### 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) | • regulator of securities and derivatives markets  
|                                                      | • focus on market integrity |
| Reserve Bank of Australia (RBA) | • Australia’s central bank  
|                                                      | • focus on financial and systemic stability  
|                                                      | • determine the Financial Stability Standards (FSS) |
| Australian Prudential Regulation Authority (APRA) | • the prudential regulator of the Australian financial services industry  
|                                                      | • focus on safety and soundness of financial institutions |

ASX’s FMIs have been assessed by ASIC and the RBA as complying with all PFMI.

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.
### Key facts about ASX’s Financial Market Infrastructures

#### Credit Rating
- **ASX Clear**
- **ASX Clear (Futures)**

![Credit Rating Icons](appends.png)

#### Domestic Standards
- **ASX Clear**
- **ASX Clear (Futures)**
- **ASX Settlement**
- **Austraclear**

![Domestic Standards Icons](appends.png)

#### International Standards
- **ASX Clear**
- **ASX Clear (Futures)**
- **ASX Settlement**
- **Austraclear**

![International Standards Icons](appends.png)
I. Executive Summary: Our Business & Customers

ASX Group (ASX) is the brand name under which ASX Limited and its subsidiaries operate. ASX is one of the world’s leading financial market exchanges. It operates at the heart of the globally attractive, deep and liquid Australian 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 a top 10 global securities exchange by value and the largest interest rate derivatives market in Asia. As the first major financial market open every day, ASX is a renowned leader in raising capital, consistently ranking among the top five exchanges globally.

ASX operates in a world-class regulatory environment, meeting the highest global standards. 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’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 the Australian Securities and Investments Commission (ASIC) and the Reserve Bank of Australia (RBA).

ASX services companies and other issuers that list equity and debt securities on the exchange, as well as a wide range of retail and institutional investors that invest in and trade those securities. Many of ASX’s services are provided through intermediaries including stockbrokers, Australian banks and Australian based international banks. Clients of these intermediaries include retail and corporate investors, asset managers, custodians and other financial market participants.

While ASX’s operations are primarily based in Australia, ASX services both domestic and international customers and some of its services are accessible from offshore.

Confidence in the operations of the companies within the ASX Group 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 Group’s Clearing and Settlement (CS) facilities. ASIC also supervises ASX’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. 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 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 assist ASX participants to more effectively mitigate their settlement and operational risk. ASX’s two settlement facilities provide a ‘delivery versus payment’ settlement service, secure asset holding services, and a wide network that enables ‘straight through processing’. ASX’s Operations division has direct responsibility to specifically manage settlement related risks.

II. Summary of major changes

Regulatory obligations – background

The RBA and ASIC are members of the Committee on Payments and Market Infrastructures (CPMI, previously the Committee on Payment and Settlement Systems (CPSS)) and the International Organisation of Securities Commissions (IOSCO) respectively, and are responsible for implementing the CPMI-IOSCO Principles for Financial Market Infrastructures in Australia.

In December 2012, the RBA published new Financial Stability Standards (FSS) which apply to central counterparties (CCPs) and securities settlement facilities (SSFs) in Australia. The FSS are aligned with the requirements in the CPMI-IOSCO Principles that address matters relevant to financial stability.

In the same month, ASIC published Regulatory Guide 211 - Clearing and Settlement facilities: Australian and overseas operators, which incorporates the CPMI-IOSCO Principles that are relevant to ASIC’s regulatory remit.

The RBA’s Payments System Board granted ASX transitional relief from several FSS relating to recovery and resolution until 31 March 2014, given their dependence on the finalisation of policy work and legislative change. An implementation plan has been agreed with the RBA for compliance with these FSS given the expiration of the transitional relief.
The effective date for the new FSS in Australia was 29 March 2013. On 16 August 2013, the RBA advised ASX of supplementary interpretative guidance for the application of the FSS to ASX Clear (Futures) because it is a domestically licensed facility, which provides services to clearing participants established in the European Union. On 27 October 2014, the RBA extended this supplementary interpretive guidance to ASX Clear.

ASX responded to the RBA with details of the actions that the CCPs are taking to address the supplementary interpretive guidance for the standards.

On 27 April 2015, ESMA recognised ASX Clear and ASX Clear (Futures) as third party CCPs which allows them to provide clearing services to clearing members established in the European Union.

As of 18 August 2015, ASX Clear (Futures) is exempt from the requirement to register with the Commodity Futures Trading Commission as a Derivatives Clearing Organisation. Subject to the terms and conditions of the exemption, ASX Clear (Futures) is permitted to clear proprietary swap positions including but not limited to interest rate swaps denominated in U.S. dollars, Euros, Japanese yen, British pounds, Australian dollars and New Zealand dollars for its U.S. clearing members (including transactions of a parent or affiliate of a U.S. clearing member).

In October 2015, the ASX CCPs implemented new ASX Recovery Rules to comply with the FSS. 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, clearing participant or investment counterparty default.

In June 2016, CPMI-IOSCO published the ‘Guidance on cyber resilience for financial market infrastructures’ which provides supplemental guidance to the CPMI-IOSCO Principles for Financial Market Infrastructures, primarily in the context of governance (Principle 2), the framework for the comprehensive management of risks (Principle 3), settlement finality (Principle 8), operational risk (Principle 17) and FMI links (Principle 20). The guidance is not intended to impose additional standards on FMIIs beyond those set out in the PFMI, but instead provides supplemental detail related to the measures that FMIIs should be taking to enhance their cyber resilience capabilities with the objective of limiting the escalating risks that cyber threats pose to financial stability.

On 12 October 2016, the Council of Financial Regulators released the ‘Regulatory Expectations for the Conduct of Cash Equity Clearing and Settlement Services in Australia’ (Regulatory Expectations) and ASX updated its Cash Equities Clearing and Settlement Code of Practice. ASX’s core commitments under the original Code of Practice - user input in to governance, transparent and non discriminatory pricing and access and the protection of confidential information of users - remain in place.

In July 2017, CPMI-IOSCO published new guidance on CCP resilience and updated its guidance on FMI recovery. The RBA advised ASX that it had adopted the new and updated guidance and would be applying the two documents in interpreting the relevant standards in the FSS as they apply to the CCPs’ risk management and recovery arrangements.

**Regulatory change – since last publication**

On 21 December 2017, the Swiss Financial Market Supervisory Authority (FINMA) recognised ASX Clear (Futures) as a foreign central counterparty which allows ASX Clear (Futures) to grant Swiss market participants supervised by FINMA direct access to its facilities as clearing participants.

In 2018 the International Monetary Fund (IMF) conducted its third Financial Sector Assessment Program (FSAP) review of the Australia financial sector including domestic regulatory oversight arrangements. The IMF’s FSAP included a review of elements of ASX Clear’s governance and risk management framework against the PFMI.

In June 2019, the RBA updated its policy arrangements. The IMF’s FSAP included a review of elements of ASX Clear’s governance and risk management framework against the PFMI.

In July 2019, the Council of Financial Regulators has continued work towards the development of draft legislation to implement an Australian resolution regime for FMIs. This regime will build on a number of consultations with the industry between 2015 and 2019 and feedback received through the consultation process. The FSB’s ‘Guidance on Central Counterparty Resolution and Resolution Planning’, published in July 2017, will also be an input into the development of these arrangements.

**Strategic change**

**VSE framework**

ASX has introduced an updated Vision, Strategy and Execution (VSE) framework since this disclosure was last published, comprising strategies which are an evolution of earlier ASX priorities.

ASX’s vision is to be ‘the world's most respected financial marketplace’. The strategies to achieve this goal are:

- To build a diverse ecosystem of products, services and stakeholder partnerships
- To provide innovative solutions and technology for customers
- To maintain trust, integrity and resilience in ASX’s relationships, systems and brands
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- To strengthen the collaborative culture among ASX’s people and customers and other stakeholders
- To be customer centric in everything ASX does.

Equities Clearing & Settlement System (CHESS) replacement
Details of FY19 progress against the VSE strategy are outlined in ASX’s Annual Report, and include the development of a Distributed Ledger Technology (DLT)-enabled CHESS replacement system which has attracted attention domestically and from across the global financial services industry. The creation of this solution is based on open, contemporary technology, which uses global standards and offers efficiency and innovation opportunities with permissioned, source-of-truth, synchronised data. This will allow customers to interact with ASX and, if they choose, to interact with others who are on the permissioned network. Refer to the CHESS replacement website for further details.

Building Stronger Foundations
Throughout FY19, ASX completed the implementation of all scheduled deliverables under the Building Stronger Foundations Program. This program was established in 2017 to bring together a number of initiatives and projects that had been identified by ASX to enhance technology and risk management practices. The program subsequently incorporated the findings and recommendations of a December 2017 review into ASX’s technology governance and operational risk management processes, performed by KPMG, at the request of ASIC and the RBA, following their regulatory assessments of ASX’s market and CS facility licensees in the same year.

The Building Stronger Foundations program is a program of work focusing on identified gaps across ASX’s risk management and technology strategy, governance practices, operational risk management, knowledge and resource management. The program is overseen by an executive management steering group to ensure the actions implemented adequately address the findings, and involves six-monthly independent progress reviews by KPMG and continued dialogue with the regulatory agencies. As at the date of this disclosure, 35 of the 36 KPMG recommendations have been completed, with the remaining recommendation scheduled for completion in 2020 and on track to meet that timetable.

Building for the future
ASX’s commitment to its technology-driven, customer-focused strategy also includes the following key initiatives which will drive ASX in the 2020s and beyond:
- Putting in place a contemporary, flexible and resilient operating platform, via a range of investments that include the establishment of a new secondary data centre, an upgrade of ASX Net (ASX’s communications network), refreshed cash equities trading hardware and software, and a redesign of the ASX website.
- Creating products and services that address the needs of ASX’s customers as well as our own – known as ‘open infrastructure solutions’ that leverage ASX’s expertise, independence and infrastructure - such as the commissioning and subsequent expansion of ASX’s Australian Liquidity Centre (with 134 financial and technology companies connecting to ASX and to each other via ASX, as at the date of this disclosure), ASX DataspHERE - a governed, secure platform, offering access to ASX and third party data and analytical tools, as well as the workspace, computing power and storage to facilitate the analysis, and, the most high profile project, the replacement of CHESS, the equity post trade system, as noted above.
- Making business easier for ASX’s customers – the open infrastructure solutions above are capable of helping ASX’s customers create new products and services, improve operational efficiency, and will reduce risks and costs. The DLT-enabled CHESS replacement infrastructure will also provide a platform for ASX’s customers to innovate and develop their own value-added products and services.

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): 549300JQLBXT6CCGP11
ASX Clear operates a clearing facility and provides CCP services for financial products traded on the ASX market, including equities, warrants, interest rate securities and equity related derivatives (comprising exchange traded options and futures) and for equities 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 (CHESS) to register and clear cash equities, 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): 549300ZD7BB0VZFVHK49

ASX Clear (Futures) operates a clearing facility and provides CCP services for derivative products traded on the ASX 24 market and for over-the-counter 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 and United States.

ASX Clear (Futures) uses Nasdaq’s Genium INET to register and clear futures and options and Calypso for over-the-counter 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) and its products.

**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 SSF 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 CHESS. 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.

ASX Settlement moved from a T+3 to a T+2 settlement cycle in March 2016. ASX Settlement’s decision to shorten the settlement cycle by a business day was based on industry consultation and a recommendation provided by an industry advisory Forum established by ASX under the Code of Practice.

ASX Settlement participants and stakeholders can refer to the ASX Settlement section on the ASX website to obtain information regarding ASX Settlement, CHESS and its services.

Austraclear

Austraclear provides a wide range of depository, registration, cash transfer and settlement services for debt instrument securities traded on the ASX market and for over-the-counter interest rate derivative products 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 equity 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 its CS boards who are independent 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 FMIs (Governance)
The ASX Limited Board has responsibility to oversee the conduct of the ASX Group consistent with its licence obligations, as well as public policy objectives directed at financial market and payments system integrity. The ASX Limited Board Charter is available on the ASX website and sets out in detail the functions of the ASX Limited Board.

The CS Boards review and provide oversight of risk management processes, internal controls and compliance systems in respect of the management of clearing and settlement risk, 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, as well as ASX’s compliance with the RBA’s FSS.

In particular, the ASX Limited Board relies on the CS Boards to review and provide oversight of risk management processes, internal controls and compliance systems in respect of:

- the management accounts of the CS subsidiaries which are prepared on a quarterly basis, and full year CS financial reports and statements;
- the management of clearing and settlement risks (being predominantly the clearing counterparty credit risk, the treasury investment risk and the liquidity risk of the CCP clearing subsidiaries and settlement risks within the SSFs); and
- compliance with the FSS determined by the RBA.

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.

Further details about the CS Boards governance arrangements are contained in the CS Boards Charter, which is available on the ASX website.

Other key governance documents relating to the ASX Group including the ASX Limited Board Charter, the Board and Committee Charters, the ASX Limited Board Policy and Guideline to Relationships Affecting Independent Status and ASX’s Conflict Handling Policy are also available at the same webpage on the ASX website.

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
Enterprise Risk is an independent function responsible for establishing and maintaining a formal framework, and appropriate training aimed at...
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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 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
The ASX Enterprise Compliance team assesses the regulatory risk exposure of ASX. It does so by:
- identifying applicable risks and the underlying regulatory obligations
- providing advice and interpretation (including by way of policies and training) in relation to the risks
- establishing a second line assurance program to review the performance of control activities
- working with internal stakeholders, engaging with regulators, managing regulatory enquiries, requests and assessments
- identifying applicable regulatory changes, assessing their impact and working with affected business units on implementation
- assessing internal incidents and notifying regulators if applicable
- carrying out applicable regulatory reporting tasks
- reporting to management and directors on regulatory risks

The General Manager, Enterprise Compliance has reporting lines to the ASX Chief Risk Officer and the chairs of the Audit and Risk Committee (ARC) and the CS Boards.

