non-default liquidity testing is reviewed as part of the annual. The results of liquidity stress testing and currency specific stress tests are regularly reported to ASX senior management, Clearing and Settlement Boards and the RBA.

As a SSF:

This Key Consideration is not applicable. For further details see Key Consideration 1 above.

Key Consideration 10:

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

CCP 7.9, SSF 6.9

As a CCP:

ASX Clear and ASX Settlement Operating Rules allow the creation of OTAs with non-defaulting clearing participants in the event that a clearing participant fails to meet a payment obligation in relation to a cash equity transaction. This arrangement settles obligations and entitlements under ASX CCP Batch Instructions which would otherwise fail due to outstanding payment obligations. OTAs would be used in a clearing participant default where ASX Clear had insufficient liquidity resources to meet the payment obligations of the defaulting participant.

ASX CCPs, through the ASX Recovery Rulebook, have additional tools to enable them to address liquidity shortfalls they may face from participant default (specifically Recovery Assessments) and in the case of ASX Clear (Futures), payment reduction powers (variation margin gains haircutting).

The Recovery Rules also give the ASX CCPs the powers to replenish their financial resources following a participant default. Under the 2016 Replenishment Deed between ASX Ltd and the ASX CCPs, ASX is obligated to meet its replenishment obligations as set out in the Recovery Rules.

As a SSF:

In the event of a default of an ASX Settlement participant, (where the DvP settlement takes place in one market level batch per day), ASX Settlement will seek to remove the defaulting participants obligations and progress with the settlement of all non-related obligations for other ASX Settlement participants.

As settlements are completed DvP, intraday, liquidity to manage deferred settlement requirements do not arise in the ordinary course of business. For further details see Key Consideration 1 above.

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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.

Key Consideration 1:

An FMI's rules and procedures should clearly define the point at which settlement is final.
CCP 8.1, SSF 7.1

As a CCP:

The settlement of obligations arising in the ASX CCPs is governed by the ASX's CCPs' Operating Rules and Procedures which describe the point at which the payment of money or the transfer of assets is final. Refer to:

- **ASX Clear Operating Rules**
 - Rule 4.20 - which provides for T+2 settlement of novated cash market and derivatives transactions in accordance with the ASX Settlement Rules;
 - Section 12 (Rules 12.4, 12.10, 12.15 and 12.17) – which provides for the discharge of net settlement and payment obligations for novated cash market and derivatives transactions, and the daily settlement of novated derivatives transactions; and
- **ASX Clear (Futures) Operating Rules**
 - Futures Rule 44 – which provides for the daily settlement of novated futures contracts;
 - Futures Rule 103 – which provides for the manner and form of settlement and the irrevocability of all payments and deliveries in accordance with the rules;
 - OTC Rule 5.8 – which provides for the payment of OTC Daily Variation Margin;
 - OTC Rule 8.2 – which provides a framework for payments by OTC participants and the discharge of net obligations; and
- **ASX Recovery Rules**
 - Rule 8.3 – which provides that a net (or reduced) payment made by the ASX CCPs in accordance with the ASX Recovery Rules discharges their obligations.

The timing and finality of the ASX CCPs' settlement obligations relating to cash and securities are also affected by the links that the ASX CCPs have with other FMIs (refer below).

CASH SETTLEMENTS

ASX Clear:

- Margin payments are settled through Austraclear, after receipt of a message from the Reserve Bank RITS indicating that cash has settled across ESAs at the RBA. The point at which settlements in Austraclear and RITS are final is set out in the Austraclear and RITS Regulations.

ASX Clear (Futures):

- All AUD payment obligations are settled through Austraclear after receipt of a message from RITS indicating that cash has settled across ESAs at the RBA. The point at which settlements in Austraclear and RITS are final is set out in the Austraclear and RITS Regulations.

- All NZD payment obligations are settled through Payments NZ's High Value Clearing System (HVCS) on a real time gross settlement basis across ESAS accounts at the RBNZ. The point at which settlements in ESAS are final is set out in the ESAS Terms and Conditions.
- All other foreign currency margin payments are settled indirectly with commercial banks and settlement is considered final once the payment is cleared in the account of ASX Clearing Corporation (ASXCC) with the commercial bank.

SECURITIES SETTLEMENTS /PHYSICAL DELIVERY:

ASX Clear:

- Securities settlements resulting from cash equity trades novated by ASX Clear are settled in accordance with the ASX Settlement Operating Rules. The settlement process operates on a DvP Model 3 basis, where cash payments and securities transfers are settled simultaneously within a single daily multilateral net batch (comprising both novated and non-novated transactions). The securities leg of equity trades takes place in CHES, while the corresponding interbank cash obligations settle through RITS on a multilateral net basis. The point at which the securities settlement is final is set out in the ASX Settlement Operating Rules. The point at which the settlement of interbank payment obligations is final is set out in the RITS Regulations.
- ASX Clear accepts cash equities as collateral by taking a security interest in accordance with the ASX Settlement Operating Rules (refer to Rule 14.6). The ASX Settlement Operating Rules set out the point at which ASX Clear's security interest is final.

ASX Clear (Futures):

- Only ASX Clear (Futures) has contracts requiring physical delivery of the underlying asset on the settlement date of the contract. ASX Clear (Futures)' arrangements ensure that delivery only occurs if payment occurs.
- ASX Clear (Futures) accepts the absolute transfer of highly liquid debt securities deposited in Austraclear as collateral. The point at which securities settlements in Austraclear are final is set out in the Austraclear Regulations.

ASX has obtained legal opinions that confirm that the provisions in the ASX CCPs' rules dealing with the payment of money and the transfer of assets are protected from reversal or invalidation under the laws of Australia (for both ASX CCPs), and New Zealand and the United States (for ASX Clear (Futures only), in the event that a participant in the CS facility enters into external administration.

As a SSF:

ASX Settlement, the point at which settlement is final for equity securities in CHES is set out in the ASX Settlement Operating Rules at Section 10. These rules address:

- (under ASXSOR 10.12) the process of settlement of batch instructions in batch settlement and when/how the steps in that process are effected, including DvP Declaration (payments in RITS simultaneously effected), transfer of financial products in CHES and DvP Notification of DvP Declaration by ASX Settlement to each Payment Provider; and,
- (under ASXSOR 10.13) the 'irrevocable' (i.e. final) discharge or satisfaction of delivery/payment obligations and entitlements under Batch Instructions included in Batch Settlement resulting from the performance of the above steps.

ASX Settlement, movement of equity securities in CHES from delivering settlement entrepot accounts to receiving entrepot accounts will only occur after receipt of a message from RITS indicating that cash has settled across ESAs.

Austraclear, the point at which settlement is final for cash transactions and transfers of debt securities in the Austraclear System is set out in the Austraclear Regulations at Sections 14, 15, 16 and 29. These rules provide that:

- In the case of transactions involving an AUD cash payment, the cash element of the transaction is settled and may not be unwound when Austraclear receives a message from RITS that the cash transfer has been made. Upon receipt of the RITS confirmation, Austraclear will update the cash records of the participants (Section 15).
- In the case of transactions involving the transfer of a security, the security element of a transaction is final and may not be unwound when Austraclear has made the appropriate amendments to the security records of the participants involved in the transaction. For a transaction with an AUD cash element, this will only occur once Austraclear receives a message from RITS that the cash transfer has been made (as above) (Regulation 14.3).

- In the case of transactions involving a foreign currency cash payment (currently Renminbi or USD), the cash element of the transaction is settled and may not be unwound once the cash transaction has passed any requisite testing of the paying participant's foreign currency cash record in the Austraclear System (Regulation 29.1). Participants receive a claim on the foreign currency settlement bank upon updating their foreign currency cash record.
- In the event that real-time settlement in RITS is unavailable, Austraclear can be operated in Assured Payment mode, which allows for deferred net settlement of Austraclear AUD payments in RITS the following day (Section 16).

ASX has obtained legal opinions that confirm that the provisions in the operating rules of ASX Settlement and Austraclear dealing with the payment of money (including foreign currency in Austraclear) and the transfer of assets are protected from reversal or invalidation under the laws of Australia, in the event that a participant in the CS facility enters into external administration. Refer to Legal Basis Principle 1 for more information.

Key Consideration 2:

An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. A large-value payment system or securities settlement system should consider adopting RTGS or multiple-batch processing during the settlement day.

CCP 8.2, SSF 7.2

As a CCP:

CASH SETTLEMENTS:

The ASX CCPs' AUD cash settlements are settled in Austraclear in real-time and are final when they are credited or debited to the ESA of ASX Clearing Corporation (ASXCC).

ASX Clear (Futures)' NZD payments are settled in real-time and are final when they are credited or debited to ASXCC's ESAS account at RBNZ.

ASX Clear (Futures) also accepts collateral in other foreign currencies. Transactions in these currencies are settled through ASXCC's accounts with commercial banks and settlement is considered final once the payment is cleared in ASXCC's account with the commercial bank.

SECURITIES SETTLEMENTS /PHYSICAL DELIVERY:

For ASX Clear, the settlement of equities trades novated by ASX Clear occurs in accordance with the ASX Settlement Operating Rules. This involves the use of a DvP Model 3 mechanism and settlement in a multilateral net batch, with the interbank cash leg settling across ESAs in RITS. Settlement is usually final by 12.30 pm. In instances where the failed settlement of a cleared trade is caused by:

- a securities shortfall, the CHES back-out algorithm is employed to remove the trade from the multilateral net batch and reschedule it for settlement on the next day (provided the participant is not in default).
- a funds shortfall for a cleared trade, ASX Clear will inject funds into the settlement batch or enter into an OTA with sellers of affected securities to facilitate timely settlement.

ASX Clear (Futures) and ASX Clear accept AUD-denominated securities as collateral via Austraclear and ASX Settlement, respectively. These securities are absolutely transferred (for ASX Clear (Futures)) or become subject to a security interest (ASX Clear) in real time as reflected in the Austraclear Regulations and ASX Settlement Operating Rules (as applicable).

Only ASX Clear (Futures) has contracts requiring physical delivery. The details of final settlement of deliverable contracts vary according to the contract specifications. ASX Clear (Futures) monitors and enforces compliance with delivery requirements and ensures that margin is not released until both matched participants have satisfied their obligations. Refer to Principle 10 Physical Delivery for more information.

As a SSF:

ASX SETTLEMENT:

The settlement of equities trades involves the use of a DvP Model 3 mechanism and settlement in a multilateral net batch, with the interbank cash leg settling across ESAs in RITS.

ASX Settlement Operating Rule 10.12.8 provides for settlement on each business day of Batch Instructions included in Batch Settlement on that day in accordance with Rule 10.12. In the case of a State of Emergency, ASX Settlement could however, under Rule 1.3, take action that is inconsistent with Rule 10.12.8 that it considers necessary to deal with the State of Emergency.

Completion of settlement on a day is supported by the deadlines for:

- the scheduling, change and removal of Batch Instructions from Batch Settlement on a day as prescribed in Section 10 of the ASX Settlement Operating Rules; and
- completion of obligations of payment providers in relation to the scheduling and making of payments in RITS as prescribed in the Standard Payments Provider Deed.

Settlement is usually final by 12.30 pm. In instances where the failed settlement of a cleared trade is caused by:

- a securities shortfall, the CHES back-out algorithm is employed to remove the trade from the multilateral net batch, and reschedule it for settlement on the next day (provided the participant is not in default).
- a funds shortfall, ASX Clear will inject funds into the settlement batch or enter into an OTA with sellers of affected securities to facilitate timely settlement.

AUSTRACLEAR:

Settlement of securities transactions in Austraclear occurs on a DvP model 1 basis. This involves the simultaneous exchange of assets (cash and securities) between the buyer and seller on a real time gross basis. Participants may also link a group of eligible transactions in a linked settlement group for simultaneous settlement by transfer of the net amount of cash and securities required to settle all transactions in that linked settlement group.

One-way cash transfers between participants are settled on a real time gross basis.

Although settlements occur in real time, transactions may be held pending during the settlement day due to insufficient funds or securities. Any instructions not ready for settlement by the end of the day are automatically moved to a 'failed' status and removed from Austraclear.

Key Consideration 3:

An FMI should clearly define the point after which unsettled payments, transfer instructions or other obligations may not be revoked by a participant.

CCP 8.3, SSF 7.3

As a CCP:

The ASX CCPs' Operating Rules and Procedures define the point after which payment or transfer instructions cannot be revoked.

ASX Clear:

- Transactions with respect to Exchange Traded Options and OTC Equity Options cannot be revoked once the instruction has been submitted to ASX Clear.
- Cash equity trades may be removed from novation, at the request of the buyer and settler, prior to the calculation of participants' net settlement obligations at the end of the transaction date (ASX Clear Rule 12.7).

ASX Clear (Futures) participants cannot revoke a payment or transfer instruction once it has been submitted to ASX Clear (Futures).

Extensions to cut-off times are permitted on an exceptional basis and must be justified by the circumstances of the individual case (ASX Clear Rule 1.20.2 and ASX Clear (Futures) Rule 22).

As a SSF:

For ASX Settlement, the timing for scheduling, change and removal of Batch Instructions from Batch Settlement on a day is prescribed in Section 10 of the ASX Settlement Operating Rules (Rules 10.5 and 10.9).

At Austraclear, the cut-off times for cancelling payment or transfer instructions are in line with the daily Austraclear cycle. Some cut-off times vary according to whether participants are engaged in evening settlement operations in RITS.

No transaction can be cancelled once it is at 'payment pending' status in Austraclear, which occurs following matching of instructions from both participants involved in the transaction or, in the case of foreign currency payments, once the transaction has passed cash record limit checks.

Extensions to cut-off times are permitted by Austraclear and ASX Settlement on an exceptional basis and must be justified by the circumstances of the individual case (Austraclear Regulation 1.10/ASX Settlement Rule 1.12.1). Some extensions in Austraclear require the RBA's approval due to the implications for RITS.

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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.

Key Consideration 1:

An FMI should conduct its money settlements in central bank money where practical and available.

CCP 9.1, SSF 8.1

As a CCP:

- All AUD settlements are conducted in central bank money via CHES (for ASX Clear only) and Austraclear (for both ASX CCPs) across ESAs in RITS.

- All NZD settlements (ASX Clear (Futures) only) are conducted in central bank money via ASXCC's ESA account.

- ESA accounts in RITS are held in the name of ASXCC (for both ASX CCPs) and ASX Settlement Pty Limited (for ASX Clear only).