Internal Audit
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 Group 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 ARC also review the findings of the audit with the external auditor.

PricewaterhouseCoopers (PwC) was the auditor of ASX Limited and all subsidiaries for the financial year ended 30 June 2019.

The audit of the ASX Limited Financial Statements was recently completed for the financial year ended 30 June 2019. The ASX Limited Annual Report was released to the market in August 2019, and contains the PwC audit opinion.

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, for the financial year ended 30 June 2019, 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 audit of Austraclear, for the financial year ended 30 June 2019 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, ASIC and the RBA. These government regulators have extensive powers to enforce the laws and regulations that govern financial markets 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 FSS, annually 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 consistent with the CPMI-IOSCO Principles for FMI.

The RBA has responsibility for assessing whether licensed clearing and settlement facilities, including those operated by ASX Group, 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 ASX Group. 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.

**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 Group’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 ultimately implemented via the Building Stronger Foundations program referred to earlier in this disclosure.

- **RBA**
  - The RBA conducts an annual assessment of how each of ASX’s CS facilities are complying with the RBA’s FSS and the more general obligation to do all other things necessary to reduce systemic risk. 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 found that all four CS facilities either observed or broadly observed all relevant requirements under the FSS during FY19, with the exception of the General Business Risk Standard (CCP Standard 14. SSF Standard 12), which was rated as ‘partially observed’ for each CS facility. The RBA concluded that the facilities conducted their affairs in a way that causes or promotes overall stability in the Australian financial system.

- **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). 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, of termination, netting and settlement of obligations 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 settled transactions as approved RTGS system (each of Austraclear and ASX Settlement has this approval, although ASX Settlement 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 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). Part 5 also protects the porting of client positions and collateral by the CCP in the event that a Clearing Participant defaults.

**Other regulation**
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 (APS112)](https://www.apra.gov.au) (the QCCP eligibility criteria prescribed by APS112 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 (APS180)](https://www.apra.gov.au). As required by APS180, 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 APS180, the ADI may apply concessional risk weightings for centrally cleared transactions, as prescribed by APS180, 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 APS180 (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.
Operating rules
Each of the ASX Group’s 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](https://www.asx.com.au).

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, Clawback, Fraud Control and Whistleblower Protection policies promote ethical and responsible decision-making by all directors and employees of the ASX Group. 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 Group 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 (Commonwealth). The ASX Privacy Policy covers how and when Personal Information is collected, stored and distributed by the ASX Group.

- Other Policies
  ASX has comprehensive polices 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 Group.

ASX operates four clearing systems:

- CHESS (providing clearing, settlement, depository and registry services for ASX-listed securities);
- Derivatives Clearing System (used for clearing derivatives traded on ASX Trade);
- Genium INET (providing clearing processes for the derivatives traded on ASX Trade24); and,
- Calypso (providing clearing processes for over-the-counter interest rate derivative products).

Further information can be found in the [Overview of CHESS brochure](https://www.asx.com.au).

ASX employs two main settlement technologies:

- Exigo (providing settlement, depository and registry services for the Australian over-the-counter debt market, and facilitating the settlement of the Australian dollar leg of foreign exchange transactions); and,
- CHESS (providing clearing, settlement, depository and registry services for ASX-listed securities).
Principles for Financial Market Infrastructures (PFMI) Disclosure Framework

Further information can be found at How Settlement Works and in the Overview of CHESS 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 Fora**
ASX has established a number of industry-represented fora 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.

Specific examples of industry discussions include:

- **Code of Practice Business Committee**
  Under the Code of Practice for Clearing and Settlement of Cash Equities in Australia, ASX established an advisory forum comprising senior representatives from ASX’s clearing and settlement participants, and a wide range of other industry stakeholders that are users of ASX’s clearing and settlement services. 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.

- **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 Advisory Group**
    This user group meets periodically 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 PFMIIs 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 Group’s 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. Please note that the RBA and ASIC separately assess ASX Group’s CS licensees’ compliance with the PFMI and FSS.
### PFMI Disclosure Framework **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.

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<tr>
<th>PFMI/FSS</th>
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| A CCP 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. | ➢ The ASX Group 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 CCPs are separate legal entities, incorporated in Australia.  
➢ Neither of the CCPs is exposed to the risks associated with the other’s CCP activities, or the activities of any other ASX Group 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 Group’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.

➢ The material aspects of the CCPs’ activities, and their legal basis, are:  
  • Licensing. The primary activity of the CCPs is the provision of clearing services to their participants. Each of the CCPs 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](https://asic.gov.au/).  
  • Legally binding nature of the CCPs’ operating rules. Section 822B of the Corporations Act provides that the operating rules of each of the CCPs have effect as a contract under seal between:  
    - the CCP and each issuer,  
    - the CCP 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 (PSNA). In the event that a participant in the CS facility enters into external administration, the PSNA provides certain protections under Australian law, from reversal or invalidation under the laws of any jurisdiction, of termination, netting and settlement of obligations, and enforcement of security effected in accordance with the operating rules of ASX’s CS facilities, as follows:  
    - Part 2 protects real time gross settlements effected through an approved RTGS system (each of Austraclear and ASX Settlement has 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); and  
    - Part 5 protects 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). Part 5 also protects the porting of client positions and collateral by the 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 CCP may be incorporated. |
### PFMI Disclosure Framework Principle 1 | Legal Basis

#### Key Consideration 2
An FMI should have rules, procedures and contracts that are clear, understandable and consistent with relevant laws and regulations.

**FSS 1.3**

- **Rules, procedures and contracts in place:**
  - Rules and procedures. Each CCP has its own set of operating rules and procedures which govern the operation of its CS 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 Group and its subsidiaries, and then ‘on-supplying’ the services to the relevant ASX Group entity. ASX Limited agrees to ensure that each CCP 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 CCPs’ 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).

- **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 CCPs’ operations, and works with ASIC and RBA as appropriate to amend its operating rules, procedures and contracts to ensure ongoing consistency with the law.
  - ASIC and RBA conduct annual assessments of ASX Group’s compliance with licence obligations, which provides further oversight of the FMIs’ 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.

**FSS 1.4**

- **How the CCPs articulate the legal basis for their activities to stakeholders:**
  - The legal basis for the activities of the CCPs and the facilities’ protection as approved “netting markets” under the PSNA are set out on ASX’s public website in this Disclosure Framework document.
  - ASX Limited (on behalf of each licensed entity within the ASX Group, including the CCPs) submits an ‘Annual Group Licence Report’ to ASIC. This report sets out the legal basis for the CCPs’ activities (namely the licence obligations), and is used by ASIC in the preparation of ASIC’s ‘market assessment reports’ which are published on ASIC’s website.
  - 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.
### PFMI Disclosure Framework Principle 1 | Legal Basis

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<th>PFMI/FSS</th>
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<td><strong>Key Consideration 4</strong>&lt;br&gt;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.&lt;br&gt;<em>FSS 1.5</em></td>
<td>› Rules and Procedures. Section 822B of the Corporations Act provides that the operating rules of each CCP have effect as a contract under seal between the CCP, participants and issuers. The operating rules are enforceable as a statutory contract.&lt;br› Contracts. The contracts entered into by the CCPs and third parties are enforceable under Australian contract law.&lt;br› Actions taken by a CCP under its operating rules.&lt;br&gt;• The status of actions taken by a CCP 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.&lt;br&gt;• The status of actions taken by a CCP under Australian law where one of its participants defaults and enters into administration is addressed by the PSNA, which, as noted above, provides certain protections under Australian law from reversal or invalidation under the laws of any jurisdiction, of termination, netting and settlement of obligations, and enforcement of security effected in accordance with an FMI’s operating rules.</td>
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<td><strong>Key Consideration 5</strong>&lt;br&gt;An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflicts of law across jurisdictions.&lt;br&gt;<em>FSS 1.6</em></td>
<td>› The operating rules of the CCPs 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.&lt;br› The legal bases outlined above apply under Australian law irrespective of the jurisdiction in which a participant in the CCP may be incorporated.&lt;br› Neither of the CCPs is licensed to 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 ASX’s markets, or in the clearing facilities operated by the CCPs, as necessary.</td>
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### PFMI Disclosure Framework 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.

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<th>PFMI/FSS</th>
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<td><strong>Key Consideration 1</strong>&lt;br&gt;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.  &lt;br&gt;<em>FSS 2.1</em></td>
<td>&gt; These obligations are addressed in the ASX Limited Board and CS Boards Charters. These, and other relevant governance documents, are published on the ASX website.&lt;br&gt; &gt; The ASX Limited Board Charter sets out the functions of the Board, which include, but are not limited to, overseeing the conduct of the affairs of the ASX Group consistent with licence obligations as well as public policy objectives directed at financial market and payment systems integrity.&lt;br&gt; &gt; The CS Boards Charter sets out the responsibilities of the CS Boards, which include, but are not limited to, reviewing the risk management framework, and overseeing the internal controls, systems and processes for management of clearing and settlement risks and systems and processes in place to achieve compliance with the Financial Stability Standards.&lt;br&gt; &gt; 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 CS facility’s services in a fair and effective way and having adequate conflict handling and compliance arrangements.</td>
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<td><strong>Key Consideration 2</strong>&lt;br&gt;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.  &lt;br&gt;<em>FSS 2.2</em></td>
<td>&gt; 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.&lt;br&gt; &gt; The ASX Limited Board Charter sets out how it relies on the CS Boards to oversee the clearing and settlement operations of the CS subsidiaries.&lt;br&gt; &gt; The CS Boards Charter sets out how the CS Boards oversee clearing and settlement management’s implementation of risk management controls, systems and processes, and compliance with licence obligations, as well as the assurance provided to the CS Boards by the external audit, Internal Audit and Enterprise Compliance functions.&lt;br&gt; &gt; The Audit and Risk Committee Charter sets out the Committee’s role reviewing the ASX Group’s framework to identify, monitor and manage enterprise risks, cyber resilience matters and controls. It also sets out the Committee’s role overseeing the compliance and conflict handling arrangements of the ASX Group’s clearing and settlement facilities.&lt;br&gt; &gt; The Remuneration Committee Charter sets out the Committee’s role overseeing executive remuneration and performance management processes. The CS Boards review the performance of the Chief Risk Officer (CRO) and Chief Operating Officer (COO) and advise the Remuneration Committee of the outcomes.&lt;br&gt; &gt; The Managing Director &amp; CEO (CEO) is responsible for the appointment and termination of both of these roles following consultation with the ASX Limited Board and with the agreement of the CS Boards.&lt;br&gt; &gt; The Nomination Committee Charter sets out the Committee’s role in reviewing nomination matters relating to the composition and performance of the CS Boards.</td>
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### PFMI/FSS

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<th>Key Consideration 3</th>
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<td>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.</td>
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<td><strong>FSS 2.3</strong></td>
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<td>› The CS Boards Charter sets out that both the General Manager Enterprise Compliance and General Manager Internal Audit have a direct line of reporting to the CS Boards, with periodic reporting provided.</td>
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<td>› The CS Boards and ASX Limited Board Committees report regularly to the ASX Limited Board and to each other on relevant matters. Minutes of their meetings are made available to the ASX Limited Board, except where the CS Boards consider confidential or competitively sensitive information. This would usually arise in a situation where another market operator or listing venue is obtaining services from, or access to, the CS facility. In those cases, no directors who are also on the ASX Limited Board may attend that meeting and neither the matter discussed nor the minutes of that meeting are reported to those directors or the ASX Limited Board.</td>
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<td>› Board roles and responsibilities are set out in the CS Boards, ASX Limited Board and ASX Board Committee Charters.</td>
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<td>› Board responsibility for effective monitoring of senior management is addressed in the CS Boards and Remuneration Committee Charters.</td>
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<td>› Board responsibility for nomination matters is addressed in the CS Boards Charter and Nomination Committee Charter. The Nomination Committee reviews nomination matters, with reporting to the CS Boards and ASX Limited Board, and to ASX Board Committees, as appropriate.</td>
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<tr>
<td>› Board responsibility for risk management, cyber resilience and internal controls is addressed in the CS Boards and Audit &amp; Risk Committee (ARC) Charters.</td>
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<td>› Board responsibility for compliance with all supervisory and oversight requirements, and consideration of financial stability and other relevant public interests, is addressed in the CS Boards and ARC Charters.</td>
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<td>› Board performance reviews of CS Boards are addressed in the CS Boards Charter.</td>
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<td>› Conflicts handling is addressed in the CS Boards Charter, ARC Charter and ASX’s Conflict Handling Policy, a copy of which is published on the ASX website. These include the additional management protocols in place to govern the communication of and access to confidential or competitively sensitive information within the ASX Group.</td>
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### PFMI Disclosure Framework Principle 2 | Governance

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<td><strong>Key Consideration 4</strong>&lt;br&gt;The board should contain suitable members with the appropriate skills and incentives to fulfill its multiple roles. This typically requires the inclusion of non-executive board member(s).&lt;br&gt;&lt;br&gt;<em>FSS 2.4</em></td>
<td>▶ These obligations are addressed in the ASX Limited Board, CS Boards, Nomination Committee, ARC and Remuneration Committee Charters.&lt;br&gt;▶ The Nomination Committee Charter sets out that the Committee is responsible for reviewing the necessary and desirable skills and experience of the CS Boards. Director appointments to the CS Boards are made by the respective CS Board and may also be made by the ASX Limited Board.&lt;br&gt;▶ A majority of CS Board directors are independent non-executives. The CEO is a director of each CS Board.&lt;br&gt;▶ The Remuneration Committee Charter sets out that the Committee is responsible for reviewing remuneration for CS Board directors. Independent non-executive CS Board directors do not receive any performance-related remuneration.&lt;br&gt;▶ Director information, including directors’ interests, ASX Group cross-directorships and independence is published on the ASX website.&lt;br&gt;▶ Director independence is reviewed annually. The CS Boards have adopted the ASX Limited Board Policy and Guideline to Relationships Affecting Independent Status, which sets out the matters which will be considered when assessing director independence. This policy is published on ASX’s website.&lt;br&gt;▶ Directors’ interests are tabled at each meeting of the CS Boards.&lt;br&gt;▶ No tenure limit in CS Boards Charters.</td>
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<tr>
<td><strong>Key Consideration 5</strong>&lt;br&gt;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.&lt;br&gt;&lt;br&gt;<em>FSS 2.5</em></td>
<td>▶ The roles and responsibilities of senior management relevant to CS operations are set out in the CS Boards Charter and more fully in defined position descriptions.&lt;br&gt;▶ The CRO has responsibility for the overall clearing risk management of the CS subsidiaries and for ensuring relevant CS licence obligations are met.&lt;br&gt;▶ The COO has responsibility for the overall settlement risk management of the CS subsidiaries and for ensuring relevant CS licence obligations are met.&lt;br&gt;▶ The CEO has responsibility for the overall operational, business and profit performance of ASX. The CRO and COO report to the CEO.&lt;br&gt;▶ The CS Boards Charter sets out that the Remuneration Committee will review remuneration arrangements for the CRO and COO. The CS Boards provide input to the Remuneration Committee as part of the annual performance management process.&lt;br&gt;▶ Executive KPIs are structured to promote soundness and effectiveness of risk management.&lt;br&gt;▶ The CS Boards review the application of ASX’s remuneration arrangements to the CS licensees, to confirm these are structured in such a way as to promote the soundness and effectiveness of risk management and with regard to other regulatory requirements. Reporting is provided to the Remuneration Committee.</td>
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### PFMI Disclosure Framework Principle 2 | Governance

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<th>Key Consideration 6</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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<td>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.</td>
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<td>These obligations are addressed in the CS Boards, ARC and Internal Audit Charters, and the ASX Enterprise Risk Management Framework. Further details are provided under Principle 3; Key Consideration 1.</td>
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<td>The CS Boards are responsible for oversight of risk management relevant to the CS subsidiaries, and the ARC is responsible for oversight of enterprise wide risk, including cyber resilience. The ARC reports to the CS Boards on matters the ARC is responsible for that may impact on CS operations.</td>
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<td>ASX has established an independent ASX Clear (Futures) Risk Consultative Committee and an independent ASX Clear Risk Consultative Committee. The Risk Consultative Committees have a broad mandate to consider and make recommendations to the Boards of the FMIs on matters related to their risk management.</td>
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<td>Each of the CRO, COO, GM Enterprise Compliance and GM Internal Audit have a direct line of reporting to the CS Boards. The GM Technology Security and Governance has a direct line of reporting to the ARC.</td>
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<td>The Internal Audit Charter addresses the independence of Internal Audit. The Internal Audit Plan is approved by the ARC, and by the CS Boards for matters relevant to the CS subsidiaries.</td>
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<tr>
<td>A 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.</td>
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<tr>
<td>These obligations are addressed in the CS Boards, ARC and Internal Audit Charters.</td>
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<tr>
<td>The CS Boards are responsible for oversight of risk management (including internal controls and Internal Audit matters) relevant to the CS subsidiaries, and the ARC is responsible for oversight of enterprise wide risk, including cyber security matters. The ARC reports to the CS Boards on matters the ARC is responsible for that may impact on CS operations.</td>
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<tr>
<td>The Internal Audit Charter sets out that the principal objective of Internal Audit is to provide independent, objective assurance and advisory services to add value and improve the operations of ASX.</td>
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<tr>
<td>The Internal Audit Plan is approved by the ARC, and by the CS Boards for matters relevant to the CS subsidiaries.</td>
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<tr>
<td>The ARC regularly assesses the independence and performance of Internal Audit. The external auditor has access to the reports of the internal audit department. An external assessment of the internal audit department is performed periodically.</td>
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<tr>
<td>Each of the CRO, COO, GM Enterprise Compliance and GM Internal Audit have a direct line of reporting to the CS Boards on relevant matters. The GM Technology Security and Governance has a direct line of reporting to the ARC.</td>
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<tr>
<td>The external auditor reviews the CS licensee financial statements.</td>
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</table>
PFMI Disclosure Framework Principle 2 | Governance

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.

HOW ASX CENTRAL COUNTERPARTIES COMPLY

- Stakeholder management is addressed within the ASX Limited Board, CS Boards and Customer Charters.
- ASX’s Customer Charter sets out how ASX will balances the interests of customers, shareholders, end investors and the broader financial markets. ASX regularly seeks feedback from participants and stakeholders, including through consultation and stakeholder committees.
- 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, and investment decisions in relation to the design, operation and development of new 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 ASX Clear (Futures) Risk Consultative Committee provides a forum for clearing participants and clients to review and make recommendations relating to various matters, including but not limited to the risk model of the CCP, changes to the CCP’s 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 CCP and its Clearing Participants.
- The ASX Clear Risk Consultative Committee provides a forum for clearing participants and clients to review and provide recommendations relating to various matters, including but not limited to the risk model of the CCP, changes to the CCP’s operating rules that have a material impact on risk management processes, changes to margin methodology or capital requirements, and other matters that may have an impact on the risk management of the CCP and its Clearing Participants.
- The Derivative Product 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. ASX Clear (Futures) has also established a Default Management Group (DMG) to provide OTC participant feedback on aspects of the default management process.
### PFMI Disclosure Framework Principle 2 | Governance

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<tr>
<th>PFMI/FSS</th>
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| A CCP 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 CCP 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 CCP should consider specific procedures for preventing and managing conflicts of interest, including with respect to intragroup outsourcing arrangements.  
  
  FSS 2.9 | Conflict and information handling is specifically addressed in the CS Boards Charter, ARC Charter and ASX’s Group Conflict Handling Policy. Arrangements are in place to address the CCP being part of a corporate group. These documents are published on the ASX website. |
| | Director information, including directors’ interests, ASX Group cross-directorships and independence, is published on the ASX website. |
| | Directors’ interests are tabled at each Board meeting. |
| | Outsourcing clauses in intra-group outsourcing arrangements address conflicts of interest, including specifying that ASX Group staff are under a duty to act in the best interests of the CCP receiving the services. |
| | ASX Clear and ASX Settlement Boards periodically meet separately from the other CS Boards. 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 made up of 6 directors, at least 50% of whom must be non-executives who are not directors of ASX Limited. The only executive director is the ASX CEO. Currently, three of the five non-executive directors of ASX Clear and ASX Settlement, including the Chair, are not directors on the ASX Limited Board. Two of these three directors can form a quorum to meet and consider any commercially sensitive matters. The non-ASX Limited directors meet regularly. |
| | Each other CS Board is also constituted such that directors who are not on the ASX Limited Board can form a quorum and meet if required. This would usually arise if one of the CS Boards was required to consider confidential or competitively sensitive information where another market operator or listing venue is obtaining services from, or access to, the CS facility. |
| | If any CS Board is required to consider confidential or competitively sensitive information, no directors who are also on the ASX Limited Board attend that meeting, and neither the matter discussed nor the minutes of that meeting are reported to those directors or the ASX Limited Board. |
PFMI Disclosure Framework **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.

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<th>PFMI/FSS</th>
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| **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.  
  *FSS 3.1* | › The ASX Enterprise Risk Management (ERM) Framework is based on the International Standard (ISO 31000) for risk management and approved by the ARC.  
 › The CCPs have identified the range of risks that arise from their activities and considered them in categories.  
 › Clearing Risk Policy & Management develops clearing risk specific policies which are reviewed and approved by the CS Boards. Policies are subject to at least an annual review.  
 › 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 – Capital Based Position Limits (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 CCPS). |
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<tr>
<td>Principle 3</td>
<td>Framework for the comprehensive management of risks</td>
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</table>
| A CCP 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.  
  **FSS 3.2** |  > 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  
  > - Default Management and Recovery Working Group  
  > - Clearing Participant Risk Consultative Committees  
  > Internal Audit includes CCP activities in its risk based audit plan. The Internal Audit Charter is on the ASX website.  
  > The CCPs’ contribution, commitment and margining regimes are aligned to scale and nature or 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.  
  > The CCPs’ Operating Rules are designed and implemented in a way to recognise the criticality of the individual participant’s activities. The CCPs’ Operating Rules are on the ASX website. |
| 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.  
  **FSS 3.3** |  > Incentives for participants to manage their risks are made via capital requirements, margin requirements, etc.  
  > Penalties for non-compliance with CCP operating rules 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. The CCPs’ Operating Rules are on the ASX website.  
  > Comprehensive information is provided to CCP participants to allow them to manage their risks and include daily gross and net risk positions, and margin requirements. |
| 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.  
  **FSS 3.4** |  > Periodic assessments of material risks posed by external entities to the CCPs are performed, which include credit, liquidity, general and operational risk management, business continuity arrangements and recovery planning.  
  > Stress scenario analysis is undertaken periodically as part of recovery plan reviews, including critical service provider interdependencies.  
  > ASX has engaged with ASIC to better communicate to clearing participants and their customers the risks associated with clearing arrangements. |
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<th>PFMI/FSS</th>
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<tr>
<td>Key Consideration 4</td>
<td>&gt; ASX has in place recovery plans which identify scenarios that may prevent a CCP from providing its critical services as a going concern and the available options for recovery or orderly wind-down.</td>
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<td>&gt; The recovery plans include utilisation of the new recovery tools that came into effect in October 2015 when the ASX Recovery Rules came into effect.</td>
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<td>&gt; ASX has in place arrangements for review and testing of the recovery plans.</td>
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FSS 3.5
## PFMI Disclosure Framework 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.  

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| **Key Consideration 1** | The 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.  
- Daily counterparty risk controls.  
- CCP financial resources. |
| **Key Consideration 2** | The CCPs' Operating Rules and Procedures detail the CCPs' credit risks and provide the CCPs with processes to control and manage these risks.  
- The 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 ASX's Clearing Risk Oversight include:  
  - Ensuring initial and variation margin requirements calculated by the 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 CCPs;  
  - Initiating intraday margining processes and manage credit risk exposures on a timely basis;  
  - Applying additional margin requirements based on the risk exposures compared to an entity's liquid capital/NTA (CBPL) or compared to a fixed amount for ASX Clear (Futures) participants that are banks and, subject to certain criteria, bank-affiliated participants;  
  - Conducting daily capital stress testing to monitor the effects of extreme but plausible scenarios on participants' portfolios and calling 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;  
  - Coordinating a 'watch list' of participants deemed to warrant more intensive monitoring. Inclusion on the watch list is based on a range of factors, such as: adverse changes (actual or rumoured financial distress), corporate restructures, operational incidents, risk management controls or significant or repeated compliance or capital issues. |
**PFMI Disclosure Framework Principle 4 | Credit Risk**

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| A CCP should have the authority to impose activity restrictions or additional credit risk controls on a participant in situations where the CCP determines that the participant’s credit standing may be in doubt.  
*FSS 4.3* | › Under the CCPs’ Operating Rules and Procedures, the 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 CCPs include imposing higher capital requirements, additional capital reporting requirements, or reducing Stress Test Exposure Limit levels.  
• In addition to routine calling of Initial Margins, CCPs may also require Clearing Participants to lodge Additional Initial Margins (AIMs) as follows:  
  - Intra-day Margins – during periods of market volatility, CCPs may impose an intra-day margin to address any significant erosion of existing margin collateral against current position exposures and current prices, as monitored in near real-time. This effectively enables the CCPs to bring forward the daily settlement process which substantially reduces the CCPs’ contingent exposure to unrealised participant losses. The CCPs make ad hoc margin calls at any point during the settlement hours, subject to banking system availability.  
  - Additional Initial Margins – 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 Capital Based Position Limits.  
    - AIMs relating to stress test exposure provide the 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 CCPs’ Capital Based Position Limits are designed to prevent a Clearing Participant from taking excessive risk relative to its capital, and thereby disproportionately increasing a CCP’s risk to its default relative to other Clearing Participants. Where a Clearing Participant’s initial margin exceeds its limit, the 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, 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.  
  - 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.  
• Applicable to SSFs only. |

**Key Consideration 3**  
*No corresponding FSS*
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.

FSS 4.4

HOW ASX CENTRAL COUNTERPARTIES COMPLY

› As set out in the Supplementary Interpretation of the Financial Stability Standards 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 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 CCPs’ Operating Rules and Procedures provide the CCPs with powers to ensure that the CCPs cover current and potential future exposures to Clearing Participants with a high degree of confidence using margin and other prefunded financial resources.

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

› The 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 CCPs to help manage Clearing Participant default are set out on the ASX website.
# PFMI Disclosure Framework Principle 4 | Credit Risk

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| **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.  

*FSS 4.5* |

- Both 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 CCPs use standard and predetermined parameters and assumptions in their capital and liquidity stress testing.  
- The CCPs’ Operating Rules and Procedures give the 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 CCP capital.  
- Model validation is in line with the CCPs’ Model Validation Standard, 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. Summary reports relating to back-testing and sensitivity analysis are also provided to the RBA on a monthly basis and the Clearing Boards on a quarterly or ad-hoc basis, dependent on the introduction of a new model or a material model development.
### 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.