- ESA accounts are held in the name of ASXCC Limited as Trustee for ASXCC Trust (ASX Clear (Futures) only).

- Other currencies are all low value/volume and are settled via commercial bank arrangements (ASX Clear (Futures) only).

As a SSF:

- All AUD settlements are conducted via CHES (for ASX Settlement) and Austraclear across ESAs in RITS.

- The RBA RITS membership is used for settlement of cash equities held in the name of ASX Settlement.

Key Consideration 2:

If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.

CCP 9.2, SSF 8.2

As a CCP:

- Non AUD/NZD currencies are all low value/volume and are settled via commercial bank arrangements (ASX Clear (Futures) only).

- ASXCC is the controlling entity for the treasury investments for ASX Clear (Futures).

- ASX maintains a small float in required currencies.

Cash collateral collected in USD from the 2am margin process is held across US banks until it is returned following the settlement of the subsequent first AUD intra-day margin run. The US banks used are all highly rated (S/T rating of A1, L/T rating of A minimum).

As a SSF:

All AUD settlements involving the ASX SSFs are completed in central bank money where cash settles irrevocably across bank exchange settlement accounts held with RBA, except cash transactions in a foreign currency within Austraclear.

Cash transactions in a foreign currency in Austraclear are conducted using commercial bank money. The foreign currency and the foreign currency settlement bank must meet the requirements of Austraclear Regulations 29.2 and 29.3. Funds are settled when Austraclear has successfully verified that sufficient funds are available with the foreign currency settlement bank in line with Regulation 29.1.

Key Consideration 3:

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

CCP 9.3, SSF 8.3

As a CCP:

For ASX Clear (Futures), non-AUD/NZD are all low value/volume and are settled via commercial bank arrangements.

Given the current value and volume of non-AUD/NZD settlements, no formal criteria have been established to deal with the regulation, supervision, creditworthiness, capitalisation, access to liquidity and operational reliability of commercial bank arrangements. Should future initiatives increase the value and volume of settlements through commercial bank arrangements, the appropriate criteria and risk management framework will be established.

The ASX CCPs do not monitor or manage clearing participants' credit and liquidity exposure inherent in the clearing participant's own banking arrangements. The individual clearing participants are in the best position to monitor and manage their own arrangements.

In the case of ASX Clear, Section 5 and Schedule 1 of the ASX's CCP's Operating Rules incorporate measures around clearing participant's credit exposures.

As a SSF:

Subject to the following, all AUD settlements are completed in central bank money where cash settles irrevocably across bank exchange settlement accounts held with RBA:

- For cash transactions in a foreign currency in Austraclear, the requirements for foreign currency settlement banks are principally set out in Regulation 29.3 and Regulation 29.4.
- In considering whether to approve an entity as a foreign currency settlement bank, matters including the regulation and supervision, creditworthiness, capitalisation, access to liquidity and organisational competencies of the applicant are assessed. These requirements are ongoing. Particular organisational competencies include prescribed operating hours, system reliability, system capacity, outage reporting, business continuity, communication links, notifications and outsourcing. In addition, the admission requirements also include the obligation for the foreign currency settlement bank to provide prescribed risk disclosures to parties that hold a foreign currency account.

Key Consideration 4:

If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.

CCP 9.4, SSF 8.4

This obligation is not applicable to ASX's CCPs/SSFs.

Key Consideration 5:

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

CCP 9.5, SSF 8.5

As a CCP:

Terms and Conditions set out the manner in which the commercial bank accounts operate.

As a SSF:

These requirements don't apply, other than for cash transactions in a foreign currency within Austraclear. For those transactions, refer to Regulation 29.4(b). Regulation 14.4A specifies that unsettled cash transactions in a foreign currency are removed from the Austraclear system at the end of the settlement day.

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PRINCIPLE 10 – PHYSICAL DELIVERY

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.

Key Consideration 1:

An FMI's rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.

CCP 10.1

As a CCP:

ASX Clear does not clear any contracts with physical delivery obligations and ASX Clear (Futures) only accepts physical delivery for derivative contracts relating to grain that are cleared through the CCP.

The storage and delivery of the physical grain is facilitated using 3rd party Bulk Handlers with whom ASX has contractual Agreements that are renewed annually.

Obligations with respect to the delivery of the physical grain are set out in ASXCLF's Operating Rules and Schedules that are publicly available on the ASX website. See Operating Rule 63 and Schedule 14.

The delivery obligations of ASX Clear (Futures) are set out in Operating Rule 63 and Schedule 14.

- At its discretion, ASX Clear (Futures) may:
 - direct a clearing participant with delivery obligations to make delivery to a nominated clearing participant holding an opposite position and to receive the settlement amount accordingly; or
 - make or take delivery itself and pay or receive the settlement amounts accordingly.
- In certain circumstances contracts can be cash settled for example where ASX Clear (Futures) is required to make delivery but delivery is not received or is impossible.
- In respect of grain contracts, delivery is effected by book entry by ASX Clear (Futures) to reduce or increase, as the case may be, the amount of the interest in the commodity held by ASX Clear (Futures) for a seller or a buyer.

ASX 24 Operating Rules Schedules. The Futures contract specifications provide details of FMI obligations regarding physical delivery.

ASX 24 Operating Rules Procedure 3801. Documents to be given to a client and Client Agreements.

Information about the ASX commodity markets is available on the ASX website:

- [Commodity codes](#)
- [ASX 24 Operating Rules Schedules](#)

Key Consideration 2:

An FMI should identify, monitor and manage the risks and costs associated with the storage and delivery of physical instruments or commodities.

CCP 10.2

As a CCP:

The Operating Rules and procedures outline the requirements for ASX's CCPs to manage and identify the risks and costs associated with the storage and delivery of physical instruments or commodities, as follows:

- The delivery obligations of ASX Clear (Futures) are set out in the ASX Clear (Futures)'s Operating Rule 63.
- ASX 24 Operating Rules Schedules (in particular 2.77.1 Item 23 – Exclusion of Liability and Warranty).
- ASX 24 Operating Rules Procedure 3801 (the minimum terms which must be incorporated in client agreements in relation to Futures Market Contracts).

Information about the ASX commodity markets is available on the ASX website:

- [Commodity codes](#)
- [ASX 24 Operating Rules Schedules](#)

PRINCIPLE 11 – CENTRAL SECURITIES DEPOSITORIES

A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.

Key Consideration 1:

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

SSF 9.1

As a SSF:

Austraclear and ASX Settlement have rules, procedures and controls to:

- safeguard the rights of securities issuers and owners; and
- prevent the unauthorised creation or deletion/withdrawal of securities.

Rules, procedures and controls are in place to ensure:

- The creation of securities are completed as requested by the Issuer, or their representative.
- The deposit of value to the securities in Austraclear are accurate with respect to the value on issue and the instructions received from the Issuer, or their representative.

A reconciliation of securities issues in Austraclear that compares Issue Balance against Total Volume on Issue, is conducted on a daily basis.

For Austraclear, rules and procedures document the prescribed procedures for Austraclear to accept the deposit of Non-Paper Securities and Dematerialised Securities. In respect of both non-paper securities and dematerialised securities:

- **Method of transfer:** The Austraclear Regulations provide a comprehensive framework for the requirements and conditions relating to the deposit of these securities and related payments on ongoing settlement.
- Whether the ASX SSF has any claim over securities:
 - **Non-paper securities:** The creditors of Austraclear Limited have no claim over non-paper securities deposited in the facility, because Austraclear holds non-paper securities as nominee for the Owners.
 - **Dematerialised securities:** The creditors of Austraclear Limited have no claim over dematerialised securities deposited in the facility, because Austraclear has no title in such securities.

For ASX Settlement (CHESS Holdings), ASX Settlement's rules and procedures address the following issues (for CHESS Holdings on an electronic CHESS subregister):

- **Type of title for Dematerialised securities:** Under the ASX Settlement Operating Rules, legal title is retained by the "Holder" (i.e. the person registered as the legal owner of financial products in a CHESS Holding (account)).
- **Method of transfer:** The ASX Settlement Operating Rules provide a comprehensive framework for the requirements and conditions relating to the transfer of registered financial products and related payments.
- **Whether the ASX SSF has any claim over securities:** The creditors of ASX Settlement have no claim over securities in CHESS because ASX Settlement has no title in such securities.

Key Consideration 2:

A CSD should prohibit overdrafts and debit balances in securities accounts.

SSF 9.2

As a SSF:

Austraclear and ASX Settlement do not permit security holdings records to be in overdraft, or carry debit balances in their securities accounts.

Key Consideration 3:

A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry. Where appropriate, a CSD should provide incentives to immobilise or dematerialise securities.

SSF 9.3

As a SSF:

Austraclear and ASX Settlement maintain securities in a dematerialised form for their transfer by book entry.

Key Consideration 4:

A CSD should protect assets against custody risk through appropriate rules and procedures consistent with its legal framework.

SSF 9.4

As a SSF:

For custody risk (protection of assets against creditor claims through operating rules), the creditors of Austraclear and ASX Settlement have no claim over securities registered in the ASX SSFs because for non-paper securities, Austraclear holds them as nominee for the owners, and for dematerialised securities in Austraclear and ASX Settlement, the facilities have no title.

In addition, a framework of controls limit the risk of loss from negligence, misuse of assets, fraud, poor administration or inadequate recordkeeping. These include regular reporting and reconciliations, authorised signatories and verification, account set-up controls, dual authorisations, leave policies and regular and external audits.

Key Consideration 5:

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

SSF 9.5

As a SSF:

- Austraclear and ASX Settlement segregate the securities of their participants and also support operationally the segregation of securities belonging to participants' customers on participants' books and facilitate the transfer of customer holdings.
- Austraclear and ASX Settlement do not hold assets in their name within the CSD.

Key Consideration 6:

A CSD should identify, measure, monitor and manage its risks from other activities that it may perform; additional tools may be necessary in order to address these risks.

SSF 9.6

As a SSF:

- Austraclear and ASX Settlement are included in ASX's approach to enterprise-wide risk management.
- Neither ASX Settlement nor Austraclear performs any ancillary activities that may pose a risk to the operation of their central securities depository function. In particular, they do not provide a centralised securities lending facility or act as a principal in securities lending transactions.
- The service is subject to the same operational risk framework that is applied across all ASX facilities. Austraclear's liability from this activity is limited under the service agreement.

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.

Key Consideration 1:

An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.

CCP 11.1, SSF 10.1

As a CCP:

- Model 1 and Model 3 (Equities – ASX Clear only) settlement systems are used.
- Electronic dematerialised DvP settlement.
- The settlement of equity securities in CHES (ASX clear only) from delivering settlement entrepot accounts to receiving entrepot accounts will only occur after confirmation from RITS that cash has irrevocably settled across central bank exchange settlement accounts of the paying/receiving banks.
- Settlement instructions that cannot be completed due to insufficient stock being available in the entrepot account are rescheduled to the following settlement day. The reschedule of settlement instructions that cannot complete takes place prior to the calculation of cash due for settlement.
- Settlement of ASX CCP obligations takes place in one batch and the scheduled settlement of all securities for that business day is contingent on the irrevocable settlement of all cash obligations:
 - ASX Settlement Operating Rules, Section 10.
 - ASX Clear Operating Rules, Section 12.

As a SSF:

- Neither ASX Settlement nor Austraclear are counterparties to transactions that settle through the settlement facilities and therefore are not exposed to principal risk.
- Principal risk of users of the facilities is managed in the following ways:
 - DvP Model 1 (Austraclear) and DvP Model 3 (Equities – ASX Settlement) settlement systems are used.
 - Electronic dematerialised DvP settlement.
 - The settlement of AUD Securities in Austraclear is contingent on the irrevocable settlement of the cash across central bank exchange settlement accounts such that the Securities cannot be transferred until the cash settlement has been completed.
 - The settlement of equity securities in CHES (ASX Clear only) from delivering settlement entrepot accounts to receiving entrepot accounts will only occur after confirmation from RITS that cash has irrevocably settled across central bank exchange settlement accounts of the paying/receiving banks.
 - Settlement instructions that cannot be completed due to insufficient stock being available in the entrepot account are rescheduled to the following settlement day. The reschedule of settlement instructions that cannot complete takes place prior to the calculation of cash due for settlement.

- Settlement of ASX CCP obligations takes place in one batch and the scheduled settlement of all securities for that business day is contingent on the irrevocable settlement of all cash obligations across central bank ESAs.
- See ASX Settlement Operating Rules Section 10.
- See ASX Clear Operating Rules Section 12.
- See Austraclear Regulations Sections 14, 15 and 16.

FSS: A CCP/SSF that is an exchange-of-value settlement system should eliminate principal risk by linking the final settlement of one obligation to the final settlement of the other through an appropriate delivery versus payment (DvP), delivery versus delivery (DvD) or payment versus payment (PvP) settlement mechanism.

CCP 11.2, SSF 10.2

As a CCP:

- DvP Model 1 (ASXCC Treasury settlements) and Model 3 (Equities – ASX Clear only) settlement systems used.
- Electronic dematerialised DvP settlement.
- The settlement of equity securities in CHES (ASX clear only) from delivering settlement entrepot accounts to receiving entrepot accounts will only occur after confirmation from RITS that cash has irrevocably settled across central bank exchange settlement accounts of the paying/receiving banks.
- Settlement instructions that cannot be completed due to insufficient stock being available in the entrepot account are rescheduled to the following settlement day. The reschedule of settlement instructions that cannot complete takes place prior to the calculation of cash due for settlement.
- Settlement of CCP obligations takes place in one batch and the scheduled settlement of all securities for that business day is contingent on the irrevocable settlement of all cash obligations.
- See ASX Settlement Operating Rules, Section 10.
- See ASX Clear Operating Rules, Section 12.

As a SSF:

- Neither (ASX Settlement nor Austraclear) are counterparties to transactions that settle through the settlement facilities and therefore are not exposed to principal risk.
- DvP Model 1 (Austraclear) and DvP Model 3 (Equities – ASX Settlement) settlement systems are used.
- Electronic dematerialised DvP settlement.
- The settlement of AUD Securities in Austraclear is contingent on the irrevocable settlement of the cash across central bank exchange settlement accounts such that the Securities cannot be transferred until the cash settlement has been completed.
- The settlement of equity securities in CHES (ASX clear only) from delivering settlement entrepot accounts to receiving entrepot accounts will only occur after confirmation from RITS that cash has irrevocably settled across central bank exchange settlement accounts of the paying/receiving banks.
- Settlement instructions that cannot be completed due to insufficient stock being available in the entrepot account are rescheduled to the following settlement day. The reschedule of settlement instructions that cannot complete takes place prior to the calculation of cash due for settlement.
- Settlement of ASX CCP obligations takes place in one batch and the scheduled settlement of all securities for that business day is contingent on the irrevocable settlement of all cash obligations across central bank ESAs.
- For further information, see:
 - ASX Settlement Operating Rules Section 10.
 - ASX Clear Operating Rules Section 12.
 - Austraclear Regulations Sections 14, 15 and 16.