**FSS 4.6**

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<td></td>
<td>› The Credit Stress Testing (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.</td>
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<td>› 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.</td>
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<td></td>
<td>› ASX Clear’s stress testing is based on 102 extreme but plausible stress scenarios, calibrated to 1 in 20 year’s price move for historical scenarios, taking the worst move over a 3 day Stressed Period of Risk (SPOR). Scenarios span market wide, sector wide and stock specific scenarios, incorporating shifts in volatility and price.</td>
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<td>› Scenarios for ASX Clear (Futures) consider a broad range of plausible outcomes in order to achieve a set sufficiently comprehensive to capture both current risks and those that may emerge in the future. These scenarios are a combination of historical observations of extreme events, theoretical scenarios based on statistical techniques, and hypothetical or forward looking scenarios incorporating a level of expert judgement.</td>
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<td>› Stress loss figures are calculated across 174 extreme but plausible stress scenarios. Historical scenarios are based on the entire price history for which reliable data is available. Scenarios are excluded if their reoccurrence is considered implausible. Theoretical scenarios are based on 20 years of historical data with a 1 in 20 year probability of occurrence, based on a 3 or 5 day stressed period of risk (SPOR) depending on market (ETD vs OTC) and product liquidity.</td>
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<td></td>
<td>› Scenarios for ASX Clear (Futures) are available on the <a href="#">ASX website</a>.</td>
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### PFMI/FSS

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<tr>
<th>Key Consideration 7</th>
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<tr>
<td>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.</td>
<td>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.</td>
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<tr>
<td>The CCPs’ Operating Rules and Procedures allow for additional initial margin to be called from a Clearing Participant</td>
<td>The CCPs’ Operating Rules and Procedures allow for additional initial margin to be called from a Clearing Participant where the CCP deems the current level of cover from that Clearing Participant to be insufficient.</td>
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<tr>
<td>The ASX Recovery Rulebook also contains rules requiring participants and the CCP to replenish the default fund</td>
<td>To determine the Additional Initial Margin 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 Stress Test Exposure Limit assigned to the Clearing Participant. Each Clearing Participant is assigned a Stress Test Exposure Limit (STEL) in accordance with their current Internal Credit Rating. Clearing Participants with higher internal credit ratings are allocated 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 Stress Loss exceeds their STEL will be required to lodge STEL related Additional Initial Margin with the CCP. The size of such Additional Initial Margin will equal the excess of stress testing losses beyond the CCP’s financial resources, and, in a default, would be available to ASX Clear and ASX Clear (Futures) ahead of their own financial resources.</td>
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<td>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.</td>
<td>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.</td>
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<tr>
<td>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.</td>
<td>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.</td>
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<tr>
<td>Complete termination. As a last resort, each of the ASX CCPs would have the power to terminate all open contracts at the CCP with any residual losses of the CCP allocated by haircutting settlement payments to participants on a pro-rata basis.</td>
<td>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:</td>
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<tr>
<td>The ASX Recovery Rulebook also contains rules requiring participants and the 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 CCP may also call additional initial margin if required to meet Cover 2 requirements.</td>
<td>• 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.</td>
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<td>• 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.</td>
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<td>• Complete termination. As a last resort, each of the ASX CCPs would have the power to terminate all open contracts at the CCP with any residual losses of the CCP allocated by haircutting settlement payments to participants on a pro-rata basis.</td>
<td>• 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:</td>
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</table>

**PFMI Disclosure Framework Principle 4 | Credit Risk**

**ASX**
### PFMI Disclosure Framework 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.

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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
</tr>
</thead>
</table>
| **Key Consideration 1**<br>An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity and market risks.  
*FSS 5.1* | *The CCPs set strict criteria for the assets they accept as collateral, and ensure that:*<br>- Collateral is of a high credit standard, to mitigate the risk of:<br>  - a double default event (i.e. the default of a Clearing Participant and of the collateral issuer); and,<br>  - excessive levels of market volatility.<br>- Collateral is liquid, enabling ASX’s CCPs to:<br>  - liquidate the collateral in a timely fashion in the event of a default, and without any legal or operational impediments; and,<br>  - mark-to-market the collateral each day, based on good quality market prices prior to any default.<br>- Collateral risks are managed through:<br>  - valuation haircuts;<br>  - related party collateral restrictions – that prevent Clearing Participants from posting their own debt or equity securities or debt or equity of companies closely linked to them; and,<br>  - exception limits – where exceptions are granted in respect of related party collateral, such exceptions are monitored on a regular basis.<br>*Details of acceptable collateral are set out on the ASX website at:*  
| **In determining its collateral policies, a CCP should take into consideration the broad effect of these policies on the market. As part of this, a CCP should consider allowing the use of collateral commonly accepted in the relevant jurisdictions in which it operates. **<br>*FSS 5.2* | *The 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 Australian Government and some semi-government securities and US Treasury bills – highly liquid and price information is readily available.*  
*ASX Clear (Futures) also accept NZD, EUR, JPY, USD and GBP foreign currencies - highly liquid and commonly accepted and traded in the Australian market.* |
| **Key Consideration 2**<br>An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.  
*FSS 5.3* | *The CCPs apply prudent collateral valuation haircuts, that take into consideration relevant risk characteristics of the instrument including:*<br>- the maturity of the instrument;<br>- historical and potential future price volatility of the instrument in both normal and stressed market conditions;<br>- the liquidity of the underlying market;<br>- foreign exchange risk (if any); and,<br>- procyclical effects.*
## PFMI/FSS Disclosure Framework: Principle 5 | Collateral

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<tr>
<th>Key Consideration</th>
<th>How ASX Central Counterparties Comply</th>
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</thead>
<tbody>
<tr>
<td><strong>Key Consideration 3</strong>&lt;br&gt;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.</td>
<td>The CCPs have stable and conservative collateral valuation haircuts that consider potential pro-cyclical effects on collateral prices. This includes taking into account stressed market conditions when setting haircut rates.</td>
</tr>
<tr>
<td><strong>Key Consideration 4</strong>&lt;br&gt;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.</td>
<td>The impact of concentrations on collateral holdings is mitigated by the fact ASX’s CCPs only accept collateral where credit quality is transparent, either through externally verifiable standards (S&amp;P ratings of AA+/AAA or being a constituent of a major index - the S&amp;P ASX 200 or highly liquid ETFs). The standard for credit quality is an indication that those high quality instruments are liquid, non-volatile, and priced adequately.</td>
</tr>
<tr>
<td><strong>Key Consideration 5</strong>&lt;br&gt;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.</td>
<td>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. In addition, the CCPs have the ability to use FX swaps to ensure that cross-border collateral can be used in a timely manner.</td>
</tr>
<tr>
<td><strong>Key Consideration 6</strong>&lt;br&gt;An FMI should use a collateral management system that is well designed and operationally flexible.</td>
<td>ASX’s CCPs have well-designed 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.</td>
</tr>
</tbody>
</table>
### PFMI Disclosure Framework 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.

<table>
<thead>
<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
</tr>
</thead>
</table>
| **Key Consideration 1**<br>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.  
*FSS 6.1* | › The 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:  
  • ASX Clear:  
    - Equity Derivatives: SPAN (Standard Portfolio Analysis of Risk)  
    - Cash Equities: Combination of Historical Simulation VaR and Flat Rates  
  • ASX Clear (Futures):  
    - Futures: SPAN  
    - OTC Interest Rate Derivatives: Filtered Historical Simulation VaR  
› Further details on OTC Interest Rate Derivatives margining can be found in the "ASX OTC Interest Rate Derivatives Clearing – Service Description". |
| **Key Consideration 2**<br>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.  
*FSS 6.2* | › 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.  
› 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. |
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.

FSS 6.3

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.

FSS 6.4

HOW ASX CENTRAL COUNTERPARTIES COMPLY

- The CCPs ensure that margin requirements are 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.
- 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 and assumed close out periods, are highlighted in the following table:

<table>
<thead>
<tr>
<th>Product Group</th>
<th>Margin Methodology</th>
<th>Confidence Intervals</th>
<th>Close-out Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Derivatives</td>
<td>SPAN</td>
<td>99</td>
<td>Max(1-2)</td>
</tr>
<tr>
<td>Cash Equity - VaR</td>
<td>VaR, Flat Rates</td>
<td>99</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Exchange-Traded-Derivatives</td>
<td>SPAN</td>
<td>99</td>
<td>Max(1-3)</td>
</tr>
<tr>
<td>OTC</td>
<td>HsVaR</td>
<td>99.5</td>
<td>5 - 7</td>
</tr>
</tbody>
</table>

- The CCPs’ Operating Rules and Procedures give the CCPs authority to collect margins on an intraday basis in order to limit the build-up of current exposures.
- Each of the CCPs has slightly different arrangements for the calling and collecting of margins:
  - ASX Clear:
    - For cash equities transactions (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;
    - For derivatives transactions (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.
APPENDIX I: ASX CS Facilities’ Compliance with the Principles for Financial Market Infrastructures and the Australian Financial Stability Standards

PFMI Disclosure Framework **Principle 6 | Margin**

**HOW ASX CENTRAL COUNTERPARTIES COMPLY**

- **ASX Clear (Futures):**
  - For Futures (Futures and Options over Futures), margins are calculated based on end of day prices and settled at 10.30am the following business day.
  - There are scheduled intraday margin calls at 8:40am, 11.40am and 2:15pm 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, refer below:

<table>
<thead>
<tr>
<th>Participant Type</th>
<th>Erosion</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTC Clearing Participant</td>
<td>10%</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>OTC &amp; Futures Clearing Participant</td>
<td>20%</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Futures Clearing Participant</td>
<td>25%</td>
<td>$1,000,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clearing Participant type</th>
<th>ICR</th>
<th>House</th>
<th>Client</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETD A</td>
<td>$8m</td>
<td>$18m</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>$8m</td>
<td>$18m</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>$3m</td>
<td>$7m</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>$1m</td>
<td>$1m</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>$1m</td>
<td>$1m</td>
<td></td>
</tr>
</tbody>
</table>

- For all scheduled and ad hoc intraday margin calls, the impacted clearing participants are notified via email and given one hour to settle their margin obligation via Austraclear, unless otherwise advised.
## PFMI Disclosure Framework Principle 6 | Margin

### 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.

*FSS 6.5*

<table>
<thead>
<tr>
<th>PFMI/FSS</th>
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<tbody>
<tr>
<td></td>
<td>‣ The margining methodology used by the CCPs allows for margin requirements to be offset across products if one product is materially and reliably correlated with the risk of the other product, however this is only allowed within a CCP and not across CCPs.</td>
</tr>
<tr>
<td></td>
<td>‣ <strong>ASX Clear (Futures) – Exchange Traded Derivatives and ASX Clear Derivative Margins:</strong> SPAN methodology allows offsets in the form of ‘inter-commodity spread concessions’. These offsets reduce margin requirements for reliable correlations across related contracts. Inter-commodity spread concessions are only applied where measures of correlation between contracts exceed 30 per cent and the correlation is based on economic fundamentals. Correlated offset is applied using additional buffers to reduce the offset and deal with correlation instability. ASX uses sensitivity analysis to verify the reliability of correlations between products used in calculating inter-commodity spread concessions.</td>
</tr>
<tr>
<td></td>
<td>‣ <strong>ASX Clear Cash Market:</strong> 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 2 years. The use of historical simulation over a 2-year period establishes the significance and reliability of these correlations by taking the worst movements at a certain confidence interval.</td>
</tr>
<tr>
<td></td>
<td>‣ <strong>ASX Clear (Futures) OTC Market:</strong> ASX Clear (Futures) applies HSVaR 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 beyond 10 years) establishes the significance and reliability of these correlations taking the worst correlated movements and the set confidence interval to apply margins.</td>
</tr>
<tr>
<td></td>
<td>‣ 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 Historic VaR model, rather than using the SPAN methodology. HSVaR 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.</td>
</tr>
</tbody>
</table>
PFMI Disclosure Framework **Principle 6 | Margin**

### How ASX Central Counterparties Comply

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<tr>
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<tr>
<td><strong>Key Consideration 6</strong>&lt;br&gt;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.&lt;br&gt;&lt;br&gt;<em>FSS 6.6</em></td>
<td>› Both CCPs monitor overall margin coverage in near real time.&lt;br&gt;› Daily backtesting of margin coverage, both static and dynamic, is performed for both CCPs and is the ongoing margin rate review process.&lt;br&gt;› Daily emails on Back Testing results are sent out to internal stakeholders.&lt;br&gt;› The pro-cyclicality is addressed by setting floors, where necessary, across a range of risk parameter inputs in CCPs margin models, incorporating stressed market conditions in the sensitivity analysis and using short term volatilities. Sensitivity analysis then looks to stretch assumptions and look for possible breaches.</td>
</tr>
<tr>
<td><strong>Key Consideration 7</strong>&lt;br&gt;A CCP should regularly review and validate its margin system.&lt;br&gt;&lt;br&gt;<em>FSS 6.7</em></td>
<td>› Model validation process in place is over and above the ongoing back testing and sensitivity analysis of margin model inputs and outputs.&lt;br&gt;› 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.&lt;br&gt;› There is a model validation standard and an approach as agreed with the RBA which addresses all models including margining models which lays out the framework for independent and internal model validations carried out on at least an annual basis.&lt;br&gt;› Note if the margin model has been materially changed or the market materially changed an earlier review may be required.&lt;br&gt;› The model validation framework is also subject to periodic review.</td>
</tr>
<tr>
<td>In designing its margin system, a CCP should consider the operating hours of payment and settlement systems in the markets in which it operates.&lt;br&gt;&lt;br&gt;<em>FSS 6.8</em></td>
<td>› All 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 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.&lt;br&gt;› The CCPs’ Operating Rules and Procedures also state the operating hours of the payment and settlement systems.</td>
</tr>
</tbody>
</table>
PFMI Disclosure Framework **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.

*FSS 7.1*

<table>
<thead>
<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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</thead>
<tbody>
<tr>
<td>→ ASX Clearing Corporation (ASXCC) manages the investment of Clearing Participant cash margins and default funds for both of ASX’s CCPs.</td>
<td></td>
</tr>
<tr>
<td>→ The 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.</td>
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</tr>
<tr>
<td>→ The key features of ASX’s approach to liquidity management are as follows:</td>
<td></td>
</tr>
<tr>
<td>• 100% of the capital for both CCPs (from ASX and from participants) is in cash.</td>
<td></td>
</tr>
<tr>
<td>• Majority of margin for ASX Clear (Futures) is received as cash.</td>
<td></td>
</tr>
<tr>
<td>• All securities invested in by ASXCC (for both CCPs) are eligible for a repurchase agreement (Repo) at the RBA.</td>
<td></td>
</tr>
<tr>
<td>• ASXCC is one of only a handful of non-bank entities who have a direct Exchange Settlement Account (ESA) with the RBA and a direct Exchange Settlement Account System (ESAS) with the RBNZ (allowing for the repo of investments directly with the RBA and the RBNZ).</td>
<td></td>
</tr>
<tr>
<td>• ASX Clear (Futures) through ASXCC also has access to EUR, GBP, JPY and USD liquidity under intraday liquidity facilities with two commercial banks.</td>
<td></td>
</tr>
<tr>
<td>• ASX Clear (Futures) relies on commercial banks to facilitate the acceptance of cash collateral in EUR, GBP, JPY and USD currencies.</td>
<td></td>
</tr>
<tr>
<td>• ASX Clear (Futures)’ US Treasury Bills posted as collateral and ASXCC’s investment securities denominated in EUR, JPY, GBP and USD are held in Clearstream, a central securities depository (CSD).</td>
<td></td>
</tr>
<tr>
<td>• ASX Clear also has recourse to a committed liquidity facility from ASX Limited.</td>
<td></td>
</tr>
<tr>
<td>• ASX Clear’s rule book gives the CCP 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.</td>
<td></td>
</tr>
<tr>
<td>→ ASX’s CCPs provide participants with information to help them manage their liquidity needs and risks, which in turn protects the CCPs to the extent this enhances participants’ own liquidity risk management.</td>
<td></td>
</tr>
<tr>
<td>→ ASX Clear also provides monthly disclosures on participants’ cash market contingent liquidity exposures including the potential use of OTAs.</td>
<td></td>
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</tbody>
</table>
### PFMI Disclosures Framework Principle 7 | Liquidity Risk

<table>
<thead>
<tr>
<th>Key Consideration 2</th>
<th>How ASX Central Counterparties Comply</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PFMI/FSS</strong></td>
<td><strong>How ASX Central Counterparties Comply</strong></td>
</tr>
<tr>
<td><strong>Key Consideration 2</strong></td>
<td>The 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.</td>
</tr>
<tr>
<td></td>
<td>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 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.</td>
</tr>
<tr>
<td><strong>FSS 7.2</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Key Consideration 3** No corresponding FSS

**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.

**FSS 7.3**

As set-out in the Supplementary Interpretation of the Financial Stability Standards 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 CCP should maintain, with a high degree of confidence, sufficient liquidity to manage the default of the two largest participants and their affiliates and meet reasonably foreseeable operational cash flows.

ASX’s CCPs primary liquidity requirement is the Core Liquidity Requirement (CLR). The CLR is calculated specific to each cash collateral currency (currency specific) and is the sum of the currency specific Default Liquidity Requirement (DLR) for each CCP and the currency specific Ordinary Liquidity Requirement (OLR) across both CCPs.

The currency specific DLR for ASX Clear is applicable for AUD only and is equal to the sum of the CCP’s default fund and the aggregate margin requirements of the two largest participants.

ASX Clear (Futures) currency specific DLR 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 CCP.

The currency specific OLR is intended to cover day to day liquidity requirements in each currency and is calculated by multiplying the ASXCC investment portfolio (less the DLR) held in that currency with the OLR rate specific to that currency.

ASX’s CCPs also have an Additional Liquidity Requirement for AUD and NZD currencies which is designed to reflect the potential for unexpected non-default related liquidity needs. The AUD and NZD ALRs are calculated by multiplying the ASXCC investment portfolio (less the DLR) held in AUD and NZD with the AUD and NZD ALR rates respectively.

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

ASXCC’s Investment Mandate limits for each participant the proportion of initial margin requirements that can be met with collateral in currencies other than the margin requirement currency.
### PFMI Disclosure Framework Principle 7 | Liquidity Risk

<table>
<thead>
<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principle 7: Liquidity Risk</td>
<td>- ASX's CCPs measure whether it has enough currency specific liquid assets to meet the combined value of the currency specific CLR and ALR on a daily basis.</td>
</tr>
<tr>
<td></td>
<td>- 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.</td>
</tr>
<tr>
<td></td>
<td>- ASX Clear has implemented a target minimum cash market liquidity buffer of $130 million 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.</td>
</tr>
<tr>
<td></td>
<td>- 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 CCP Batch Instructions which would otherwise fail due to outstanding payment obligations. OTAs replace the previous settlement rescheduling arrangements for those failed CCP Batch Instructions and facilitate the settlement of CCP Batch Instructions on the scheduled settlement date.</td>
</tr>
</tbody>
</table>

#### 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.

**FSS 7.4**

- 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 Exchange Settlement Account (ESA) held with the RBA. NZD denominated investments are settled across the ESA System 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 ASXCC's investment objective is the need to ensure timely and certain access to funds at all times, including in the event of a Clearing Participant default.
- ASXCC's Investment Mandate and ASX's CCP Liquidity Stress Testing and Liquidity Requirement Standard require the CCPs' Treasury to meet the currency specific CLR with high quality liquid assets - 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, and 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 authorised deposit-taking institution (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.
- ASX Clear's committed liquidity facility with ASX Limited is contractually based and could be drawn down to meet ASX Clear's default management liquidity requirements.
### PFMI Disclosure Framework **Principle 7 | Liquidity Risk**

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<td><strong>Key Consideration 6</strong>&lt;br&gt;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. <strong>FSS 7.5</strong></td>
<td>✓ The CCPs do not rely on supplemental liquid resources, as they meet their minimum liquidity requirements through their qualifying liquid resources.&lt;br&gt;✓ ASX Clear (Futures) can access, via ASXCC, EUR, GBP, JPY and USD liquidity under intraday liquidity facilities with two commercial banks.</td>
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<td><strong>Key Consideration 7</strong>&lt;br&gt;An FMI should obtain a high degree of confidence, though 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. <strong>FSS 7.6</strong></td>
<td>✓ 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.&lt;br&gt;✓ ASX Clear (Futures) does not rely on external liquidity providers other than the RBA and RBNZ.&lt;br&gt;✓ ASX’s CCPs periodically test their procedures for accessing ASXCC’s liquid resources.&lt;br&gt;✓ ASX Clear’s cash market liquidity includes contingent funding from participants’ through OTAs.&lt;br&gt;✓ ASX Clear also relies on a $150m committed liquidity facility from ASX Limited in meeting its minimum default liquidity resource requirement.&lt;br&gt;✓ ASX Clear periodically conducts due diligence to ensure that the committed liquidity facility from ASX Limited could be drawn upon if needed.</td>
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PFMI Disclosure Framework **Principle 7 | Liquidity Risk**

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<td><strong>Key Consideration 8</strong>&lt;br&gt;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.&lt;br&gt;FSS 7.7</td>
<td>‣ The CCPs use the following services to enhance their liquidity risk management:&lt;br&gt;  • Austraclear: Clearing Participants settle routine margin payments in respect of ASX derivatives positions (for both ASX Clear and ASX Clear (Futures)) and novated unsettled cash equity market obligations (for ASX Clear only) via cash transfers in Austraclear, which settle in real time via RITS.&lt;br&gt;  • RBA ESA: AUD denominated payments transactions reflecting margin-related funds movements and treasury investments for both CCPs are settled using ASXCC’s ESA.&lt;br&gt;  • RBNZ ESAs: NZD denominated settlement obligations at ASX Clear (Futures) are settled using ASXCC’s ESAs.</td>
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<td><strong>Key Consideration 9</strong>&lt;br&gt;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.&lt;br&gt;FSS 7.8</td>
<td>‣ The CCPs assess the adequacy of their liquidity arrangements in the event of Clearing Participant default using the ASX Liquidity Stress Testing (LST) model on a daily basis.&lt;br&gt;  ‣ In order to estimate the liquidity that the CCPs need to hold in order to manage Clearing Participant default events, the CCPs stress test Clearing Participant positions using possible adverse price moves (stress scenarios) in extreme but plausible market conditions (and, in the case of ASX Clear, different settlement/close-out assumptions) in the time between the last payment of margin and the time of close-out, these are the LST values. The worst case LST value (i.e. the highest hypothetical LST requirement for the two largest Clearing Participants and their affiliates, as per Key Consideration 4 above, on ASX Clear and ASX Clear (Futures), irrespective of credit standing and across all scenarios, is taken as the Default Liquidity Requirement (DLR) each day (for ASX Clear (Futures)) or used to monitor the adequacy of the liquidity resources (for ASX Clear).&lt;br&gt;  ‣ The Liquidity Stress Testing model is aligned with the ASX Capital Stress Testing (CST) model which uses a comprehensive range of stress scenarios, however, assumption on portability and settlement cashflows within the CST model and the LST model differ for ASX Clear.&lt;br&gt;  ‣ The Liquidity Risk Policy and ASXCC Investment Mandate sets out the rationale for, and governance arrangements relating to, the amount and form of liquid resources it maintains.&lt;br&gt;  ‣ ASX’s CCPs supplement their default liquidity stress testing with four currency specific liquidity specific stress test scenarios. These scenarios consider stresses to currency specific cash margin outflows across the CCPs. The results from the currency specific liquidity specific stress test scenarios assess the adequacy of CCPs currency specific CLR and ALR and the actual liquidity of the ASXCC investment portfolio.&lt;br&gt;  ‣ 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.</td>
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## PFMI Disclosure Framework **Principle 7 | Liquidity Risk**

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<td><strong>Key Consideration 10</strong>&lt;br&gt;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.&lt;br&gt;&lt;br&gt;&lt;br&gt;<strong>FSS 7.9</strong>&lt;br&gt;</td>
<td>› ASX has introduced ASX Clear and ASX Settlement Operating Rule amendments to allow the creation of Offsetting Transaction Arrangements (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 CCP Batch Instructions which would otherwise fail due to outstanding payment obligations. OTAs replace the previous settlement rescheduling arrangements for those failed CCP Batch Instructions and facilitate the settlement of CCP Batch Instructions on the scheduled settlement date.&lt;br&gt;› ASX CCPs, through the ASX Recovery Rulebook, have additional tools to enable them to address liquidity shortfalls they may face from participant default (Recovery Assessments, partial and complete termination and, in the case of ASX Clear (Futures), payment reduction powers) and as well as to replenish their financial resources following a participant default.</td>
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## PFMI Disclosure Framework **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.

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| **Key Consideration 1**<br>An FMI’s rules and procedures should clearly define the point at which settlement is final.<br>**FSS 8.1** | ➢ ASX CCPs’ Operating Rules and Procedures describe the extent of the CCPs’ contractual obligations including the point of settlement finality. Refer ASX Clear Operating Rules, Section 12 and ASX Clear (Futures) Operating Rules, Part 4.  
➢ The point at which settlement is final for equity securities in CHESS 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 CHESS 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.  
➢ Movement of equity securities in CHESS 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 ESA accounts (for ASX Clear only).  
➢ Margin payments within Austraclear will occur after receipt of a message from RITS indicating that cash has settled across ESA accounts for settlement. All payments are irrevocable once they are accepted by Austraclear.  
➢ Margin payments within the High Value Payment System (HVPS) occur when the underlying SWIFT message has been processed. All payments are irrevocable once they have been processed through the RBNZ Exchange Settlement Account (ESA). Transactions are not accepted by the system unless the paying member has sufficient credit provided by their Settlement Bank. |
| **Key Consideration 2**<br>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.<br>**FSS 8.2** | ➢ ASX CCPs complete settlement in accordance with the Operating Rules and Procedures of Austraclear, ASX Settlement (for ASX Clear only) or RITS.  
➢ Delivery versus Payment (DvP) Model 1 (Austraclear – for ASX Clear (Futures) and ASXCC Treasury settlements) and DvP Model 3 (Equities – for ASX Clear only) settlement systems are used.  
➢ In addition, CHESS facilitates Real Time Gross Settlement (RTGS) – ASX Clear only.  
➢ Movement of equity securities in CHESS 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 ESA accounts (ASX Clear only).  
➢ The deadlines for completion of equity batch settlement and the obligations of Payment Providers are set out in the CHESS Payments Interface Standard Payments Provider Deed (ASX Clear only). |
### PfMI Disclosure Framework **Principle 8 | Settlement Finality**

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| **Key Consideration 3**<br>An FMI should clearly define the point after which unsettled payments, transfer instructions or other obligations may not be revoked by a participant.  
_FSS 8.3_ | › ASX CCPs complete settlement in accordance with the Operating Rules and Procedures of Austraclear, ASX Settlement (for ASX Clear only) or RITS.  
› Movement of securities in Austraclear will only occur once a message is received from RITS that the cash leg has settled across ESA accounts. The point at which settlement is final is set out in the Austraclear Regulations at Sections 14, 15 and 16.  
› For ASX Settlement, movement of equity securities in CHESS 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 ESA accounts. The point at which settlement is final is set out in the ASX Settlement Operating Rules at Section 10.  
› Unsettled payments may not be revoked after they match and the cash leg has settled across ESA accounts. |
### PFMI Disclosure Framework 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.