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.

Key Consideration 1:

An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.

CCP 12.1, SSF 11.1

As a CCP/SSF:

The ASX operating Rules of the ASX CCPs/SSFs detail the powers and actions available to an ASX CCP/SSF in the event of a participant default. The powers to suspend and/or terminate a participant in the event of a default are also set out in Guidance Note 5 Suspension and Termination of Participants under the relevant ASX CCP/SSF rulebook.

The Participant Issues Response Group (PIRG) is responsible for monitoring and managing participant issues that may have a material impact on a participant's business as a participant and/or the operations, risk management, or licence compliance of an ASX CCP/SSF.

As a CCP:

For the ASX CCPs, in the event of a potential clearing participant default, the PIRG will refer the matter to the Default Management Committee (DMC). ASX maintains a documented 'Default Management Framework' and comprehensive default management procedures for the ASX CCPs.

- Following a declaration of default, the ASX CCPs may, among other things:
 - Suspend the defaulting participant's authority to clear some or all market/OTC transactions. If all clearing activities are suspended, there will be no further payments or collateral movements to the participant. This enables the ASX CCP to 'crystallise' the defaulting participant's position and establishes the basis for the close-out of exposures to the defaulting participant;
 - Subject to certain conditions being met, transfer (or port) client positions and collateral to a non-defaulting clearing participant prepared to accept them. Refer to Principle 14 Segregation and Portability for more detail;
 - For a defaulting OTC participant on ASX Clear (Futures), convene the Default Management Group (comprising representatives from OTC Clearing participants) to provide guidance and advice to the DMC on the best way to hedge and auction the defaulting participant's portfolio; and
 - Liaise with one of its default brokers (authorised to act on behalf of the ASX CCP in the event of a default) to close out or hedge the defaulting participant's outstanding obligations to the ASX CCP and/or seek to auction the defaulting participant's portfolio.

- The ASX CCPs would meet obligations arising from a participant default using collateral (cash or eligible securities), excess cash and default fund contributions lodged by that participant. If the defaulting participant's assets were insufficient, the relevant ASX CCP could draw upon their default fund. ASX Clear's \$250 million default fund is fully funded by the ASX CCP's equity. ASX Clear (Futures)' \$650 million default fund is fully prefunded with contributions from both ASX and clearing participants. The default fund comprises \$450 million in ASX capital (across three tranches), and \$200 million in participant contributions (across two tranches).

If an ASX CCP's prefunded resources were exhausted, each ASX CCP has the power to call Recovery Assessments from participants. Recovery Assessments at ASX Clear are capped at \$300 million, and at ASX Clear (Futures) they are capped at \$200 million (for a single default) and \$600 million (if multiple participants default). The allocation of Recovery Assessments across individual participants is proportional to the risk associated with positions held by participants prior to the default.

In addition ASX Clear (Futures) can reduce (haircut) a range of its outgoing payment obligations to participants to allocate remaining financial exposures arising from the default. The allocation of payment haircuts is linked to the positions held by participants.

As a last resort, the ASX CCPs have the power to completely terminate all open contracts.

ASX has established a process to replenish the ASX CCP default funds if these are partially utilised or exhausted following a participant default. At the end of a 22-business-day cooling-off period, the default funds would be fully replenished to up to \$150 million (ASX Clear) and \$400 million (ASX Clear (Futures)). Participants' contributions are capped at half of the amount needed to replenish the ASX CCPs' default funds to those levels. Individual participants' replenishment contributions would be determined in proportion to the risk associated with positions held by the participant prior to the default. The ASX CCPs may increase the default funds (including participant contributions) at a later time to meet any regulatory requirement applicable to the ASX CCPs.

As a SSF:

For SSFs, the PIRG are responsible for co-ordinating the SSF's response and provide input into any decision on whether to suspend or terminate the admission of, or take other action in relation to, the participant.

Key Consideration 2:

An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.

CCP 12.2, SSF 11.2

As a CCP/SSF:

The ASX CCP/SSF Operating Rules require participants to inform ASX immediately if they become aware they are unable to comply with the Operating Rules including when the participant is at risk of being in default. ASX continuously monitor participants' compliance with obligations outlined in its Operating Rules and have arrangements in place (Refer to Key Consideration 1) to expeditiously escalate any participant issues to the appropriate governance group (PIRG or DMC).

ASX maintains a comprehensive 'Default Management Framework' allowing it to implement its default rules and procedures to deal with an event of default in a timely manner. The Framework includes, but not limited to, the Default Management Policy and Standard, the Recovery Plans, documented default management procedures, communications plans, and testing plans and procedures. The Framework is reviewed regularly and presented to the internal governance working group (Default Management and Recovery Working Group) with the Policy, Standard and Recovery Plan approved by the CS Board on an annual basis.

ASX's approach and method for identifying and managing default events are outlined in the Framework. The declaration of default decision is not automatic and takes into account the totality of the circumstances.

In an event of default of a participant, ASX has a range of tools available to it to manage the default including, but not limited to, suspension of the participant's membership, the transfer of customer positions to a non-defaulting participant, use of default brokers to close or hedge out the market risk arising from the open positions, and ability to auction the defaulted portfolio to a third party. The range of default management procedures available are outlined in ASX's internal procedures and default strategy documents.

Default management fire drills are conducted for the ASX CCP/SSF facilities at least annually and with involvement with relevant stakeholders (including regulators, boards, clearing participants, liquidity providers and end-user clients). Refer to Key Consideration 3 for further details.

As a SSF:

For the ASX SFFs, there are documented default management procedures for a participant default and as well as for a participant's failure to settle, the criteria and mechanisms for suspending and terminating participants and the removal of outstanding non CCP transactions from settlement.

Key Consideration 3:

An FMI should publicly disclose key aspects of its default rules and procedures.

CCP 12.3, SSF 11.3

As a CCP/SSF:

Default management information is published on the [ASX website](#) which includes:

- frequently asked for clients of a Defaulting ASX Clear Participants;
- ASX Clear Participant Default – Overview;
- ASX Settlement and Austraclear participant Default – Overview;
- Fact Sheet for Insolvency Practitioners;
- Fact Sheet for CHESS Sponsored and Issuer Sponsored Holdings; and
- ASX Clear (Futures) Participant Default Overview.

As a CCP:

For the ASX CCPs, the Rules that cover the default and recovery processes of each of the ASX CCPs are published on the ASX website:

- ASX Clear Operating Rules & Procedures – Section 15 – Default;
- ASX Clear (Futures) Operating Rules & Procedures – Part 7 – Procedures on Default;
- ASX Clear (Futures) OTC Rulebook – Section 6 – Default; and
- ASX Recovery Rules.

These rules set out when the ASX CCPs may take action against a participant and the powers of the ASX CCPs in the event of a default, including the ability of ASX to transfer client derivative positions to other participants. The ASX Recovery Rules provide the ASX CCPs with additional recovery tools to enable them to address losses or liquidity shortfalls arising from, and replenish financial resources utilised as a result of, a clearing participant default.

ASX has published on the ASX website an overview of each ASX CCPs' approach to managing a clearing participant default, a guidance note on each ASX CCPs' approach to the suspension and termination of participants (Guidance Note 5 Suspension and Termination of Participants), as well as a client fact sheet that outlines the segregation and portability arrangements in ASX Clear (Futures) and the rights of clients in the event of their clearing participant's default.

As a SSF:

For the SFFs, the Operating Rules of the ASX SSFs detail the powers and actions available to a SSF in the event of a default. The powers to suspend and/or terminate a participant in the event of a default are also set out in Guidance Note 5 Suspension and Termination of Participants under the relevant SSF rulebook.

Further information can be found in the documentation on the [ASX website](#).

Key Consideration 4:

An FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close out procedures. Such testing and review should be conducted at least annually and following material changes to the rules and procedures to ensure that they are practical and effective.

CCP 12.4, SSF 11.4

As a CCP:

For the ASX CCPs, default management fire drills are conducted for the ASX CCPs at least annually, to test, review and, where applicable, enhance ASX's default management processes and procedures. The scheduled fire drills are included in a forward looking plan that is presented to the internal governance forum (Default Management and Recovery Working Group) and Risk Consultative Committee.

These fire drill tests include relevant parties that are likely involved in the default procedures including default brokers (who the ASX CCPs may instruct to close-out or hedge the defaulter's portfolio), the OTC DMG (who provide advice to ASX Clear (Futures) on hedging and auctioning of an OTC portfolio), liquidity facility providers (including actual drawdown on the facility to test the operational capability) and participants (who may bid in an auction of the defaulting participant's portfolio).

The scope and scenarios used for each fire drill may differ depending on the objectives of each fire drill but typically include testing of the operational capability of external stakeholder to ingest files from the ASX, reconcile the positions with ASX, and assess stakeholders' system preparedness to trigger their processes to participate in a default event.

These fire drills are designed to test participant's ability to evaluate sizeable portfolios (under extreme but plausible market conditions and assess the pricing impact from the liquidation or auction process of such sizeable portfolio in such conditions.

The results of the fire drill testing (along with any enhancement opportunities) are shared with the CS Board, the regulatory agencies (RBA and ASIC), and the Risk Consultative Committees.

FSS: A CCP/SSF should demonstrate that its default management procedures take appropriate account of interests in relevant jurisdictions and, in particular, any implications for pricing, liquidity and stability in relevant financial markets.

CCP 12.5, SSF 11.5

As a CCP:

ASX's default management procedures have been developed with the objective of minimising impact to the markets in which it operate. This includes jurisdictions in which the defaulted participants may have material exposure to, such as New Zealand.

ASX has agreed arrangements in place with RBNZ that when a defaulted participant has material exposure to New Zealand dollar based products, ASX would discuss the default management approach and the potential implications to the market including pricing, liquidity and stability.

As a SSF:

Not applicable for the ASX SSFs.

PRINCIPLE 14 – SEGREGATION AND PORTABILITY

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

Key Consideration 1:

A CCP should, at a minimum, have segregation and portability arrangements that effectively protect a participant’s customers’ positions and related collateral from the default or insolvency of that participant. If the CCP additionally offers protection of such customer positions and collateral against the concurrent default of the participant and a fellow customer, the CCP should take steps to ensure that such protection is effective.

CCP 13.1

As a CCP:

ASX CLEAR

Maintains a single (comingled) account structure for its cash market products which does not separate client positions from the participant’s proprietary positions. Under the Operating Rules, ASX Clear has the power to transfer (port) participants’ clients’ positions without the need to seek approval from the participant’s external administrator. However porting of cash equities positions is unlikely, given the two days settlement cycle and impediments to portability, including arising from participant’s KYC obligations where all clients have not established a pre-existing clearing arrangement with the same alternative clearer.

Under the Operating Rules, participants are not allowed to use client collateral for the purpose of meeting margin obligations to ASX Clear in connection with transactions in cash market products. Accordingly, ASX Clear should not hold client collateral which could be exposed to a default of the participant or fellow customers.

Client asset protections for cash market products provide “materially equivalent protection of customer assets by alternative means” to an omnibus client account structure under FSS 13.2.10. This includes operating rule amendments and system changes introduced in April 2014 and May 2015 to enhance asset protections for buying and selling clients during the trade settlement cycle. Under the operating rules of ASX Clear and ASX Settlement and CHES processes that apply to clearing and settlement of cash market products:

- Client securities in the Accumulation Account are maintained beneficially for the client and accurate records are required to allow daily reconciliation of securities in the Accumulation Account.
- Funds covering client purchases can only be withdrawn from the client trust account if the Participant has taken all steps required to register the securities into the client’s name (subject to certain exceptions based on the Corporations Act).
- When client securities are transferred from the Accumulation Account or a Direct/ Sponsored HIN into the Settlement Account funds representing the sale proceeds (net of brokerage) are paid into the client trust account or to the client concurrent with the transfer.
- If a client’s securities held in the Accumulation Account are delivered directly to a buyer, funds representing the sale proceeds (net of brokerage) are paid into the client trust account or to the client on the same day that the securities are transferred.

ASX has reviewed the comingled account structure and related client asset protections for cash market clearing and concluded that these arrangements offer materially equivalent protection to an omnibus client account structure, for the purposes of FSS 13.2.10. The RBA is considering ASX’s analysis.

Maintains a segregated account structure for its equity derivatives products which separates client positions and collateral from the participant's proprietary positions and collateral. For these products, clients are able to access individually segregated accounts that offer protection against the concurrent default of the participant and a fellow client. Under the Operating Rules, ASX Clear has the power to transfer (port) participants' clients' positions and collateral without the need to seek approval from the participant's external administrator.

ASX CLEAR (FUTURES)

Maintains a segregated account structure for ASX 24 Exchange Traded Derivatives and OTC Interest Rate Derivatives which separates client positions and collateral from the participant's proprietary positions. For these products, clients are able to access individually segregated accounts (known as Individual Client Accounts (or ICAs)) that offer protection of the positions and collateral value of the ICA against the concurrent default of the participant and a fellow client.

Offers an omnibus account structure, in which multiple clients are pooled together. In an omnibus account the positions and collateral value of the account are protected against the default of the participant but a client is exposed to losses on positions of other clients in the same account. Collateral is calculated and collected on a net basis thereby exposing each client in the omnibus account to "fellow client risk".

The collateral value of an ICA or omnibus account is the greater of:

- the value determined by ASX Clear (Futures) of all collateral (if any) attributed by ASX Clear (Futures) to the account as at the time at which the participant defaults; and
- the value of initial margin calculated by ASX Clear (Futures) in respect of the account as at the last end of day time at which the participant settled its initial margin obligations prior to its default.

ASX has obtained an Australian law legal opinion that supports the enforceability of the client segregation and portability arrangements outlined in this Principle 14, irrespective of the jurisdiction in which the defaulting participant in the ASX CCP may be incorporated.

Key Consideration 2:

An FMI should employ an account structure that enables it readily to identify positions of a participant's customers and to segregate related collateral. A CCP should maintain customer positions and collateral in individual customer accounts or in omnibus customer accounts, or in omnibus customer accounts.

CCP 13.2

As a CCP:

Refer to Key Consideration 1 above.

Key Consideration 3:

An FMI should structure its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants.

CCP 13.3

As a CCP:

ASX CLEAR

Under the Operating Rules, ASX Clear has the power to transfer (port) positions and collateral without the need to seek approval from the participant's external administrator in the event of a default. The availability of individually segregated client accounts for options supports the transfer of client positions and collateral to another participant in the event of a clearing participant default.

Under individual client segregation:

- margin requirements are calculated on a gross basis for the positions held by each client;
- excess cash may be held directly with ASX Clear and attributed to an individual client account; and
- non-cash collateral is retained in the name of the registered holder, subject to a security interest in favour of ASX Clear, and attributed to individually segregated client accounts.

Accordingly, there should be sufficient collateral available to support the transfer of each client's positions to another clearing participant. However porting is subject to an alternate clearer being able and willing to accept the client's positions within prescribed timeframes.

ASX CLEAR (FUTURES)

Under the Operating Rules, ASX Clear (Futures) has the power to transfer (port) positions and collateral of a participant's clients without the need to seek approval from the participant's external administrator in the event of a default. The availability of Individual Client Accounts (ICA) for ASX 24 Exchange Traded Derivatives and OTC Interest Rate Derivatives supports the transfer of client positions and collateral value to another participant in the event of a clearing participant default.

Under the ICA model, the participant deposits with ASX Clear (Futures) the initial margin calculated by ASX Clear (Futures) for the ICA (there is no netting effect as with omnibus accounts) and may request that ASX Clear (Futures) attribute excess cash or specific non-cash collateral to the ICA. Accordingly, the positions and related collateral value of clients that opt for the ICA can be ported in the event of the clearing participant's default, subject to an alternate clearer being able and willing to accept the client's positions within prescribed timeframes.

Key Consideration 4:

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

No corresponding FSS

As a CCP:

ASX CLEAR

Current arrangements for segregation and portability are defined in sections 10, 12, 14, 15 and 17 of the ASX Clear Operating Rules and Procedures. Current arrangements for client asset protections for cash market products to provide "materially equivalent protection of customer assets by alternative means" to an omnibus client account structure, for the purposes of FSS 13.2.10, are set out in section 4 of the ASX Clear Operating Rules and sections 6 and 10 of the ASX Settlement Operating Rules.

Detailed information relating to the ASX Clear default management process is on the [ASX website](#).

ASX CLEAR (FUTURES)

Current arrangements for segregation and portability are defined in parts 4, 7, and 10 of the ASX Clear (Futures) Operating Rules and Procedures.

Participants are required by the ASX Clear (Futures) Operating Rules to provide this [fact sheet](#) to clients who have invested in, or are considering investing in, ASX 24 Exchange Traded Derivatives or OTC Interest Rate Derivatives.

This [fact sheet](#) outlines the key features of the Client Protection Model that supports the Client Clearing Service offered by ASX Clear (Futures). Further information can be found [here](#).

Detailed information relating to the ASX Clear (Futures) default management process is on the [ASX website](#).

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.

Key Consideration 1:

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

CCP 14.1, SSF 12.1

As a CCP/SSF:

ASX has robust management and control systems to identify, monitor and manage their general business risks. Key risks, including general business risks, identified under the ERMF and recorded in the risk database (ERICA) are monitored and managed by the relevant risk owners and are regularly reported to the Executive Leadership Team (ELT) and the ARC and/or the ASX Board.

General business risks at ASX refer to the risks and potential losses that arise from operations that are not related to participant default nor separately covered under credit, investment or liquidity risk. These general business could result in losses from poor execution of business strategy, negative cash flows or unexpected and excessively large operating expenses.

General business risks can be categorised as strategic / business risks, regulatory or reputational risks, operational risks and financial risks. Risks identified are managed and monitored through robust risk monitoring using KRIs and suitably designed controls. KRIs and effectiveness of controls are reported to the ARC and Board from time to time.

Financial risks are mitigated through the annual preparation of the five year business plans which are reviewed and approved by the Board. These business plans include financial forecasts, new business initiatives and associated risks, and capital forecasts. These forecasts are reviewed on a monthly basis and presented to the Board.

In addition, ASX takes up third party insurance to cover losses that may arise from some of the general business risks.

Key Consideration 2:

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

CCP 14.2, SSF 12.2

As a CCP:

ASX has set aside capital for operational and business risk across the two ASX CCPs if they incur general business losses.

In determining the sufficiency of the operational and business risk capital set aside for the ASX CCPs, ASX has estimated the capital required to cover six months of current operating expenses, plus that required to cover operational and legal risk, non-covered credit and counterparty credit risk, non-covered market risk and business risk. It has calculated these components consistent with the methodology used by ASX CCPs in the EU, under the European Regulation on OTC derivatives, central counterparties and trade repositories (EMIR). In addition, the amounts noted above include a minimum 10% buffer to the outcomes of the EMIR methodology calculation.

ASX Limited has also set aside a separate pool of capital of \$90 million for investment risks across both CCPs, which is split across the two ASX CCPs based on the average contribution of each ASX CCP to the common investment pool over the last five years. This also includes a buffer in each ASX CCP to cover a potential shortfall in investment capital should the actual proportion of a ASX CCP's contribution to pooled investments differ from the average ratio on the day an investment loss occurred.

As a SSF:

ASX maintains total capital requirements for the SSFs which is determined using the reducing balance methodology.

Under this methodology, ASX applies a capital charge for operational and business risk to the value of securities held in each SSF. The calculated percentage of required risk resources declines as the level of assets increases – recognising that a significant part of the risk resources required will represent a minimum fixed amount. At the ASX Limited level, the total capital held has been determined noting that the two facilities' are uncorrelated and so they will not both require their allocated risk funds at the same time.

Similar to ASX CCPs, ASX estimated the capital required to cover six months of current operating expenses, plus that required to cover operational and legal risk, non-covered credit and counterparty credit risk, non-covered market risk and business risk. It has calculated these components consistent with the methodology under the European Regulation on OTC derivatives, central counterparties and trade repositories (EMIR). In addition, the amounts noted above include a minimum 10% buffer to the outcomes of the EMIR methodology calculation. The amount of capital determined under the EMIR approach is maintained separately in the ASX SSFs, whereas the excess is maintained centrally and available for use by either ASX SSF.

ASX review and monitor the capital positions monthly to ensure that there is adequate capital to support business activities and meet regulatory capital conditions. The capital positions are reported to the Board on a monthly basis and to the ASX CCP and SSF boards on a quarterly basis.

Key Consideration 3:

An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan.

At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.

CCP 14.3, SSF 12.3

As a CCP/SSF:

Maintain a Recovery Plan which sets out how the ASX CCPs/SSFs facilities plan to ensure they continue to provide their critical operations in recovery situations. In this context "Recovery concerns the ability of an FMI to recover from a threat to its viability and financial strength so that it can continue to provide its critical services without requiring the use of resolution powers by authorities".

The Recovery Plan is reviewed on an annual basis by the ASX CCP and SSF boards.

Total liquid net assets funded by equity to cover business risk as at 30 June 2023 was \$306 million.

In determining the sufficiency of the operational and business risk capital held by ASX CCPs/SSFs, it has been estimated as the capital required to cover six months of current operating expenses, with an additional buffer to allow for future growth, to support any viable recovery or orderly wind-down. This component represents a sub-set of the overall operational and business risk capital and liquid net assets held across the group. In addition, ASX has in place a number of insurance policies to reduce its exposure to a broad range of risks, including professional indemnity, fraud, and operational risks such as computer equipment failure.

As a CCP:

The recovery plans include utilisation of recovery tools including recovery assessments, variation margin gains haircutting (ASX Clear (Futures) only), partial termination and complete termination of open contracts.

As a SSF:

A portion of the operational and business risk capital is held within each ASX SSF with the remainder held on behalf of the ASX SSFs at the ASX group level. This arrangement has been included in the ASX Group Support Agreement.

Key Consideration 4:

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

CCP 14.4, SSF 12.4

As a CCP/SSF:

The liquid net assets comprise at call and fixed term bank deposits, bank bills and negotiable certificates of deposits.

The ASX CCP investment mandates, which are reviewed annually by management and approved by the ASX CCP and SSF Boards, set out allowed asset types and liquidity limits. Compliance with the mandates is monitored daily by Clearing Risk Oversight.

The assets held to cover general business risks and investment risks are liquid net assets funded by equity and reserves.

Key Consideration 5:

An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly

CCP 14.5, SSF 12.5

As a CCP/SSF:

The ASX Limited Board monitors the on-going capital adequacy and requirements of the group and, when needed, will determine the most appropriate means of raising additional capital after due consideration of prevailing market conditions and available alternative financing mechanisms. The ASX Limited Board has reviewed and approved the plan to replenish operational and business risk capital and investment risk capital following a loss event.

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.

Key Consideration 1:

An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures and internal controls that fully protect these assets.

CCP 15.1, SSF 13.1

As a CCP:

ASXCC

ASX's CCPs' Operating Rules and Procedures define how ASX CCPs use lodged collateral. Cash investments, including cash collateral, clearing participant contributions and shareholder funds, are controlled by ASXCC, of which the ASX CCPs are subsidiaries.

ASXCC makes its investments in accordance with its Investment Mandate and ASX's Investment Policy, which together define investment objectives, investment specifications, and audit and maintenance of the policy.

The AUD denominated assets of the ASX CCPs and their participants are administered and held within the ASX group. Intragroup arrangements allow the ASX CCPs to fully understand the nature of their risk exposure to ASXCC and other group entities. This exposure is managed within the context of ASX's overall Clearing Risk Policy Framework. ASX has robust accounting practices, safekeeping procedures and internal controls to protect its own and its participants' assets.

NZD denominated investment securities are held in NZ Clear.

US Treasury Bills posted as collateral and investment securities denominated in EUR, GBP, JPY and USD are held in Clearstream.

Cash collateral collected in USD from the 2am margin process is held across five US banks until it is returned following the settlement of the subsequent first AUD intra-day margin run..

ASXCLF/ASXCL

Both ASX CCPs also holds funds from capital that are invested in cash or other high quality liquid assets in accordance with their respective Investment Mandates.

As a SSF:

For the ASX SSFs, neither hold clearing participant assets.

Both ASX SSFs hold funds from issued capital and retained earnings that are invested in cash or other high quality liquid assets in accordance with their respective Investment Mandates.

Key Consideration 2:

An FMI should have prompt access to its assets and the assets provided by participants, when required.

CCP 15.2, SSF 13.2

As a CCP:

ASXCC

AUD denominated assets invested on behalf of ASX's CCPs and their participants are held with the ASX and subject to the ASX CCPs' exclusive custody.

Cash investments are held directly by ASXCC.

NZD denominated investments are held in NZClear and investments denominated in EUR, JPY, GBP and USD are held in Clearstream.

The ASXCC portfolio is primarily invested in AUD denominated cash, Australian government and state issued bonds (directly or via Reverse Repo) and also in Bank Bills and Negotiable Certificates of Deposits.

The Investment Mandate identifies a maximum Portfolio Weighted Average Maturity and a trigger that provides early warning of the maximum average maturity being approached.

These arrangements ensure that the ASX CCPs have prompt access to participant collateral and their own contributions to prefunded financial resources, including in the event of participant default.

ASXCLF/ASXCL

The ASX CCPs own capital is invested in AUD denominated cash, Bank Bills and Negotiable Certificates of Deposits, and Australian government and state issued bonds in a separate investment pool from the ASXCC Investment portfolio and in accordance with their respective Investment Mandates.

A custodian is not used to hold these assets.

The Investment Mandate identifies a maximum Portfolio Weighted Average Maturity and a trigger that provides early warning of the maximum average maturity being approached.

These measures contribute to ensuring that the ASX CCP entities have prompt access to their assets as required.

As a SSF:

A custodian is not used to hold the ASX SSFs' assets.

Both ASX SSFs funds are invested in AUD denominated cash, Bank Bills and Negotiable Certificates of Deposits in accordance with their respective Investment Mandates.

The Investment Mandate identifies a maximum Portfolio Weighted Average Maturity and a trigger that provides early warning of the maximum average maturity being approached.

These measures contribute to ensuring that the ASX SSF entities have prompt access to their assets as required.

Key Consideration 3:

An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.

CCP 15.3, SSF 13.3

As a CCP/SSF:

ASX's CCPs/SSFs do not use the services of external custodians.

Key Consideration 4:

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

CCP 15.4, SSF 13.4

As a CCP:

ASXCC

ASXCC is the controlling entity for the investments of both ASX CCPs. ASXCC invests funds in accordance with a defined treasury investment policy which is endorsed by the Clearing Boards. ASX CCPs' investment policy, articulates the basis for the ASX CCPs' mitigation of investment-related credit, market and liquidity risks. The primary objective of the Investment Mandate is to ensure that the investment portfolio is made up of highly liquid financial instruments with a high credit quality and low levels of market risk. This is driven by the ASX CCPs' requirement to have timely, certain and ease of access to funds at all times, including in the event of clearing participant default. This objective is achieved by setting appropriate limits and restrictions on investment products and on the amount and source of credit, liquidity and market risk exposures.

All investments are purchased by ASXCC with the intent to hold until maturity, however investments may be sold as liquidity or other needs arise, and so will be deemed "available-for-sale".

Exposures against limits in the mandate are monitored by Clearing Risk Oversight.

To ensure the ongoing appropriateness of the Investment Mandate, it is reviewed on an annual basis by the CS Board. The ASXCC investment strategy is disclosed to participants via the Risk Consultative Committee meetings for both ASX Clear and ASX Clear (Futures).

Information regarding ASXCC's investment portfolio is provided to clearing participants via reporting to the Risk Consultative Committees and via publicly available quarterly quantitative disclosures on ASX's website.

ASXCLF/ASXCL

Separate Investment Mandates exist for each ASX CCP for the investment of that ASX CCPs' own capital to cover credit, investment, and business risks. The Investment Mandates set out approved products, counterparties and their limits and portfolio limits.

Exposures against limits in the Investment Mandate are monitored by Clearing Risk Oversight.

To ensure the ongoing appropriateness of the Investment Mandate, they are reviewed on an annual basis by the Clearing and Settlement Board.

As the funds invested by the ASX CCP entities represents ASX funds, the respective ASX CCP Investment Mandates are not disclosed to participants.

As a SSF:

ASX has allocated capital to each ASX SSF entity for the purpose of covering general business risk and for meeting liabilities in a timely fashion.