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<tr>
<td><strong>Key Consideration 1</strong>&lt;br&gt;An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.&lt;br&gt;<em>FSS 9.1</em></td>
<td>› All $AUD settlements are conducted in central bank money via CHESS (for ASX Clear only) and Austraclear (for both CCPs) across ESAs in RITS.&lt;br&gt;› All $NZ settlements (ASX Clear (Futures) only) are conducted in central bank money via ASXCC’s ESA account.&lt;br&gt;› ESA accounts in RITS are held in the name of ASXCC (for both CCPs) and ASX Settlement Pty Limited (for ASX Clear only).&lt;br&gt;› ESA accounts are held in the name of ASXCC Limited as Trustee for ASXCC Trust (ASX Clear (Futures) only).&lt;br&gt;› Other currencies are all low value/volume and are settled via commercial bank arrangements (ASX Clear (Futures) only).</td>
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<td><strong>Key Consideration 2</strong>&lt;br&gt;If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.&lt;br&gt;<em>FSS 9.2</em></td>
<td>› Other currencies are all low value/volume and are settled via commercial bank arrangements. (ASX Clear (Futures) only).&lt;br&gt;› ASXCC is the controlling entity for the treasury investments for ASX Clear (Futures).&lt;br&gt;› ASX maintains a small float in required currencies.</td>
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<tr>
<td><strong>Key Consideration 3</strong>&lt;br&gt;If an FMI settles in commercial bank money, it should monitor, manage and limit its credit and liquidity risks arising from the commercial banks. In particular, an FMI should establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.&lt;br&gt;<em>FSS 9.3</em></td>
<td>› Other currencies are all low value/volume and are settled via commercial bank arrangements. (ASX Clear (Futures) only).&lt;br&gt;› Given the current value and volume of non-$AUD/$NZ 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.&lt;br&gt;› Should future initiatives increase the value and volume of settlements through commercial bank arrangements, the appropriate criteria and risk management framework will be established.&lt;br&gt;› The 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.&lt;br&gt;› In the case of ASX Clear, Section 5 and Schedule 1 of the CCP’s Operating Rules incorporate measures around Clearing Participant’s credit exposures.&lt;br&gt;› ASX is currently developing formal criteria to deal with the regulation, supervision, creditworthiness, capitalisation, access to liquidity and operational reliability of commercial bank arrangements.</td>
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### PFMI Disclosure Framework  
**Principle 9 | Money Settlements**

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| **Key Consideration 4**  
If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.  
*FSS 9.4* | » This obligation is not applicable to ASX’s CCPs. |
| **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.  
*FSS 9.5* | » Terms and Conditions set out the manner in which the commercial bank accounts operate. |
**PFMI Disclosure Framework 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.

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| **Key Consideration 1**  
An FMI’s rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.  
*FSS 10.1*  
PRINCIPLE 10 |  
> The delivery obligations of ASX Clear (Futures) are set out in Operating Rule 63 and Schedule 14. This includes both deliverable commodity and 90 Day Bank Bill futures contracts.  
> 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 e.g. 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.  
> Information about the ASX commodity markets is available on the ASX website at:  

| **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.  
*FSS 10.2*  
PRINCIPLE 10 |  
> 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 at:  

**PFMI Disclosure Framework 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.

This PFMI is not applicable to ASX’s CCPs.
### PFMI Disclosure Framework 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.

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| **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.  
*FSS 11.1* |  
› Model 1 (Austraclear – for ASX Clear (Futures) and ASXCC Treasury settlements) and Model 3 (Equities – ASX Clear only) settlement systems used.  
› Electronic dematerialised DvP settlement.  
› Movement of securities in Austraclear (ASX Clear (Futures) or ASXCC treasury settlements) will only occur once a message is received from RITS that the cash leg has settled across ESA accounts.  
› Movement of equity securities in CHESS (ASX clear only) 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 ESA accounts.  
› ASX Settlement Operating Rules, Section 10.  
› ASX Clear Operating Rules, Section 12.  
› Austraclear Regulations, Sections 14, 15 and 16. |
| **A CCP should eliminate principal risk associated with the settlement of linked obligations by ensuring that it employs an appropriate delivery versus payment (DvP), delivery versus delivery (DvD) or payment versus payment (PvP) settlement mechanism.**  
*FSS 11.2* |  
› DvP Model 1 (Austraclear- for ASX Clear (Futures) and ASXCC Treasury settlements) and Model 3 (Equities – ASX Clear only) settlement systems used.  
› Electronic dematerialised DvP settlement.  
› Movement of securities in Austraclear (ASX Clear (Futures) or ASXCC treasury settlements) will only occur once a message is received from RITS that the cash leg has settled across ESA accounts.  
› Movement of equity securities in CHESS (ASX clear only) 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 ESA accounts.  
› ASX Settlement Operating Rules, Section 10.  
› ASX Clear Operating Rules, Section 12.  
› Austraclear Regulations, Sections 14, 15 and 16. |
PFMI Disclosure Framework **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.

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<tr>
<td><strong>Key Consideration 1</strong>&lt;br&gt;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.&lt;br&gt;&lt;br&gt;<em>FSS 12.1</em></td>
<td>‣ The ASX Operating Rules detail the powers and actions available to a CCP in the event of a default.&lt;br&gt;‣ The Participant Issue Response Group (PIRG) is called upon an incident with a Participant becoming apparent.&lt;br&gt;‣ In the event of a potential default, the PIRG will refer the matter to the Default Management Committee (DMC).&lt;br&gt;‣ <strong>ASX Clear Clearing Participant or ASX Clear (Futures) futures Clearing Participant default:</strong> once the DMC has declared the Clearing Participant default then (following notification to the market) ASX may liaise with one of its default brokers (authorised to act on behalf of ASX in the event of a default) to close out or hedge the defaulting Clearing Participant’s outstanding obligations to the Clearing House.&lt;br&gt;‣ <strong>OTC Clearing Participant default:</strong> once the DMC has declared the Clearing Participant default then ASX will convene the Default Management Group (comprising representatives from each of the OTC Clearing Participant entities of ASX Clear (Futures)) to provide guidance and advice (such advice will be referred back to the DMC for consideration) on the best way to hedge, and subsequently auction, the defaulter’s portfolio.&lt;br&gt;‣ ASX maintains a documented ‘Default Management Framework’ and comprehensive default management procedures.&lt;br&gt;‣ Default management processes for both CCPs are documented on the <a href="https://www.asx.com.au">ASX website</a>.</td>
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<td><strong>Key Consideration 2</strong>&lt;br&gt;An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.&lt;br&gt;&lt;br&gt;<em>FSS 12.2</em></td>
<td>‣ The ASX operating rule framework places an obligation on all Participants to self-report to ASX if they become aware of any circumstances which may prevent them being able to continue their obligations as an ASX Clearing Participant.&lt;br&gt;‣ A PIRG is called upon an incident with a Participant becoming apparent.&lt;br&gt;‣ In the event of a potential default, the PIRG will refer the matter to the DMC.&lt;br&gt;‣ Under the Default Management Framework, ASX has the power to close out or hedge a Participant’s open contracts in order to appropriately control the risk of the participant.</td>
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<td><strong>Key Consideration 3</strong>&lt;br&gt;An FMI should publicly disclose key aspects of its default rules and procedures.&lt;br&gt;&lt;br&gt;<em>FSS 12.3</em></td>
<td>‣ Default management processes for both CCPs are documented on the <a href="https://www.asx.com.au">ASX website</a>.&lt;br&gt;‣ The Rules that cover the default processes in each of the CCP’s are:&lt;br&gt;‣ <strong>ASX Clear Operating Rules &amp; Procedures</strong> – Section 15 - Default.&lt;br&gt;‣ <strong>ASX Clear (Futures) Operating Rules &amp; Procedures</strong> – Part 7 – Procedures on Default.&lt;br&gt;‣ <strong>ASX Clear (Futures) OTC Rulebook</strong> – Section 6 – Default.</td>
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## PFMI Disclosure Framework \textbf{Principle 13} | Participant-default rules and procedures

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| **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.  
\textit{FSS 12.4} | › Default management fire drills are conducted for the CCP facilities at least annually, to test, review and, where applicable, enhance ASX’s default management processes and procedures. These tests include relevant parties that are likely involved in the default procedures.  
› In the event of default by an OTC Clearing Participant, a Default Management Group (DMG) would be established, comprising representatives from OTC Clearing Participants of ASX Clear (Futures). The DMG would provide advice on hedging and auctioning of the defaulting participant’s portfolio. DMG members are involved in the annual testing and review of default procedures relating to the potential default of an OTC Clearing Participant of ASX Clear (Futures). |
| A CCP 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.  
\textit{FSS 12.5} | › ASX has a documented Default Management Framework and comprehensive default management procedures. |
## 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.

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<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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</thead>
<tbody>
<tr>
<td><strong>Key Consideration 1</strong></td>
<td>ASX Clear maintains a segregated account structure for its options and futures products which separates client positions from the participant’s proprietary positions. 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 also has the power to transfer (port) participants’ clients’ positions and collateral without the need to seek approval from the participant’s external administrator.</td>
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<td></td>
<td>ASX has enhanced ASX Clear client asset protections for cash market products to ensure they provide “materially equivalent protection of customer assets by alternative means” under FSS 13.2.10. These enhancements were introduced in two stages:</td>
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<tr>
<td></td>
<td><strong>Stage 1:</strong> In April 2014, ASX made amendments to the ASX Settlement Operating Rules to confirm that client stock in the Accumulation Account is maintained beneficially for the client and requiring accurate records to allow daily reconciliation of stock in the Accumulation Account. Amendments were also made to the ASX Clear Operating Rules to confirm that funds covering client purchases can only be withdrawn from the client trust account if the Participant has taken all steps required to register the stock into the client’s name (subject to certain exceptions based on the Corporations Act).</td>
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<td><strong>Stage 2:</strong> New CHESS processes and associated rule changes were introduced in May 2015. These changes will ensure that when client stock is transferred from the Accumulation Account or a Direct/Sponsored HIN into the Settlement Account that funds representing the sale proceeds (net of brokerage) are paid into the client trust account or to the client on the same day the stock is transferred.</td>
</tr>
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<td></td>
<td>ASX plans to review client segregation arrangements in ASX Clear for the cash market following implementation of the CHESS replacement system.</td>
</tr>
<tr>
<td><strong>Key Consideration 2</strong></td>
<td>Refer to Key Consideration 1 above.</td>
</tr>
</tbody>
</table>

*FSS 13.1*

*FSS 13.2*
<table>
<thead>
<tr>
<th>Key Consideration 3</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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<tbody>
<tr>
<td>A CCP 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.</td>
<td>› 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 in the event of a default. The availability of individually segregated client accounts for both options and futures 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. Accordingly, there should be sufficient collateral available to support the transfer of each client’s positions to another clearing participant.</td>
</tr>
<tr>
<td>FSS 13.3</td>
<td>› Individually segregated client clearing arrangements for OTC and futures transactions on ASX Clear (Futures) are as follows:</td>
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<td></td>
<td>• Futures Client Clearing: The Futures Client Clearing service has an Individual Client Account (ICA) option which allows for an individual client’s net position to be segregated from the positions of other clients and ASX’s initial margin requirement for that client’s position to be collected and accounted for by ASX within an operationally comingled client collateral account of the clearing participant. The positions and related initial margin value of clients that opt for the ICA are highly likely to 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.</td>
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<td>• OTC Client Clearing: The OTC interest rate derivatives dealer clearing service for ASX Clear (Futures) covers the clearing of OTC end client (e.g. buy-side) transactions. The OTC client clearing service makes use of the individual client account structure (ICA) in ASX Clear (Futures) that allows for the segregation of individual client positions with related initial margin requirements managed within an operationally comingled client collateral account. The OTC service also facilitates the allocation of client trades executed bilaterally, through electronic execution facilities or via voice brokers to the clearing house from market standard interfaces (Markitwire in the first instance). The OTC service also supports cross-margining of eligible ASX futures contracts and related OTC interest rate derivatives positions where a client uses ICAs for both OTC and futures positions through the same clearing participant.</td>
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<td>• Enhanced Protection: ASX Clear (Futures) and ASX Clear offer derivatives clients the choice of increased collateral protection. Excess customer collateral may be held directly with the central counterparty and attributed to individual client accounts (ICA). Under ASX Clear (Futures), the account structure facilitates collateral excess (collateral not utilised to cover the ICA initial margin requirement) to be calculated at an ICA level, based upon the cash/non-cash collateral (or total collateral) attributed to the ICA by the Clearing Participant. Clearing Participants have the option (but not the obligation) to notify ASX Clear (Futures) of these collateral amounts, on behalf of the client. The account structure also introduces a “tracking” capability, for lodgement of assets on behalf of an ICA, which identifies that asset as belonging to that particular client, in the books and records of the CCP. Under ASX Clear (ETOs), collateral excess is already recorded at the client account level, with the lodgement of client non-cash collateral into individual accounts already common practice. However, the enhancements allow clearing participants to notify/lodge excess cash collateral against the clients’ individual accounts. Client collateral continues to be held in the pooled client collateral account of the clearing participant.</td>
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### PFMI Disclosure Framework  
**Principle 14 | Segregation and portability**

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<tr>
<th>PFMI/FSS</th>
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| **Key Consideration 4**<br>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* | > ASX Clear (Futures):  
  - Chapters 4 and 7 of the Operating Rules for ASX Clear (Futures).  
  - Clearing brokers 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).  
  - Detailed information relating to the ASX default management process is on the [ASX website](#).  
> ASX Clear:  
  - Current arrangements for segregation and portability are defined in chapters 10, 13, 15 and 17 of the ASX Clear Operating Rules and Procedures.  
  - Detailed information relating to the ASX default management process is on the [ASX website](#).
### PFMI Disclosure Framework **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.