The Investment Mandates set out approved products, counterparties and their limits and portfolio limits.

Exposures against limits in the Investment Mandate are monitored by Clearing Risk Oversight.

To ensure the ongoing appropriateness of the Investment Mandate, they are reviewed on an annual basis by the Clearing and Settlement Board, CRO, CFO, and other relevant senior management.

Funds invested by the ASX SSF entities represents ASX funds only and specifically, capital held for business risk. For this reason, the respective ASX SSF Investment Mandates are not disclosed to participants.

As a CCP/SSF:

MARKET DATA

For ASXCC, the ASX CCPs/ SSFs, Market data (share prices and credit default swap spreads) and external credit ratings relating to investment counterparties are monitored on a daily basis by the risk function for indication of any deterioration in their creditworthiness.

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 fulfilment of the FMI’s obligations, including in the event of a wide-scale or major disruption.

Key Consideration 1:

An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.

CCP 16.1, SSF 14.1

As a CCP/SSF:

ASX’s framework for risk management is described in its ERMF. These outline: the overall risk environment in the ASX; the fundamental risk management processes for identification and assessment, treatment, monitoring, reporting and communicating risk; as well as the risk governance structure, which summarises responsibilities for ownership and management, framework and risk appetite overview and executive management committee and Board oversight.

ASX’s RAS is a central component of ASX’s risk management framework and describes the risk types encountered in ASX’s business, along with tolerance thresholds. Tolerance levels are expressed through KRIs that are cascaded throughout ASX to assist staff in its day-to-day management of risk. This helps ensure the whole organisation operates within agreed risk tolerance boundaries. ASX’s stated tolerance for technology, counterparty, financial, operational, legal and regulatory risks is ‘very low’.

ASX integrate commercial standards into their risk management frameworks. For instance, the Enterprise Risk Management Framework is assessed against the international standard ISO 31000:2018 Risk Management – Principles and Guidelines. The BCMF has been prepared with reference to the ISO International Standard on business continuity and the Business Continuity Institute’s Good Practice Guidelines. The ASX Fraud Control Policy references Standards Australia’s Standard on Fraud and Corruption Control.

ASX’s Compliance Management Framework (CMF), which aligned with the ISO 37301:2001 compliance management systems, provides processes, systems and tools to facilitate effective regulatory risk management and compliance with obligations applicable to ASX CCP/SSF. ASX’s risk management and governance system ERICA (Enterprise Risk, Internal Audit and Compliance Application) documents risks, obligations and controls, facilitating implementation of ASX’s ERMF and CMF.

The ERMF, CMF and other policies and procedures are the subject of internal and external review. ASX has a Policy Design and Review Handbook, which sets out governance arrangements for ASX policies and associated procedures and systems, including a policy cycle review process.

The Change Management Policy and Process documents are reviewed and approved annually, roles and responsibilities are described and identified, supporting terms of reference for functions such as the Change Approval Board are also managed. These documents address the comprehensive checks to mitigate the risks that changes and major projects inadvertently affect the smooth functioning of the system.

Key Consideration 2:

An FMI's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk management framework. Systems, operational policies, procedures and controls should be reviewed, audited and tested periodically and after significant changes.

CCP 16.2, SSF 14.2

As a CCP/SSF:

The ASX Board has endorsed the the ASX ERMF which assigns specific risk responsibilities across the ASX, including to the ASX Limited Board of Directors, Board Technology Committee, the ARC, Technology Management Committee, the Risk Committee, Enterprise Risk, Enterprise Compliance, executive management and business unit management and staff. The CS Boards oversee the ASX CCP/SSF operational risks as per carve out in the ARC Charter. The ERMF is reviewed and oversighted by the Board on an annual basis.

The Risk Committee, comprising executives from across the departments, is responsible for overseeing the implementation and adequacy of enterprise risk management and risk processes to ensure risks are being managed within the board approved risk appetite.

The Regulatory Committee is a senior management committee chaired by the Group General Counsel. The Regulatory Committee exercises delegated authority from the CEO to oversee policy development in relation to the operation and conduct of ASX's licensed activities, with the exception of clearing risk and settlement risk policy which is the responsibility of the Risk Committee.

ASX's risk management strategy is founded on the Three Lines of Defence model, which provides a clear organisational structure and clarifies roles and responsibilities for managing risks and controls across the business. The Three Lines of Defence is summarised as follows:

- Line 1 is risk management within the business divisions. The identification, assessment, monitoring, reporting and escalation of risks begins in Line 1.
- Line 2 is the independent risk management and compliance functions that develop risk and compliance frameworks and policies and oversee and challenge risk management in the first line.
- Line 3 is the independent assurance function (i.e. Internal Audit).

ASX has an Accountability Framework, which is approved by the board. The Accountability Framework sets out the accountability map, accountability statements, reasonable steps and the reasonable steps assessment. The accountability statements in place for all ASX executives set out the allocation of responsibilities, which includes risk management, to executives across ASX's operations.

Individual departments are responsible for: identifying business-specific risks; applying controls; maintaining risk management systems; reporting on the effectiveness of controls; and implementing enhancements and taking remedial action as appropriate.

Risk profiles are formally self-assessed annually as part of an enterprise-wide RSA program focusing on risks and controls within each business unit. Review of risk and controls is also performed by each line of business as part of quarterly risk working groups. More frequent reviews are also undertaken where there are potential changes to technology, legal or regulatory requirements, organisational restructure, material process adjustment and/or other material change to a business area.

The Enterprise Risk function facilitates an annual review of major current and emerging 'top 10' risks faced by ASX, including associated control improvement action plans to ensure risks are being managed within appetite.

The ERMF, CMF and other policies and procedures are the subject of internal and external review. ASX's Internal Audit department routinely monitors compliance with operational frameworks and policies, reporting to the ARC on a quarterly basis. Audit findings may prompt a review of a framework and/or policy, which would be conducted in consultation with key stakeholders. Further technology-related security frameworks are also considered by external auditors as required by the scope of the audit.

BCP testing of the clearing systems is conducted on an annual basis.

For new clearing participant, on-boarding contains operational readiness testing with the applicant to ensure they are competent in performing tasks required as part of day to day activity.

Key Consideration 3:

An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.

CCP 16.3, SSF 14.3

As a CCP/SSF:

Defined operational objectives are in place. The monthly management reporting summarises performance against availability and other measures such as critical system capacity and headroom and includes a description of any changes or incidents where an outage has occurred to a critical service. The actual capacity and performance of ASX CCP systems is tested on a periodic basis. A required level of redundant capacity is taken into account. There are tools and controls in place that are used to monitor, report, review and test the capacity and performance of the systems.

The operational objectives of critical systems is reported quarterly to the Technology Management Committee, Board Technology Committee and as required, to the regulators.

IT operations and operational resilience is supported by a number of policies and procedures covering areas such as IT and physical security, change and release management, incident and problem management, disaster recovery, risk management, data centre operations, project management, architecture design principles and system development and testing. The ASX's CCPs' policies are reviewed and assessed on a regular basis and recognise that employees, contractors and consultants have an obligation and a significant role to play in helping protect and maintain the information systems and data resources of ASX.

As a CCP:

Availability targets are documented and defined formally for critical services. The ASX CCP systems are required to meet a minimum availability target of between 99.8% and 99.95% depending on system criticality, contractual or regulatory requirement, or the system implementation date.

As a SSF:

Availability targets are documented and defined formally for critical services. The ASX SSF services are required to meet a minimum availability target of 99.8% for legacy systems up to July 2014. From July 2014, all new systems, or legacy systems that have experienced a major upgrade, are required to meet a minimum availability target of 99.95% (99.9% for the Austraclear System as required under the Step-in and Service Agreement with the RBA).

Key Consideration 4:

An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.

No corresponding FSS

As a CCP/SSF:

ASX's CCPs/SSFs are designed to have scalable capacity which is maintained at levels to support increasing volumes and service availability objectives. The internal metric for target capacity is to maintain 100% over peak recorded daily measured monthly, rolling 3 and 24 month and historical peak volumes. Review of current and projected capacity requirements are triggered when a service does not meet 100% available headroom, or when a significant/environmental change to the service.

ASX has validated that CHES is able to process 10 million trades per day (against a record peak day volume of 7 million trades, in March 2020). ASX has defined a number of operational enhancement initiatives including to conduct a stress test for over 10 million trades per day to identify breakpoints, and to assess and develop possible capacity and performance uplifts in CHES ahead of system replacement.

Key Consideration 5:

An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.

No corresponding FSS

As a CCP/SSF:

ASX has a range of security policies and standards designed to provide guidance to staff and safeguard the ASX technology environment against threats which may disable or affect its operations. Security documentation coverage include the security framework, default security requirements, identity and access management, security awareness, patching, email and internet use, removable media, scenario testing, hardening standards, firewall management, third party vendor monitoring, encryption, mobility and remote access, network security, incident response, vulnerability scanning and security testing.

ASX implements physical security measures in accordance with ISO27001 standards and other frameworks that minimise or remove the risk of harm to people, and information and physical asset resources being made inoperable or inaccessible, or being accessed, used or removed without proper authorisation.

ASX performs regular threat and vulnerability reviews of our facilities, in conjunction with market-leading security consultants.

Key Consideration 6:

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

No corresponding FSS

As a CCP/SSF:

ASX's BCMF has clearly stated objectives and is supported by a range of other internal documents to support ASX CCPs/SFFs rapid recovery and timely resumption of critical operations following a disruption. Examples of these include the BCM Exercise Framework, BCM Scenario Risk Assessment, ASX Crisis Management Plan, and Incident Management Framework.

ASX business continuity arrangements are underpinned by permanent dual-site operational teams in place with sufficient resources, capabilities and functionalities and appropriate staffing arrangements at both the primary and alternate operations sites (including the use of remote working arrangements). One site is located outside of the Sydney CBD. The primary and backup data centres are both located outside of the CBD and are geographically separated. These arrangements enable ASX CCPs/SFFs sustain and operate under a broad range of circumstances including wide-scale disruptions.

The Crisis Management Plan and the ASX Continuous Disclosure Policy assists the Crisis Management Team in consulting and informing participants, interdependent FMIs, the RBA and other relevant authorities, and others (such as service providers and media) on a timely basis.

- ASX's CCPs/SSFs conduct periodic business impact analysis and maintain business continuity plans detailing the operational responses to events that pose a significant risk of disrupting operations. The plans identify and address events such as technology failure, staff unavailability, pandemic, cyber-attack, greater CBD inaccessibility and primary site & systems unusable. These plans are reviewed annually.

- ASX maintains both primary and backup data centres, and its business continuity arrangements are designed to achieve failover to the backup site data centre within two hours and to ensure there is zero or near zero data loss. Front-end servers handling communications with participants are configured to provide automatic failover across sites.

- The ASX CCPs/SSFs regularly test their business continuity arrangements per a BCM Exercise Framework that sets out exercise requirements. Dual site operational teams across the primary and alternate secondary operations sites (including the use of remote working arrangements) effectively test backup operational processes on a continuous basis. Live tests, where clearing and settlement services are provided in real time from the alternate backup data centre site, are conducted annually.

As a SSF:

- Austraclear has introduced biannual Assured Mode industry test exercises to develop industry capability in continuing to use Austraclear in the event that connection between Austraclear and RITS is interrupted for an extended period of time. Austraclear Assured Mode is existing functionality within Austraclear that offers participants continued ability to achieve irrevocable settlement of transactions under the Austraclear Regulations in such an interruption event.

FSS: A CCP/SSF should ensure that it can reliably access and utilise well-trained and competent personnel, as well as technical and other resources. These arrangements should be designed to ensure that all key systems are operated securely and reliably in all circumstances, including where a related body becomes subject to external administration.

CCP 16.4, SSF 14.4

As a CCP/SSF:

- The ASX CCPs/SSFs employ sufficient well-qualified personnel. Processes are in place to mitigate the effects of high rates of staff turnover and key-person risk.

- Within the ASX group structure, most operational resources are provided by ASX Operations Limited, a subsidiary of ASX Limited, under a contractual Support Agreement. In the event that ASX Operations Limited became subject to external administration, to the extent permissible by law, provisions within the Support Agreement provide for the ASX CCPs/SSFs to retain the use of operational resources.

- Major projects are approved and overseen by the Portfolio Governance Group and reported through to the Board via the Board Technology Committee. All projects are ranked based on strategic objectives and identified benefits and undergoes an assessment and classification based on its risk and complexity. This assessment provides a project tiering which identifies the appropriate project delivery governance pathway to be applied. This risk-based approach, determines delivery and governance pathways and defines the mandatory and optional project deliverables, how roles and responsibilities apply and what level of governance is required on a project.

Key Consideration 7:

An FMI should identify, monitor and manage the risks that key participants, other FMIs and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor and manage the risks its operations might pose to other FMIs.

CCP 16.5, SSF 14.5

As a CCP/SSF:

The ASX, in line with RBA recommendations, is in the process of enhancing its framework for managing and monitoring risks to and from third parties.

ASX has developed a Critical Third Party Policy that will be used to identify parties that have a material impact on the delivery of clearing and settlement services.

The ASX has a Procurement Policy and Vendor Management Framework where third party related risks are considered as part of risk profile reviews.

As a CCP:

For a CCP ASX services and operational support are provided to participants of ASX Clear (Futures) that clear NZ dollar-denominated products as part of normal business procedures.

FSS: A participant of a CCP/SSF should have complementary operational and business continuity arrangements that are appropriate to the nature and size of the business undertaken by that participant. The CCP's rules and procedures should clearly specify operational requirements for participants.

CCP 16.6, SSF 14.6

As a CCP/SSF:

The ASX CPPs/SSFs consider Business Continuity Plan (BCP) arrangements for their participants as part of the participant's admission and on-going operating rule requirements. The obligations are broadly similar across the ASX SSFs, though may vary slightly (e.g. the BCP self-assessment form required to be completed as part of the admission process) given the differing nature of the facilities. Participants are required to have arrangements which are comparable to the nature and size of their business as a participant.

The ASX CCPs/SSFs have issued guidance on business continuity and disaster recovery to assist participants to understand the arrangements they should have in place to meet their obligations under the rules. As a guide, larger participants should be in a position to be able to continue operating their clearing and settlement functions within 2-4 hours and smaller participants within 4-6 hours after a disruption.

Guidance has also been issued on offshoring and outsourcing noting that ASX would regard material offshoring and/or outsourcing arrangements to include business continuity and disaster recovery requirements. Participants are required to verify that the service provider's business continuity and disaster recovery arrangements are adequate and align with the recovery time objective of the participant and, for material arrangements, enforce obligations on the provider to consult before making any material changes to their business continuity arrangements and perform and participate in frequent testing of those arrangements.

Review of participants' BCM are conducted, if risk factors are identified, to examine the participant's governance and processes for resilience and business continuity.

The ASX CCP/SSF Operating Rules have criteria for operational requirements.

FSS: A CCP/SSF should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology systems can resume operations within two hours following disruptive events. Business continuity arrangements should provide appropriate redundancy of critical systems and appropriate mitigants for data loss. The business continuity plan should be designed to enable the CCP to facilitate settlement by the end of the day of the disruption, even in case of extreme circumstances. The CCP should regularly test these arrangements.

CCP 16.7, SSF 14.7

- ASX business continuity arrangements are underpinned by a three site dual operations model with sufficient resources, capabilities and functionalities and appropriate staffing arrangements that would not be affected by a wide-scale disruption. Also, staff are able to work remotely and work from home regularly. Technology recovery arrangements include inter- and intra-site system redundancy and data recovery.
- Participants are required to be involved in testing each time the ASX CCPs/SSFs roll out a major change or new system that participants connect to.
- Connectivity testing with the participants is undertaken regularly. An external testing environment is in place.
- ASX Clear performs monthly tests to validate the process to revert to manual settlement of cash market obligations arising within the CHESST settlement batch within RBA RITS. This ensures that in the event that connection to RITS is interrupted, ASX Clear can facilitate settlement by the end of the day.

FSS: A CCP/SSF should consider making contingency testing compulsory for the largest participants to ensure they are operationally reliable and have in place tested contingency arrangements to deal with a range of operational stress scenarios that may include impaired access to the CCP/SSF.

CCP 16.8, SSF 14.8

As a CCP/SSF:

- The ASX's CPPs/SSFs Operating Rules include BCP testing requirements arrangements for their participants as part of the participant's admission and on-going operating rule requirements.
- The ASX CCP/SSF Operating Rules include BCP testing requirements which are assessed at the time of admission, and reviews of participants' BCM are conducted, if risk factors are identified, to examine the participant's governance and processes for resilience and business continuity.
- The Operating Rules for both ASX CCPs/SSFs require participants to maintain adequate business continuity arrangements that are appropriate to the nature and size of their business as a participant. The guidance issued by ASX on these obligations includes guidance that a participant is required to test its disaster recovery and business continuity arrangements at least once annually and as soon as practicable following any material change to its business or its disaster recovery business continuity arrangements. These arrangements are reviewed as part of the participant admission process, and, on a risk-based approach, periodically, as part of ASX Participants Compliance monitoring and enforcement procedures.

FSS: A CCP/SSF that relies upon, outsources some of its operations to, or has other dependencies with a related body, another FMI or a third-party service provider (for example, data processing and information systems management) should ensure that those operations meet the resilience, security and operational performance requirements of these CCP/SSF Standards and equivalent requirements of any other jurisdictions in which it operates.

CCP 16.9, SSF 14.9

As a CCP/SSF:

- ASX has a Critical Service Provider (CSP) process that provides a definition of a CSP as well as outlining the applicable management and review process. As part of this procedure, ASX has developed a set of standard clauses for negotiation into agreements with third-party CSPs where they apply to an ASX CCP/SSF. These standard clauses seek to ensure that the agreements meet the resilience, security and operational performance requirements of the FSS.
- ASX is negotiating these standard clauses into all new agreements with CSPs, and is reviewing all existing agreements with a view to negotiating these standard clauses where they are not already reflected.

FSS: All of ASX's CCP's/SSF's outsourcing or critical service provision arrangements should provide rights of access to the Reserve Bank to obtain sufficient information regarding the service provider's operation of any critical functions provided. A CCP/SSF should consult with the Reserve Bank prior to entering into an outsourcing or service provision arrangement for critical functions.

CCP 16.10, SSF 14.10

As a CCP/SSF:

- Refer Key Consideration 6 for further information.
- ASX's CSP procedure includes references to the level of RBA consultation required in the management of CSPs, including annual notification of addition and removal of CSPs.
- ASX's standard clauses for CSP agreements require the CSP to grant reasonable access to the RBA in respect of information relating to the CSP's operation of a critical function. ASX is negotiating these clauses into all new agreements with CSPs, and is reviewing all existing service agreements with a view to negotiating these standard clauses where they are not already reflected. Where a CSP does not agree to ASX's proposed clauses in this regard, RBA will be consulted.

FSS: A CCP/SSF should organise its operations, including any outsourcing or critical service provision arrangements, in such a way as to ensure continuity of service in a crisis and to facilitate effective crisis management actions by the Reserve Bank or other relevant authorities. These arrangements should be commensurate with the nature and scale of the CCP's/SSF's operations.

CCP 16.11, SSF 14.11

As a CCP/SSF:

- ASX's standard clauses for CSP agreements require the CSP to give the RBA notice of any intention of the CSP to terminate the agreement as a consequence of an ASX CCP/SSF breach, or in the event of the insolvency of an ASX CCP/SSF or any other relevant ASX entity, and to negotiate an alternate arrangement with the RBA to ensure continued service provision.
- ASX's CCPs/SSFs arrangements to ensure continuity of operations in the event of a crisis will be aligned to the new resolution regime for FMIs once introduced into Australian law.
- All third party arrangements are managed in accordance with ASX's Procurement Policy and Vendor Management Framework. Further, ASX has developed a Critical Third Party Policy that will be used to identify parties that have a material impact on the delivery of clearing and settlement services.

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.

Key Consideration 1:

An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.

CCP 17.1, SSF 15.1

As a CCP/SSF:

The [ASX Cash Equities CS Code of Practice](#) sets out ASX’s commitments to its customers and other stakeholders in managing cash equities clearing and settlement infrastructure and services for the Australian market. Under the Code, ASX commits, among other things, to transparent and non-discriminatory terms of access to cash equities clearing and settlement services. Refer to section 3 of the Code for further details regarding standard access to these services.

The Trade Acceptance Service (TAS) Legal Terms provides clearing and settlement arrangements to non-ASX market operators consistent with [ASX’s Code of Practice commitments](#). The TAS Legal Terms were last updated in October 2021 and can be found on the [ASX website](#).

Guidance notes on admission as an ASX Settlement, ASX Clear and ASX Clear (Futures) participant are included in the [Participant Application Kit](#), and include risk-related participant requirements.

As a CCP:

As to the ASX CCP’s interpretation of what it means to provide its clearing and settlement services in a “fair and effective” way refer to the “Fair and Effective Clearing and Settlement Facilities” document under “Supporting Information” [here](#).

Capital requirements, as well as other risk-related requirements, for ASX Clear and ASX Clear (Futures) participants are set-out online (refer to section 1(f) for a summary of the [capital requirements for clearing participants](#)).

Relevant Operating Rule oversight and Guidance Notes can be found on the [ASX website](#), see in particular:

- ASX Clear Operating Rules [Section 3: Participation in the Clearing Facility](#);
- ASX Clear Operating Rules [Section 4: Rights and Obligations of Participants](#);
- ASX Clear Operating Rules [Section 5: Risk Management Capital Requirements](#);
- ASX Clear [Guidance Note 1: Admission as a Participant](#); and
- ASX Clear (Futures) Operating Rules [Part 2: General ASX Clear \(Futures\) Guidance Note 1: Admission as a Participant](#).

As a SSF:

Information regarding participation options is available on the ASX website for [ASX Settlement](#) and [Austraclear](#).

Relevant Operating Rule oversight and Guidance Notes can be found on the [ASX website](#), see:

- ASX Settlement Operating Rules [Section 4: Participation in the Settlement Facility](#);

- ASX Settlement Operating Rules [Section 6: Rights and Obligations of Participants](#);
- ASX Settlement [Guidance Note 1: Admission as a Participant](#); and
- Austraclear [Regulations 2-5](#).

Key Consideration 2:

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

CCP 17.2, SSF 15.2

As a CCP/SSF:

Reviews of participant admission, assess restrictions and eligibility requirements are undertaken on a need basis and taking into consideration the market conditions and regulatory requirements. Any material changes to the Operating Rules will be consulted on and subject to regulatory approvals to ensure they are fair.

Admission Requirements are principal based with guidance issued around expectations and evidence requirement to demonstrate the capabilities to become a participant.

ASX offers different classes of participation to participants which will take into account their needs, activities and requirements.

As a CCP:

Guidance notes on admission as an ASX Clear and ASX Clear (Futures) participant are included in the [Participant Application Kit](#), and include risk-related participant requirements. Capital requirements, as well as other risk-related requirements, for ASX Clear and ASX Clear (Futures) participants are set-out [online](#). Having capital requirements, among other admission requirements, seeks to ensure that only entities with an adequate level of financial resources are admitted, and remain, as clearing participants. All ASX Clear non-bank participants are subject to the same risk based capital regime, within which participants that undertake higher risk activities are required to hold a higher level of capital. ASX Clear (Futures) participants are largely subject to a net tangible asset requirement, which is higher for OTC participants than futures participants, reflecting the higher risk of OTC derivatives clearing.

Relevant Operating Rule oversight and Guidance Notes can be found on the [ASX website](#):

- ASX Clear Operating Rules [Section 3: Participation in the Clearing Facility](#);
- ASX Clear Operating Rules [Section 4: Rights and Obligations of Participants](#);
- ASX Clear Operating Rules [Section 5: Risk Management Capital Requirements](#);
- ASX Clear [Guidance Note 1: Admission as a Participant](#)
- ASX Clear (Futures) Operating Rules [Part 2: General](#); and
- ASX Clear (Futures) [Guidance Note 1: Admission as a Participant](#).

As a SSF:

Information about the range of participation choices are [publicly](#) available. Information regarding participation options on the ASX website for [ASX Settlement](#) and [Austraclear](#).

Relevant Operating Rule oversight and Guidance Notes can be found on the [ASX website](#):

- ASX Settlement Operating Rules [Participation in the Settlement Facility](#);
- ASX Settlement Operating Rules [Section 6: Rights and Obligations of Participants](#);
- ASX Settlement [Guidance Note 1: Admission as a Participant](#); and
- Replace with [Austraclear Regulations 2-5](#).

Key Consideration 3:

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

CCP 17.3, SSF 15.3

As a CCP/SSF:

Relevant Operating Rules require participants to comply with the admission requirements on an ongoing basis and include notification requirements for participants to advise of changes to their businesses which will be assessed to ensure ongoing compliance with the admission criteria. The Relevant Operating Rules also permit conditions to be imposed on participants as a way of managing a change in the profile of the participant which may limit the exposures the participant can take or notification requirements.

Participants Compliance conducts risk-based thematic compliance reviews to monitor participants' compliance with the relevant Operating Rules.

- Relevant documents disclosed on the ASX website include: Monitoring and Enforcing Compliance: [Monitoring and Enforcing Compliance with ASX's Operating Rules](#);
- For ASX Clear refer ASX Clear [Default Management Overview](#); and
- For ASX Clear (Futures) refer [ASXCLF Clearing Participant Default Overview](#).

As a CCP:

The Counterparty Risk Assessment unit reviews financial information provided by participants to monitor their compliance with the relevant capital requirements. Participants provide financial information via monthly, annual and ad hoc and returns. The returns must be provided by the lodgement deadlines specified by the ASX CCPs and must be authorised by directors (or alternatively by authorised signatories in the case of ASX Clear (Futures) participants).

The Counterparty Risk Assessment unit is also responsible for developing and monitoring the capital regimes that clearing participants must comply with. This includes developing the policy framework and reporting mechanisms designed to ensure that the financial strength of participants is measured and monitored on a regular basis.

A clearing participant watchlist is prepared on a monthly basis. The purpose of the watchlist is to provide information to senior management on those clearing participants that appear to be experiencing financial, risk, operational, compliance or reputational issues that may impact on their ongoing ability to meet their obligations as a participant and therefore need to be monitored more closely.

Relevant Operating Rule oversight and Guidance Notes can be found on the [website](#), see in particular:

- Refer ASX Clear: [Section 15: Default](#);
- Refer ASX Clear: [Guidance Note 5: Suspension and Termination of Participants](#);
- Refer ASX Clear (Futures): [Part 7: Procedures on a Default](#); and
- Refer ASX Clear (Futures): [Guidance Note 5: Suspension and Termination of Participants](#).

As a SSF:

Relevant Operating Rule oversight and Guidance Notes can be found on the [ASX website](#), refer to:

- ASX Settlement: [Section 3: Functions, Powers, Rights and Obligations of AX Settlement](#);
- ASX Settlement: Section 12;
- ASX Settlement: [Guidance Note 5: Suspension and Termination of Participants](#);
- Austraclear: [Regulation 6](#); and
- Austraclear: [Guidance Note 5: Suspension and Termination of Participants](#).

PRINCIPLE 19 – TIERED PARTICIPATION ARRANGEMENTS

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

Key Consideration 1:

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

CCP 18.1, SSF 16.1

As a CCP/SSF:

Entities admitted to ASX Clear, ASX Clear (Futures), ASX Settlement and Austraclear are direct participants of ASX and have access to our clearing and/or settlement systems. Indirect participants are direct or indirect clients of our direct participants. The types of clients which would be indirect participants includes market and trading participants, banks, asset managers, hedge funds, market makers and individuals.

The ASX operating rule framework allows ASX to request information on any activities covered under the ASX operating rule framework, which would include information in relation to indirect clients.

As a CCP:

Under the capital monitoring provisions of the ASX operating rule framework, ASXCL gathers information on all activities conducted by ASX Clear non-bank participants.

As a SSF:

All non CCP related settlements between participants in either ASX Settlement or Austraclear are on a bi-lateral basis (i.e. not novated to the Clearing House) and therefore, in the event of a default of one settlement participant, the transaction present within the ASX SSF would either lapse or be cancelled, and therefore do not create a material risk to ASX Settlement and Austraclear.

Key Consideration 2:

An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.

CCP 18.2, SSF 16.2

As a CCP:

For ASX Clear (Futures), ASX Participants Compliance monitors concentrations at the account level through the Daily Beneficial Ownership Report (DBOR) under a risk-based approach. The Operating Rules require each participant to provide the ASX CCP with the name and address of the beneficial holder of each open position, unless they meet an exception, on a daily basis. Where a client falls within the exceptions, ASX Operating Rules require that the participant has in place arrangements with such clients to provide the information directly to ASX where required.