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| **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.
*FSS 14.1* | > ASX's CCPs have robust management and control systems to identify, monitor and manage their general business risks.
> Risk profiling and assessment is the principal method by which the business identifies, assesses and reports on both its organisational business unit-level risks, as well as ‘Top 10’ key risks. Sources of business risk and their potential impact on operations and services are identified and assessed. Financial results and available resources are reviewed at least monthly and expected impacts are considered. Annual financial planning and budgeting processes are in place. Major loss analysis is undertaken periodically. Capital forecasting and cash flow sensitivity analysis is undertaken. Capital expenditure is presented to relevant management monthly. Cash flow forecasting is reviewed at least monthly. |
| **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.
*FSS 14.2* | > ASX has set aside capital for operational and business risk across the two ASX Group CCPs if they incur general business losses. Since ASX has identified constraints to making business risk capital bankruptcy remote within the CCP, this capital is held at the ASX Group level to ensure that it cannot be applied to meet losses caused by a participant default. Each CCP has a separate allocation for business risk capital - $31 million for ASX Clear and $40 million for ASX Clear (Futures) - that is explicitly made available to the CCPs from ASX Limited. ASX Limited has also set aside a separate pool of capital of $75 million for investment risks across both CCPs.
> In determining the sufficiency of the operational and business risk capital set aside for the 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 CCPs in the EU, under the European Regulation on OTC derivatives, central counterparties and trade repositories (EMIR).
> ASX’s CCP business/operational risk capital is determined and reviewed by management and the Risk Committee.
> Annual financial forecasts, budgets, major loss scenario assessments etc. are undertaken to ensure the CCPs have adequate liquid assets to continue as a going concern should business risks eventuate.
## APPENDIX I: ASX CS Facilities’ Compliance with the Principles for Financial Market Infrastructures and the Australian Financial Stability Standards

### PFMI Disclosure Framework Principle 15 | General business risk

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<td><strong>Key Consideration 3</strong>&lt;br&gt;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.&lt;br&gt;&lt;br&gt;<strong>FSS 14.3</strong></td>
<td>&gt; ASX has in place recovery plans which identify scenarios that may prevent a CCP from providing its critical services as a going concern and the available options for recovery or orderly wind-down.&lt;br&gt; &gt; 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. ASX has in place arrangements for annual review and testing of the recovery plans.&lt;br&gt; &gt; General business risk capital is held on behalf of the CCPs at the ASX Group level to ensure that it cannot be applied to meet losses caused by a participant default. A group-wide capital buffer provides protection to allocated business risk capital against potential losses sustained elsewhere in the group. This arrangement has been included in the ASX Group Support Agreement.&lt;br&gt; &gt; The amount of operational and business risk capital set aside for the CCPs has been estimated as the capital required to cover six months of current operating expenses, with an additional buffer to allow for future growth. Periodic loss scenario analysis is undertaken which aims to ensure that the level of operational and business risk capital is sufficient to meet the single largest uninsured business loss event for a CCP. Loss scenarios considered include closure due to external events such as pandemics, the fraudulent redirection of payments, or the unauthorised transfer of funds. 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.</td>
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<td><strong>Key Consideration 4</strong>&lt;br&gt;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.&lt;br&gt;&lt;br&gt;<strong>FSS 14.4</strong></td>
<td>&gt; The assets held to cover general business risks and investment risks are liquid net assets funded by equity and reserves.&lt;br&gt; &gt; The liquid net assets comprise at call and fixed term bank deposits, bank bills and negotiable certificates of deposits.&lt;br&gt; &gt; The ASX investment mandates, which are reviewed annually by management and approved by the Board, set out allowed asset types and liquidity limits. Compliance with the mandates is monitored daily by Clearing Risk Policy &amp; Management.</td>
</tr>
<tr>
<td><strong>Key Consideration 5</strong>&lt;br&gt;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.&lt;br&gt;&lt;br&gt;<strong>FSS 14.5</strong></td>
<td>&gt; 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 business risk capital (including investment risk capital) following a loss event.</td>
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**PFMI Disclosure Framework 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.

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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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| **Key Consideration 1**<br>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. | › The AUD denominated assets of the CCPs and their participants are administered and held within the ASX Group. Intragroup arrangements allow the 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. 
› ASX’s CCPs’ Operating Rules and Procedures define how CCPs use lodged collateral. Cash investments, including cash collateral, clearing participant contributions and shareholder funds, are controlled by ASXCC, of which the 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. |
| **Key Consideration 2**<br>An FMI should have prompt access to its assets and the assets provided by participants, when required. | › AUD denominated assets invested on behalf of ASX’s CCPs and their participants are held with the ASX Group and subject to the 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.  
› These arrangements ensure that the CCPs have prompt access to participant collateral and their own contributions to prefunded financial resources, including in the event of participant default. |
<p>| <strong>Key Consideration 3</strong>&lt;br&gt;An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each. | › ASX’s CCPs do not use the services of external custodians. |</p>
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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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| **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.  
*FSS 15.4* | › ASXCC is the controlling entity for the investments of both 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 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 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”.  
› The performance of the investment portfolio within the parameters of the investment policy is closely monitored by ASXCC, with trigger points to automatically escalate potential issues to the Chief Risk Officer before actual limits are reached.  
› The ASXCC investment strategy is disclosed to participants via the Risk Consultative Committee (RCC) meetings for both ASX Clear and ASX Clear (Futures).  
› Information regarding ASXCC’s investment portfolio is provided to Clearing Participants via monthly reporting to the RCCs and via publicly available quarterly quantitative disclosures on ASX’s website. |
APPENDIX I: ASX CS Facilities’ Compliance with the Principles for Financial Market Infrastructures and the Australian Financial Stability Standards

PFMI Disclosure Framework 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.

**FSS 16.1**

- ASX’s CCPs adopt ASX’s framework for risk management which is described in its Enterprise Risk Management Framework and the COO Operational Risk Management Framework. These outline: the overall risk environment in the ASX Group; 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 stated tolerance for technology, counterparty, financial, operational, legal and regulatory risks is ‘very low’ as per the Board-approved Risk Appetite Statement.
- Systems, procedures and controls are in place to support operational processes.
- The CCPs integrate commercial standards into their operational risk management frameworks. For instance, the risk management framework is regularly assessed against the international standard ISO 31000 Risk Management – Principles and Guidelines. The Business Continuity Framework has been prepared with reference to the ISO International Standard on business continuity and the Business Continuity Institute’s Good Practice Guidelines. The COO Operational Risk Management Framework aligns with the ERM Framework. The ASX Fraud Control Policy references Standards Australia’s Standard on Fraud and Corruption Control.

### 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.

**FSS 16.2**

- The ASX Board has endorsed the the ASX Enterprise Risk Management Framework which assigns specific risk responsibilities across the ASX Group, including to the ASX Limited Board of Directors, the Audit and Risk Committee, the Risk Committee, Enterprise Risk, Enterprise Compliance, executive management and business unit management and staff. The Clearing Boards oversee the ASX CCP operational risks as per carve out in the ARC Charter.
- The Risk Committee, comprising executives from across the departments, is responsible for overseeing the implementation and adequacy of enterprise risk management policy, the ERM Framework and risk processes to ensure risks are being managed within the board approved risk appetite.
- Individual departments are responsible for: identifying business-specific risks; applying controls; maintaining risk management systems; reporting on the effectiveness of risk controls; and implementing enhancements and taking remedial action as appropriate. Each department is required to maintain a record of its risk profile, reviewing this on a periodic basis and updating as appropriate. More frequent reviews are undertaken where there are potential changes to technology, legal or regulatory requirements, or business drivers.
- Policies and procedures are the subject of internal and external review. ASX’s Internal Audit department routinely monitors compliance with operational policy, reporting to the Audit and Risk Committee on a quarterly basis. Audit findings may prompt a review of policy, which would be conducted in consultation with key stakeholders. Technology-related security policy is considered by external auditors as required by the scope of the audit.
- Change Management Procedures include comprehensive checks to ensure changes are implemented effectively.
## PFMI/FSS | HOW ASX CENTRAL COUNTERPARTIES COMPLY

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<thead>
<tr>
<th>Key Consideration 3</th>
<th>An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.</th>
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<tr>
<td><strong>FSS 16.3</strong></td>
<td>› Clearly defined operational objectives are in place. The monthly management reporting summarises performance against availability measures and other measures such as critical system capacity and headroom and includes a description of any incidents where an outage has occurred to a critical service. The actual capacity and performance of CCP systems is tested on a periodic basis. A required level of redundant capacity is taken into account. There are tools/controls in place that are used to monitor, review and test the capacity and performance of the systems.</td>
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<td>› The system's performance is reported quarterly to the ARC and to the RBA.</td>
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<td>› The CCPs' physical and information security policies are reviewed and assessed annually. The security policies recognise that employees, contractors and consultants have an obligation and a significant role to play in helping protect the information systems resources of ASX.</td>
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<td>› Availability targets are documented and defined formally for critical services. The 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.</td>
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<tr>
<th>Key Consideration 4</th>
<th>An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.</th>
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<tr>
<td><strong>No corresponding FSS</strong></td>
<td>› ASX’s CCPs are designed to have scalable capacity which is maintained at levels to support increasing volumes and service availability objectives. The guideline for target capacity is to maintain 50% over peak recorded daily volumes, with the ability to increase to 100% over peak within six months. Review of current and projected capacity requirements are undertaken when a service does not meet 100% available headroom, or when a significant change occurs to the service.</td>
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<tr>
<th>Key Consideration 5</th>
<th>An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.</th>
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<td><strong>No corresponding FSS</strong></td>
<td>› The ASX Employee Physical Security Policy outlines CCP requirements in regards to the protection of people, information and other assets and to ensure security risks from crime, activism and terrorism are minimised.</td>
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<td>› ASX has a range of security policies designed to safeguard the ASX technology environment against threats which may disable or affect its effectiveness. Policies, standards and guidelines cover user access and administration, infrastructure builds, default security requirements, firewalls, encryption, virus protection, passwords, removable media, email, internet and other risks.</td>
</tr>
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</table>
### PFMI/FSS

**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*

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<tr>
<td>➢ ASX’s CCPs maintain business continuity plans detailing the operational responses to a facility disruption. The plans identify and address events that pose a significant risk of disrupting operations, e.g. events such as technology failure, staff unavailability, pandemic, cyber-attack, greater CBD inaccessibility and primary site &amp; systems unusable. These plans are reviewed annually.</td>
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<tr>
<td>➢ 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. Front-end servers handling communications with participants are configured to provide automatic failover across sites.</td>
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<tr>
<td>➢ The CCPs regularly test their business continuity arrangements. Dual site operational teams across the primary and alternate secondary operations sites effectively test backup operational processes on a continuous basis. For those teams not located across both sites, connectivity and procedural testing of the backup secondary site are performed. Live tests, where clearing services are provided in real time from the alternate backup data centre site, are conducted annually.</td>
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**A CCP 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.**

*FSS 16.4*

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<td>➢ The CCPs employ sufficient well-qualified personnel. Appropriate human resource policies are implemented to mitigate the effects of high rates of staff turnover and key-person risk. Examples of policies in place are: Workplace Health &amp; Safety, Recruitment, Secondment &amp; Transfers, Ethics &amp; Conduct and Security - Workplace Surveillance and Information Security.</td>
</tr>
<tr>
<td>➢ 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 CCPs to retain the use of operational resources.</td>
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<td>➢ Major projects are overseen by the Portfolio Governance Group and reported through to the Board via the Technology, Operations and Security Committee. Delivery of major projects is managed by the Delivery Group. All projects affecting core systems are allocated an enterprise priority and risk rating to ensure that they receive appropriate access to resources.</td>
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**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.

*FSS 16.5*

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<td>➢ CCP risk profiling considers the risk they pose to external parties and vice-versa.</td>
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<td>➢ The CCPs inform the RBA of major risks and dependencies as part of their active engagement programme.</td>
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<tr>
<td>➢ CCP services and operational support are provided to participants of ASX Clear (Futures) that clear NZ dollar-denominated products as part of normal business procedures.</td>
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### PFMI Disclosure Framework Principle 17 | Operational risk

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| A participant of a CCP 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.  
*FSS 16.6* |  
› The CCPs consider Business Continuity Plan (BCP) arrangements for their participants as part of the participant’s admission and on-going operating rule requirements. Clearing Participants are required to have arrangements which are comparable to the nature and size of their business as a participant.  
› The CCPs 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 Clearing Participants should be in a position to be able to continue operating their clearing 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.  
› Reviews of participants’ business continuity management are conducted, if risk factors are identified, to examine the participant’s governance and processes for resilience and business continuity.  
› The CCPs’ Operating Rules have criteria for operational requirements. |
| A CCP 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.  
*FSS 16.7* |  
› CCP BCPs are in place, and target the recovery and resumption of critical operations within the Recovery Time Objective (RTO) specified by ASX. The BCPs identify and address events that pose a significant risk of disrupting operations, e.g. events such as technology failure, cyber-attack, staff unavailability, pandemic, greater CBD inaccessibility and primary site and systems being unable to be used.  
› ASX’s business continuity activities are underpinned by a three site dual operations model including primary and back up data centres with operational teams split across separate sites.  
› Technology recovery arrangements include inter- and intra-site system redundancy and data recovery.  
› Participants are required to be involved in testing each time the CCPs roll out a major change or new system.  
› Connectivity testing with the participants is undertaken regularly. An external testing environment is in place. |
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<th>PFMI/FSS</th>
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| A CCP 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. **FSS 16.8** | • The ASX Clear Operating Rules include BCP testing requirements which are assessed at the time of admission, and reviews of participants' business continuity management are conducted, if risk factors are identified, to examine the participant's governance and processes for resilience and business continuity.  
• The Operating Rules and Procedures for both CCPs 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 should 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. |
| A CCP 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 Standards and equivalent requirements of any other jurisdictions in which it operates. **FSS 16.9** | • ASX has developed a set of standard clauses for inclusion in contracts with third-party critical service providers to the CCPs. The clauses seek to ensure that the agreements meet the resilience, security and operational performance requirements of the FSS.  
• In particular, the clauses allow the RBA to gather information from the service provider about the operation of critical functions and, in the event that the RBA concludes that the terms of the service provider agreement do not meet FSS requirements, the clauses require the service provider to negotiate acceptable new terms with ASX.  
• Furthermore, the standard clauses allow the RBA to take steps to remedy a breach to a contract with a critical service provider to the CCPs (or negotiate a replacement contract) if the contract may be terminated as a consequence of insolvency of an ASX entity.  
• ASX is applying these clauses to all new agreements with critical service providers, and has incorporated them into all of its key existing service agreements. |
<p>| All of a CCP’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 should consult with the Reserve Bank prior to entering into an outsourcing or service provision arrangement for critical functions. <strong>FSS 16.10</strong> | • ASX’s standard clauses for agreements with critical service providers to the CCPs require the provider to grant reasonable access to the RBA in respect of information relating to its operation of a critical function. ASX is applying these clauses to all new agreements with critical service providers to the CCPs, and has incorporated them into agreements with key existing critical service providers to the CCPs. |</p>
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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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| A CCP 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 operations.  
*FSS 16.11* | › Standard clauses in the CCP agreements with critical service providers require that those providers give the RBA notice of any intention to terminate the agreement as a consequence of CCP failure to pay fees, or in the event of the insolvency of a CCP or any other relevant ASX entity. This is intended to give the RBA an opportunity to take action to remedy the breach on behalf of the CCP or take other steps to ensure continued service provision.   
› The CCP’s arrangements to ensure continuity of operations in the event of a crisis will be aligned to the new resolution regime for FMIs once introduced to Australian law. |
**PFMI Disclosure Framework 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.