- Risk concentration is monitored via the monitoring of trading and clearing volumes as well as margin requirements based on house and client accounts (as applicable) on a periodic basis. ASX Clear (Futures) will consider the indirect clients clearing through multiple participants as part of its assessment of DBOR data on a periodic basis.
 - For ASX Clear (Futures), all interest rate contracts are monitored by a group comprising of ASX Participants Compliance, ASX Clearing Risk Oversight, ASX Markets and ASX Legal to ensure there are no concentration amongst other aspects. Deliverable contracts are monitored by ASX Operations.
- As a SSF:**
- See Key Consideration 1.

Key Consideration 3:

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

CCP 18.3, SSF 16.3

As a CCP:

- Participants have the primary responsibility for supervisory and monitoring of the indirect participants. In addition to this, ASX Clear in respect of ETOs and ASX Clear (Futures) have different account structures for House (direct) and Client (indirect).
- This allows ASX Clear to identify the proportion of activity that the direct participants conducts on behalf of indirect participants.
- For ASX Clear (Futures), ASX Participants Compliance monitors concentrations of indirect participants through the DBOR information under a risk-based approach.
- For ASX Clear (Futures), all interest rate contracts are monitored by a group comprising of ASX Participants Compliance, ASX Clearing Risk Oversight, ASX Markets and ASX Legal to ensure there are no concentration amongst other aspects. Deliverable contracts are monitored by ASX Markets, Operations team.

As a SSF:

- Indirect participants, responsible for a significant proportion of transactions processed in Austraclear are identified and monitored in the daily course of operation. Data related to indirect participants is shared with RBA in the FMI links regulatory reporting feed.

Key Consideration 4:

An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.

CCP 18.4, SSF 16.4

As a CCP:

- For ASX Clear (Futures), ASX Participants Compliance monitors concentrations at the account level through the DBOR.
- For ASX Clear (Futures), all open positions in expiry contracts are monitored by ASX Participants Compliance and, for major contracts, by a group comprising of ASX Participants Compliance, ASX Operations, ASX Clearing Risk Oversight, ASX Markets team and ASX Legal to ensure there are no concentration or delivery issues.
- If an issue is identified via any of the monitoring, then the ASX CCP will contact the clearing participant to obtain a better understanding of the risk. If not satisfied, the ASX CCP has the right to call for AIMs to cover the exposure or to place restrictions on their admission regarding the ability to open new positions.

PRINCIPLE 20 – FMI LINKS

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

Key Consideration 1:

Before entering into a link arrangement and on an ongoing basis once the link is established, an FMI should identify, monitor, and manage all potential sources of risk arising from the link arrangement. Link arrangements should be designed such that each FMI is able to observe the other principles in this report.

CCP 19.1, SSF 17.1

As a CCP:

The following links exist between ASX's CCPs and other FMIs:

- ASX Clear and ASX Settlement, for the settlement of novated cash equity market transactions;
- ASX Clear and Austraclear, for the settlement of AUD margin payments;
- ASX Clear (Futures) and Austraclear, for AUD fund transfers and lodgement of AUD-denominated non-cash collateral;
- ASX Clear (Futures) and HVCS, (operated by Payments NZ) for the settlement of NZD payments; and
- ASX Clear (Futures) and ASX Clear and the DTCC Data Repository (Singapore) Pty Ltd (DTCC), for the provision of trade repository services for cleared OTC transactions.

The ASX CCPs' links to ASX Settlement and Austraclear are subject to the enterprise risk management framework that encompasses all the ASX Clearing and Settlement facilities. The framework addresses operational risks associated with software, infrastructure or network failures and manual processing errors. Incident reports are required for all significant technical or operational incidents and include, in the assessment, mitigating actions to reduce the risk of reoccurrence. In addition, a risk profile assessment is also prepared for the ARC every six months. Internal reviews are supplemented by an annual independent system-controls audit (ASAE 3402 Assurance Reports).

The link from ASX Clear (Futures) to HVCS is limited by the small size of NZD margin requirements. The HVCS rules, standards and procedures set out how these types of transactions are made, including what payment information is required and the timeframes for completing the transaction. HVCS participants use a dedicated SWIFT-based system between banks to settle these payments and interchange information between them. ASX Clear (Futures) also has contingency arrangements that allow for late payment of margin on New Zealand futures products via Austraclear in AUD if required.

ASX Clear (Futures) and SWIFT / commercial bank accounts for USD intraday margins, and collateral deposits for USD, Pound Sterling, Japanese Yen, Euro dollar.

ASX Clear (Futures) uses Clearstream to facilitate USD non cash collateral deposits.

The ASX CCPs' links to DTCC for trade reporting purposes are supported by contractual arrangements between the FMIs.

As a SSF:

ASX Settlement has a link to ASX Clear in order to settle novated cash equity market transactions. ASX Settlement is not exposed to financial risk through this link and the operational risk inherent in the link is managed under ASX's ERMF.

Austraclear maintains four links:

- ASX Clear, for the settlement of AUD margins ASX Clear is an Austraclear participant;
- ASX Clear (Futures), for the settlement of AUD fund transfers and lodgement of AUD-denominated non-cash collateral, and for settlement of 90-day bank bill futures. ASX Clear (Futures) is an Austraclear participant;
- Clearstream Banking S.A. (Clearstream), in relation to Euro entitlements managed in Austraclear. Austraclear is a participant in Clearstream's international central securities depository (ICSD). In addition, Austraclear has links with ASX Collateral Management Services Pty Limited which has links with Clearstream, in relation to ASX's Collateral Management Service;
- LCH Limited (LCH), for the management of LCH's AUD liquidity requirements. This link does not, in practice, bring with it any binding additional requirements for Austraclear, over and above the operational risk management arrangements that Austraclear maintains for participants more broadly, since Austraclear does not have a dependency on LCH as part of the arrangement. LCH is an Austraclear participant; and
- The RITS, in relation to AUD payments made through Austraclear.

Austraclear and ASX Settlement do not act as bilateral counterparty is not exposed to financial risk through these links and the operational risk inherent in the links is managed under ASX's ERMF.

Key Consideration 2:

A link should have a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the FMIs involved in the link.

CCP 19.2, SSF 17.2

As a CCP/SSF:

All links operate within Australia, and have a well-founded legal basis supported by contractual arrangements which include, where applicable, operating rules that establish the framework for participation in the FMI or the provision of settlement instructions from one FMI to another. ASX conducts legal due diligence on the non-ASX group FMI Links on a periodic basis and reviews any regulatory matters that may impact those FMI Links.

ASX Clear's links to Austraclear and ASX Settlement have their legal basis in the rules and procedures of those facilities. The finality of settlements in the systems is supported, respectively, by approvals of the Austraclear System under Part 2 of the PSNA, and by the approval of CHESS (operated by ASX Settlement) under Part 3 of the PSNA.

ASX Clear (Futures)' link to Austraclear has its legal basis in the Austraclear Regulations and procedures. Securities are held in a bankruptcy remote manner from Austraclear. The finality of cash and securities settlements in Austraclear, including transactions submitted via these links, is supported by its approval under Part 2 of the PSNA.

ASX Clear (Futures)' link to HVCS has its legal basis in the rules and procedures of Payments NZ. The rules provide that cash settlements must take place through the NZ ESAS (operated by the RBNZ). ESAS is a designated settlement system under Part 5C of the Reserve Bank Act 1989 (New Zealand) and designation gives legislative backing to the finality of settlements effected in accordance with the rules of the system.

The ASX CCPs' links to DTCC for trade reporting purposes do not give rise to legal risks associated with the clearing and settlement of transactions or the recording of title to assets. Nevertheless, the ASX CCPs' links to DTCC are supported by contractual arrangements between the FMIs.

Austraclear's link to Clearstream's ICSD has a legal basis in a contract between the two FMIs, and Clearstream's rules which are supported by the Settlement Finality in Payment and Securities Settlement System Directive which has been implemented into Luxembourg Law. This ensures that instructions that have settled in Clearstream's settlement system (upon the successful debit and credit of the relevant accounts) are final and cannot be unwound. Securities are held in a bankruptcy remote manner from Clearstream.

Austraclear's link to LCH is governed by the Austraclear Regulations and does not expose Austraclear to legal risk different to any other Austraclear participant.

Key Consideration 3:

Linked CSDs should measure, monitor, and manage the credit and liquidity risks arising from each other. Any credit extensions between CSDs should be covered fully with high quality collateral and be subject to limits.

No Corresponding FSS

Not applicable to ASX SSFs. ASX Settlement and Austraclear do not act as bilateral counterparty to transactions settled in the facility and as such, arrangements do not involve credit or liquidity requirements.

Key Consideration 4:

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

SSF 17.5

Not applicable to ASX SSFs. CSD arrangements do not involve the transfer of securities.

Key Consideration 5:

An investor CSD should only establish a link with an issuer CSD if the arrangement provides a high level of protection for the rights of the investor CSD's participants.

No Corresponding FSS

Not applicable to the ASX SSFs.

Key Consideration 6:

An investor CSD that uses an intermediary to operate a link with an issuer CSD should measure, monitor and manage the additional risks (including custody, credit, legal and operational risks) arising from the use of the intermediary.

SSF 17.6

Not applicable to the ASX SSFs.

FSS: Where relevant to its operations in Australia, a CCP should consult with the Reserve Bank prior to entering into a link arrangement with another FMI.

CCP 19.3, SSF 17.3

The RBA is consulted on the design of all new ASX services involving another FMI prior to entering into the arrangement.

Key Consideration 7:

Before entering into a link with another CCP, a CCP should identify and manage the potential spillover effects from the default of the linked CCP. If a link has three or more CCPs, each CCP should identify, assess and manage the risks of the collective link arrangement.

CCP 19.4

Noted for CCPs, not applicable for SSFs.

FSS: A SSF operating a central securities depository that links to another central securities depository should measure, monitor and manage the credit and liquidity risks arising from such links. Any credit extended to the linked central securities depository should be covered fully with high-quality collateral and be subject to limits.

SSF 17.4

Not applicable, as CSD arrangements do not involve credit or liquidity requirements.

Key Consideration 8:

Each CCP in a CCP link arrangement should be able to cover, at least on a daily basis, its current and potential future exposures to the linked CCP and its participants, if any, fully with a high degree of confidence without reducing the CCP's ability to fulfil its obligations to its own participants at any time.

CCP 19.5

There are no CCP links.

Key Consideration 9:

A Trade Repository should carefully assess the additional operational risks related to its links to ensure the scalability and reliability of IT and related resources.

No Corresponding FSS

Applicable to Trade Repositories only.

PRINCIPLE 21 – EFFICIENCY AND EFFECTIVENESS

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

Key Consideration 1:

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

No corresponding FSS

As a CCP/SSF:

ASX Clear, ASX Clear (Futures), ASX Settlement and Austraclear provide a range of participation choices to suit the market and tailors the application process and arrangements dependant on the products and markets available. Refer to the [Participant Application Kit](#) for further details. In addition, for ASX Settlement refer to the [ASX website](#) and for Austraclear refer to the [ASX website](#).

User input is provided to the Boards of ASX Clear and ASX Settlement on the ongoing operation and development of cash equity clearing infrastructure and services by the ASX Business Committee. The ASX Advisory Group provides advice to the Boards of ASX Clear and ASX Settlement on strategic clearing and settlement matters.

The Risk and Product Working Groups for ASX Clear (Futures) provide user input to the Clearing Boards.

Key Consideration 2:

An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk management expectations, and business priorities.

No corresponding FSS

As a CCP/SSF:

Each ASX CCP/SSF has in place a corporate strategy that places a high priority on the safety of the facility and promotes financial stability. Each strategy outlines the key objectives and goals, along with the current initiatives to deliver agreed goals. CS facility strategies are refreshed annually, with progress monitored on a quarterly basis via reporting to the CS boards.

The strategy documents cover areas such as risk management and business priorities.

Operational targets:

- Availability targets for critical systems which have been set, are monitored and reported to relevant governance committees such as ARC and the CS Boards on a regular basis.

Risk management expectation:

- ASX has policies and procedures regarding the risk management, for more information refer to Principle 3.

In terms of minimum service levels, ASX Settlement and ASX Clear have a minimum availability target of 99.8 per cent and a minimum capacity headroom target of 50 per cent of total capacity, Austraclear has a 99.9 per cent minimum availability target stipulated in Austraclear's 'Step-in and Service Agreement' with the RBA.

Key Consideration 3:

An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.

No corresponding FSS

As a CCP/SSF:

Business strategy documents provide for periodic reporting to the CS Boards of progress against the goals and objectives, as outlined in the documents. The business plan/strategy noted above is reviewed annually.

The ASX Business Committee provides a mechanism for participants' input in to ASX's governance framework for consideration by ASX Management and the board of ASX Settlement and ASX Clear. Quarterly operational performance of the cash market clearing and settlement services is presented to the Business Committee and published on the [ASX website](#).

ASX undertakes regular customer engagement. Customer feedback is recorded in an enterprise CRM system.

As part of its commitment to continuous improvement, ASX has a suite of policies and procedures to support the activities to supervise the FMIs. These policies and procedures are reviewed on a regular basis.

Customer feedback is obtained from customer engagement, which provides a regular review of ASX Settlement and Austraclear's efficiency and effectiveness.

Finally, ASX Settlement and Austraclear are subject to review by both ASIC and the RBA.

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.

Key Consideration 1:

An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.

No corresponding FSS

As a CCP/SSF:

Approved Market Operators (AMOs) utilising the ASX Clear or ASX Settlement facilities are informed of any changes to connectivity or messaging protocols (either standardised or commercial) and there are processes and procedures in place to determine impact and actions required to accommodate changes.

As a CCP:

ASX Clear and ASX Clear (Futures) use industry recognised communication standards specific to the domestic and regional market.

ASX Clear's CHES system is a proprietary system, used by domestic clearing participants, Settlement Banks and Registries for the secure and efficient clearing and settlement of products transacted on an AMO using proprietary format messaging protocols. As part of the project to replace CHES, the replacement system will use FIX and ISO 20022 global messaging standards.

The clearing and settlement of ASX transactions executed on the trading platforms of Approved Market Operators takes place in CHES and is an integral part of the technology infrastructure for Australian equity clearing.

ASX Clear uses the Derivatives Clearing System (DCS) – a clearing platform for ETOs. DCS is a proprietary system, used by clearing participants to register and clear derivatives.

ASX Clear (Futures) uses Genium Clearing and OMNET API as an industry recognised communication standard to facilitate and manage the clearing of ASX24 products.

Genium Clearing and the OMNET API are used regionally in neighbouring exchanges (for example. SGX) and further afield across Scandinavian markets.

As a SSF:

Austraclear uses internationally accepted messaging standards (SWIFT 15022 and migrating to ISO 20022 messages in November 2024), in addition to proprietary Host to Host file based STP mechanism and the Austraclear Graphical User Interface). CHES currently uses proprietary messaging protocols (as at the date of this disclosure). As part of the project to replace CHES, the replacement system will use FIX and ISO 20022 global messaging standards.

PRINCIPLE 23 – DISCLOSURE OF RULES, KEY PROCEDURES AND MARKET DATA

An FMI should have clear and comprehensive rules, policies and procedures and should provide sufficient information and data 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 policies and procedures should be publicly disclosed.

Key Consideration 1:

An FMI should adopt clear and comprehensive rules, policies and procedures that are fully disclosed to participants. Relevant rules and key policies and procedures should also be publicly disclosed.

CCP 20.1, SSF 18.1

As a CCP/SSF:

- Rules/regulations and procedures, including any amendments are disclosed to participants and publicly via the [ASX website](#).
- Key policies and procedures such as application forms, clearing forms, acceptable collateral lists, interest payments, haircuts, and user guides are disclosed via the ASX website.
- ASX conducts a review of the CS facilities' rules and procedures on a five year cycle, to consider any changes that mitigate systemic risk or are otherwise desirable, address stakeholder feedback and replace redundant or inconsistent rules and procedures. This helps to ensure that the rules and procedures remain clear and comprehensive.
- The regulatory clearance process for amendments to the rules is set out under Part 7.3 of the Corporations Act (Division 2, Subdivision B). ASX consults with impacted stakeholders on material rule amendments. The Minister (or their delegate) has the power to disallow amendments to the rules of the CS facilities, which must be submitted by the CS facilities for review as soon as practicable after being made.
- Completed rule amendments are notified to participants via market notices and the ASX website.
- Rules are reviewed periodically including when any rules package is implemented, for example linked and deferred settlement, multi-currency, and removal of e-conveyancing.

FSS: A CCP's rules, policies and procedures should clearly identify the nature and scope of the risk exposure assumed by the CCP, such as by novation, open offer or other similar legal devices. A CCP's rules, policies and procedures should clearly identify the point in the clearing process at which the CCP assumes the risk exposure.

CCP 20.2

As a CCP:

The rules and procedures of ASX Clear and ASX Clear (Futures) can be found on the [ASX website](#).

- For the nature and scope of the risk exposure assumed by ASX Clear:
 - Refer to [Section 12](#): Registration, Novation, Netting and Settlement.
- For the nature and scope of the risk exposure assumed by ASX Clear (Futures):
 - Refer to [Part 3](#): Registration of Market Contracts and Obligations of ASX Clear (Futures) in particular Section 31A.2 and [ASXCLF Clearing Participant Default Overview](#) in particular under Section 3.

Rules relating to novation can be found on the [ASX website](#).

- **ASX Clear:**
 - [Section 12](#): Registration, Novation, Netting and Settlement.
 - Fact Sheet on Novation.
- **ASX Clear (Futures):**
 - [Part 3](#): of the Futures Rules Registration of Market Contracts and Obligations of ASX Clear (Futures).
 - Part 4 of the OTC Rules: Registration.
 - Fact Sheet on Novation.
- These rules set out the arrangements for the registration and novation of market contracts or OTC derivatives trades, including the point at which a contract is novated and the ASX CCP assumes the risk exposure of the trade.

Key Consideration 2:

An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.

CCP 20.3, SSF 18.2

As a CCP/SSF:

Details of all systems' design and operations can be found [online](#) via the ASX website.

Rights, obligations and benefits to participants is available via our website:

- [ASX Clear](#)
- [ASX Clear \(Futures\)](#)
- [ASX Settlement](#)
- [Austraclear](#)

The [ASX website](#) also provides descriptions of the cash market clearing process and margining approaches for securities and derivatives in ASX Clear, and clearing processes and margining approaches for exchange-traded and OTC derivatives in ASX Clear (Futures).

The rights and obligations of participants are set out in the rules and procedures of the ASX CCPs/SSFs which are published on the ASX website.

Refer also to "System design and operations" in the Introductory section of this document.

As a SSF:

Clear descriptions of the systems, operations and services, together with descriptions of participation in the ASX SSFs are disclosed in the following places:

- [ASX Settlement](#)
- [Austraclear](#)

Refer also to "System design and operations" in the Introductory section of this document.

Key Consideration 3:

An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.

CCP 20.4, SSF 18.3

As a CCP/SSF:

- A Participant Application Kit is available on the ASX website for new and prospective participants, which provides participants with key forms and guidance notes about the requirements for admission as a participant. The rules and procedures and additional participant education material are also available on [ASX's website](#).
- ASX has published fact sheets for the ASX CCPs that cover topics including default management, novation, client account options on ASX Clear (Futures), and investment risks for clients under the ASX Recovery Rules.
- Consultation papers are provided as part of [public consultations](#) conducted on amendments to rules and procedures (among other things).
- For Austraclear, regular forums and workshops are held with participants to communicate current and upcoming developments, and ASX Operations provides a helpdesk for participants, covering operational hours.
- Education webinars and online modules are available [online](#).
- New clearing participants are required to complete an operational readiness prior to admission.
- Referrals from ASX CCPs and ASX Settlement staff to Participant Compliance are made where the ASX CCP is of the view the clearing participant does not have sufficient knowledge of the rules or resources to operate.

Key Consideration 4:

An FMI should publicly disclose its fees at the level of the individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.

No corresponding FSS

As a CCP/SSF:

- The Clearing and Settlement services Fee schedule and Austraclear Fee schedules are available on the [ASX Online website](#).
- The Clearing and Settlement services Fee schedule includes details of the Cash Market Clearing and Settlement Revenue Sharing Scheme in which 50% of all cash market clearing and settlement revenue earned above an annual growth threshold (if any) will be shared with cash market clearing and settlement participants.
- Section 8 of the [Austraclear Fee Schedule](#) includes details of the rebates that apply dependent on fees charged or settlement volumes.
- Fee schedules are reviewed annually and are communicated via either market notice, email or through industry working groups, depending on the nature of the change.
- Any changes to Austraclear fees are communicated to participants via Market Notice generally 2-3 months in advance of effective date.

Key Consideration 5:

An FMI should complete regularly and disclose publicly responses to the CPMI-IOSCO Disclosure Framework for Financial Market Infrastructures. An FMI also should, at a minimum, disclose basic risk and activity data on transaction volumes and values.

CCP 20.5, SSF 18.4

As a CCP/SSF:

The CPMI-IOSCO *Disclosure Framework for Financial Market Infrastructures* is updated at a minimum, every two years, in accordance with clause 3.23.7 of the framework and available on the ASX website.

As a CCP:

On a quarterly basis, ASX updates the Quantitative Disclosures for both ASX Clear and ASX Clear Futures.

The quantitative disclosures under the CPMI-IOSCO Public quantitative disclosure standards for central counterparties for [ASX Clear can be found here](#) and for ASX Clear (Futures) [here](#). The quantitative disclosures for ASX Clear and ASX Clear (Futures) enable authorities, participants and the public to understand the risks associated with the ASX CCP.


24

PRINCIPLE 24 – DISCLOSURE OF MARKET DATA BY TRADE REPOSITORIES

A TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.

This PFMI is not applicable to ASX CCPs/SSFs.



FFS: REGULATORY REPORTING

A CCP/SSF should inform the Reserve Bank in a timely manner of any events or changes to its operations or circumstances that may materially impact its management of risks or ability to continue operations. A CCP/SSF should also regularly provide information to the Reserve Bank regarding its financial position and risk controls on a timely basis.

FSS: A CCP should inform the Reserve Bank as soon as reasonably practicable if:

- a. it breaches, or has reason to believe that it will breach:
 - i. a CCP Standard; or
 - ii. its broader legislative obligation to do, to the extent that it is reasonably practicable to do so, all things necessary to reduce systemic risk;
- b. it becomes subject to external administration, or has reasonable grounds for suspecting that it will become subject to external administration;
- c. a related body to the CCP becomes subject to external administration, or if the CCP has reasonable grounds for suspecting that a related body will become subject to external administration;
- d. a participant becomes subject to external administration, or if the CCP has reasonable grounds for suspecting that a participant will become subject to external administration;
- e. a participant fails to meet its obligations under the CCP's risk control requirements or has its participation suspended or cancelled because of a failure to meet the CCP's risk control requirements;
- f. it fails to enforce any of its own risk control requirements;
- g. it plans to make significant changes to its risk control requirements or its rules, policies and procedures;
- h. it or a service it relies on from a third party or outsourced provider experiences a significant operational disruption, including providing the conclusions of its post-incident review;
- i. any internal audits or independent external expert reviews are undertaken of its operations, risk management processes or internal control mechanisms, including providing the conclusions of such audits or reviews;
- j. its operations or risk controls are affected, or are likely to be affected, by distress in financial markets;
- k. it has critical dependencies on utilities or service providers, including providing a description of the dependency and an update if the nature of this relationship changes;

- l. it proposes to grant a security interest over its assets (other than a lien, right of retention or statutory charge that arises in the ordinary course of business);
- m. it proposes to incur or permit to subsist any loans from participants or members unless such loans are subordinated to the claims of all other creditors of the CCP; or
- n. any other matter arises which has or is likely to have a significant impact on its risk control arrangements (see also CCP Standards 1.6, 16.10 and 19.3).

CCP 21.1, SSF 19.1

As a CCP/SSF:

ASX has documented the applicable reporting obligations in its Governance Risk & Compliance system. As such, if any of the relevant matters occur, the RBA is notified accordingly and a record of notification is entered into a repository.

The ASX Incident Management Framework and associated procedures and systems facilitate the assessment and timely reporting of breaches and other incidents to the RBA. Further, as a result of ongoing monitoring and periodic reviews of FSS compliance obligations.

The financial position of the ASX CCPs/SSFs is provided quarterly to the RBA.

ASX has a Regulatory Reporting Policy, which sets our principles and requirements for the timely and accurate reporting of information to regulators.

ASX's Compliance Management Framework (CMF), which aligned with the ISO 37301:2001 compliance management systems, provides processes, systems and tools to facilitate effective regulatory risk management and compliance with regulatory reporting obligations applicable to ASX CCP/SSF.

The financial position of ASX, including wholly owned subsidiaries' is reviewed by the ASX Limited Board at every meeting and by the ARC every six months. Externally audited financial statements are produced annually.

Daily monitoring of participant credit indicators; use of "watchlist"; participant communication. A Participant Issue Response Group (PIRG) and then potentially a Default Management Committee (DMC) would be convened and relevant information communicated to regulators. Updates would continue to be provided as further information became available.

For participant monitoring of risk and relevant material compliance obligations, as noted in the above bullet point, the same approach is applied to inform the RBA.

A Daily Risk Indicator Report is escalated to senior management.

Discussion relating to risk controls may also occur at liaison meetings with the RBA.

As part of the quarterly meeting between Internal Audit and the RBA, a listing of audits issued in the prior quarter is provided and full audit reports are submitted on request. Notable reports and audit issues are also discussed during the quarterly meetings.

Regular risk reporting is provided to the RBA, including stress test exposures.

Cyclical impact (e.g. GFC) or distress from participant default is discussed with the RBA, as required.

Ad-hoc meetings with the RBA.

FSS: A CCP should also provide to the Reserve Bank, on a timely basis:

- a. audited annual accounts;
- b. management accounts on a regular basis, and at least quarterly;
- c. risk management reports, including detailed information on margining and stress testing, on a regular basis, and at least quarterly;
- d. periodic activity, risk and operational data, as agreed with the Reserve Bank; and,
- e. any other information as specified by the Reserve Bank from time to time.

CCP 21.2, SSF 19.2

As a CCP/SSF:

ASX has documented the applicable reporting obligations in its Governance Risk & Compliance system. Processes are in place to deliver the required reports to the RBA on the required frequency.

Annually audited licensed accounts for ASX Clear and ASX Clear (Futures) are provided to the RBA.

Management accounts for the ASX CCPs and ASX SSFs are provided to the RBA quarterly.

Risk reports are provided to the RBA at least quarterly.

Any agreed additional data is provided to the RBA quarterly.

APPENDIX II

Acronyms used throughout this document:

| | |
|---------------|--|
| ADI | Authorised Deposit-taking Institution |
| AIMs | Additional Initial Margins |
| ARC | Audit and Risk Committee |
| ARD | Additional Liquidity Requirement |
| BCM | Business Continuity Management |
| BCMF | Business Continuity Management Framework |
| CBD | Central Business District |
| CBPL | Capital Based Position Limit |
| CCP | Central Counterparty |
| CHESS | Clearing House Electronic Subregister System |
| CS | Clearing and Settlement |
| CST | Credit Stress Testing |
| CLR | Core Liquidity Requirement |
| DBOR | Daily Beneficial Ownership Report |
| DLR | Default Liquidity Requirement |
| DvP | Delivery versus Payment |
| ERICA | Enterprise Risk, Internal Audit and Compliance Application |
| ESA | Exchange Settlement Account |
| ESAS | Exchange Settlement Account System |
| FHSVaR | Filtered Historical Simulation VaR |
| FSS | Financial Stability Standards |
| HSVaR | Historical Simulation VaR |
| HVCS | High Value Clearing System |
| ICA | Individual Client Account |
| ICCs | Inter-Commodity Concessions |
| ICs | Intra-commodity Spread |
| IRS | Interest Rate Swap |
| KRI | Key Risk Indicator |
| LST | Liquidity Stress Testing |
| MPOR | Margin Period of Risk |
| OLR | Ordinary Liquidity Requirement |
| OTA | Offsetting Transaction Arrangement |
| OTC | Over the Counter |
| PSNA | Payment Systems and Netting Act |
| RAS | Risk Appetite Statement |
| RBA | Reserve Bank of Australia |
| RBNZ | Reserve Bank of New Zealand |
| RITS | Reserve Bank Information and Transfer System |
| RSA | Risk Self-Assessment |
| RTGS | Real Time Gross Settlement |
| SPAN | Standard Portfolio Analysis of Risk |
| SPOR | Stress period of risk |
| SSF | Securities Settlement Facility |
| STEL | Stress Test Exposure Limit |
| VaR | Value at Risk |

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