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<tr>
<th>PFMI/FSS</th>
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<tbody>
<tr>
<td>Key Consideration 1</td>
<td>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. 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) provides clearing and settlement arrangements to other market operators consistent with ASX’s Code of Practice commitments. The TAS legal terms were last updated in August 2018 and can be found on the <a href="https://www.asx.com.au">ASX website</a>.</td>
</tr>
<tr>
<td>Key Consideration 2</td>
<td>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.</td>
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**FSS 17.1**

Guidance notes on admission as an ASX Clear and ASX Clear (Futures) participant are available 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. Relevant Operating Rule oversight and Guidance Notes can be found on the [ASX website](https://www.asx.com.au).

- ASX Clear (Futures) [Guidance Note 1: Admission as a Participant](https://www.asx.com.au).

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**FSS 17.2**

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.
### PFMI Disclosure Framework **Principle 18 | Access and participation requirements**

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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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| **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.  
*FSS 17.3* |  
› Relevant documents which are disclosed on the ASX website include:  
  - Monitoring and Enforcing Compliance:  
    - Refer [Monitoring](#).  
    - Refer [Enforcing](#).  
  - Relevant Operating Rule oversight and Guidance Notes can be found on the [ASX website](#).  
    - Refer [Section 15](#).  
    - Refer ASX Clear [Guidance Note 5: Suspension and Termination of Participants](#).  
    - Refer ASX Clear (Futures): [Part 7](#).  
    - Refer ASX Clear (Futures) [Guidance Note 5: Suspension and Termination of Participants](#).  
  - 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, ad hoc and summary returns. 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.  
  - Refer [Default Management Overview](#). |
### PFMI Disclosure Framework **Principle 19 | Tiered participation arrangements**

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

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| **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.  
**FSS 18.1** |  
› Under the capital monitoring provisions of the ASX operating rule framework, ASX gathers information on all activities conducted by the Participants.  
› The ASX operating rule framework allows ASX to request information on any activities covered under the ASX operating rule framework. |
| **Key Consideration 2**  
An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.  
**FSS 18.2** |  
› ASX monitors all Clearing Participants’ material counterparty risk exposures.  
› For ASX Clear (Futures), ASX Participants Compliance monitors concentrations at the account level through the Daily Beneficial Ownership Report (DBOR). The Operating Rules require each participant to provide the CCP with the name and address of the beneficial holder of each open position, on a daily basis.  
› For ASX Clear (Futures), all expiry contracts are monitored by a committee comprising of ASX Participants Compliance, ASX Operations, ASX Clearing Risk Management, ASX Business Development and ASX Legal to ensure there are no concentration or delivery issues.  
› For ASX Clear, concentration in Exchange Traded Options (ETOs) is monitored at an account level by the Clearing Risk Oversight team. |
| **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.  
**FSS 18.3** |  
› For ASX Clear (Futures), ASX Participants Compliance monitors concentrations at the account level through the DBOR.  
› For ASX Clear (Futures), all expiry contracts are monitored by a committee comprising of ASX Participants Compliance, ASX Operations, ASX Clearing Risk Management, ASX Business Development and ASX Legal to ensure there are no concentration or delivery issues.  
› For ASX Clear, concentration in ETOs is monitored as part of the Clearing Risk Oversight concentration monitoring. |
## PFMI Disclosure Framework **Principle 19 | Tiered participation arrangements**

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<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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| **Key Consideration 4**<br>An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate. <br>*FSS 18.4* | › ASX monitors Clearing Participants’ material counterparty risk exposures.  
› 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 Management, ASX Derivatives and OTC Markets team and ASX Legal to ensure there are no concentration or delivery issues.  
› For ASX Clear, concentration in ETOs is monitored as part of the Clearing Risk Oversight concentration monitoring.  
› If an issue is identified via any of the monitoring, then the CCP will contact the Clearing Participant to obtain a better understanding of the risk. If not satisfied, the CCP has the right to call for Additional Initial Margins to cover the exposure or to place restrictions on their admission regarding the ability to open new positions. |
## PFMI Disclosure Framework 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 PFMI.

**FSS 19.1**

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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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| Key Consideration 1 | The following links exist between ASX’s CCPs and other FMIs:  
  - ASX Clear and ASX Settlement, for the settlement of financial products;  
  - ASX Clear and Austraclear, for margin payments in AUD;  
  - ASX Clear (Futures) and Austraclear, for AUD fund transfers and lodgement of AUD-denominated non-cash collateral; and,  
  - ASX Clear (Futures) and HVPS, for the settlement of NZD payments.  
  The CCPs’ links to ASX Settlement and Austraclear are subject to the operational risk management framework that exists for 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 Audit and Risk Committee every six months, and an independent system-controls audit is conducted annually.  
  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. |

### 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.

**FSS 19.2**

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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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<tr>
<td>Key Consideration 2</td>
<td>All links 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.</td>
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### 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**

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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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<tr>
<td>Key Consideration 3</td>
<td>Noted</td>
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### PFMI Disclosure Framework Principle 20 | FMI links

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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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| **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.  
*No corresponding FSS* | › Noted |
| **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* | › Noted |
| **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.  
*No corresponding FSS* | › Noted |
| 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.  
*FSS 19.3* | › Noted |
| **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.  
*FSS 19.4* | › Noted |
## PFMI Disclosure Framework Principle 20 | FMI links

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<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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<tr>
<td><strong>Key Consideration 8</strong></td>
<td>Noted</td>
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<td>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.</td>
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<tr>
<td><strong>FSS 19.5</strong></td>
<td></td>
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<tr>
<td><strong>Key Consideration 9</strong></td>
<td>Applicable to Trade Repositories only.</td>
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<tr>
<td>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.</td>
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<tr>
<td><strong>No corresponding FSS</strong></td>
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### PFMI Disclosure Framework Principle 21 | Efficiency and effectiveness

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

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| **Key Consideration 1**<br>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. | ➢ ASX provides 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.  
➢ User input is provided to the Board of ASX Clear on the ongoing operation and development of cash equity clearing infrastructure and services by the Code of Practice Business Committee. The Risk and Product Committees for ASX Clear (Futures) provide user input to the Clearing Boards.  
➢ ASX has been extensively consulting with the market regarding the new system it is building to replace CHESS, including on desired new functionality, updated technology and implementation of global messaging standards. Refer to the CHESS replacement website for consultation papers, details of various work streams of stakeholder engagement and comprehensive announcements regarding progress with the delivery of the new system.  

*No corresponding FSS* |
| **Key Consideration 2**<br>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. | ➢ In respect of each of the FMI:  
* Operational targets - ASX has availability targets for critical systems which have been set and are monitored and reported to relevant governance committees including the Audit and Risk Committee and Clearing Boards on a regular basis.  
* Operating Rules and Procedures, together with other participant communications such as guidance notes and circulars, provide transparency to participants and other stakeholders regarding the operation of the FMI and are available on the ASX website.  
* Risk Management Expectation – ASX has a comprehensive suite of policies and procedures regarding the Risk Management of each of the facilities.  
* Business priorities: ASX has a vision, strategy and execution plan approved by the ASX Board and reviewed on a continuous basis.  

*No corresponding FSS* |
| **Key Consideration 3**<br>An FMI should have established mechanisms for the regular review of its efficiency and effectiveness. | ➢ ASX Group has a robust corporate governance framework, which enables ASX to oversee its FMIs’ efficiency and effectiveness.  
➢ Senior management report periodically on the goals and objectives of the CS facilities to the various boards and committees.  
➢ The Clearing Boards review relevant CCP efficiency and effectiveness statistics and reports on a quarterly basis.  
➢ The ASX Business Committee provides a mechanism for input in to ASX’s governance framework for consideration by ASX Management and the board of ASX Clear.  
➢ ASX undertakes regular customer engagement. Participant feedback provides an important basis to test against efficiency and effectiveness standards.  
➢ As part of its commitment to continuous improvement, the ASX Operations and Risk divisions have a comprehensive suite of policies and procedures to support the activities to supervise the FMI, which are reviewed on a regular basis.  
➢ ASX business streams capture results and track progress.  

*No corresponding FSS* |
### PFMI Disclosure Framework **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.

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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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</table>
| **Key Consideration 1**  
An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.  
*No corresponding FSS* |  
› ASX Clear and ASX Clear (Futures) use industry recognised communication standards specific to the domestic and regional market.  
› ASX Clear’s CHESS 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. As part of the project to replace CHESS, the replacement system will use FIX and ISO 20022 global messaging standards.  
› The clearing of ASX transactions has taken place in CHESS for over 20 years 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 (e.g. SGX) and further afield across Scandinavian markets.  
› ASX Group is informed of any changes to connectivity protocols (either standardised or commercial) and there are processes and procedures in place to determine impact and actions required to accommodate changes. Similarly well-established processes and procedures exist for the notification of changes to downstream users and dependent applications. |
**PFMI Disclosure Framework** **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.

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<tr>
<td><strong>Key Consideration 1</strong></td>
<td>The CCPs’ Operating Rules are publicly disclosed on the <a href="http://www.asx.com.au">ASX website</a>.</td>
</tr>
<tr>
<td>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. <strong>FSS 20.1</strong></td>
<td>Relevant Operating Rule oversight can be found on the <a href="http://www.asx.com.au">ASX website</a>.</td>
</tr>
</tbody>
</table>
| 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. **FSS 20.2** | Refer ASX Clear:  
- Section 12: Registration, Novation, Netting and Settlement.  
Refer ASX Clear (Futures):  
- Part 3: Registration of Market Contracts and Obligations of ASX Clear (Futures). |
| **Key Consideration 2** | Details of all systems’ design and operations can be found online. |
| 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. **FSS 20.3** | 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). |
| For the system ASX is building to replace CHESS, details of the system design and operations are released publicly, once available. | Refer also to “System design and operations” in the Introductory section of this document. |
| **Key Consideration 3** | Regular forums and workshops are held with Participants for ASX Clear and ASX Clear (Futures) to communicate current and upcoming developments. |
| An FMI should provide all necessary and appropriate documentation and training to facilitate participants’ understanding of the FMI’s rules, policies and procedures and the risks they face from participating in the FMI. **FSS 20.4** | ASX Operations provides a helpdesk for Participants, covering operational hours. |
| Education modules are also available online. |
### PFMI Disclosure Framework **Principle 23 | Disclosure of rules, key procedures and market data**

**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.


**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.

*FSS 20.5*


### PFMI Disclosure Framework **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.

*No corresponding FSS*

This PFMI is not applicable to ASX’s CCPs.
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;

If any of these matters arose, ASX would notify the RBA as soon as reasonably practicable following an incident.

Identification and monitoring measures include:

a) Ongoing monitoring; formal periodic review of FSS compliance obligations.

b) The financial position of the CCPs is provided quarterly to the RBA

c) ASX Group, including wholly owned subsidiaries’ financial position is reviewed by the ASX Limited Board at every meeting and by the ARC every six months. Externally audited financial statements are produced annually.

d) Daily monitoring of participant credit indicators; use of “watchlist”; participant communication. A PIRG and then potentially a DMC would be convened and relevant information communicated to regulators. Updates would continue to be provided as further information became available.

e) Daily participant monitoring of risk and compliance obligations. A PIRG and then potentially a DMC would be convened and relevant information communicated to regulators. Updates would continue to be provided as further information became available.

f) Daily Risk Indicator Report; escalation to senior management.

g) Discussion at liaison meetings with the RBA.

h) Any incidents are escalated to senior risk management.

i) Reviews are provided to regulators, upon request.

j) 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.

k) Discussion at the RBA liaison meetings.

l) No such interests exist. The Chief Financial Officer/ CRO would discuss with the RBA prior to entering into any such arrangements.

m) Discussion as required prior to loan approval.

n) As required.
PFMI Disclosure Framework **FSS 21 – Regulatory reporting**

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<th>PFMI/FSS</th>
<th>HOW ASX CENTRAL COUNTERPARTIES COMPLY</th>
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<td>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;</td>
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<td>j) its operations or risk controls are affected, or are likely to be affected, by distress in financial markets;</td>
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<td>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;</td>
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<td>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);</td>
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<td>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</td>
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<td>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).</td>
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**FSS 21.1**
### PFMI Disclosure Framework FSS 21 – Regulatory reporting

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<th>PFMI/FSS</th>
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| 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. |
|  | ➢ All of the required reports and data are on the deliverable lists of responsible executives within ASX.  
a) Annually audited licensed accounts for ASX Clear and ASX Clear (Futures) are provided to the RBA.  
b) Management accounts for cash market clearing and cash market settlement are provided to the ARC, CS Boards and the RBA every six months.  
c) Risk reports are provided to the RBA at least quarterly.  
d) Agreed additional data is provided to the RBA quarterly.  
e) As required. |

_FSS 21.2_
APPENDIX I: ASX CS Facilities’ Compliance with the Principles for Financial Market Infrastructures and the Australian Financial Stability Standards

PFMI Disclosure Framework 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.

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<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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</table>
| A 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 SSF. *FSS 1.1* | › The ASX Group operates two SSFs:  
› ‘ASX Settlement’, operated by ASX Settlement Pty Limited ABN 49 008 504 532; and,  
› ‘Austraclear’, operated by Austraclear Limited ABN 94 002 060 773.  
› The SSFs are separate legal entities, incorporated in Australia.  
› Neither of the 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 Group’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. *FSS 1.2*

› The material aspects of the SSFs’ activities, and their legal basis, are:  
› Licensing. The primary activity of the SSFs is the provision of settlement services to their participants. Each of the 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.  
› Effecting transfers (ASX Settlement only). ASX Settlement is a ‘prescribed CS facility’ for the purposes of the Corporations Act. Part 7.11 of the Act provides the legal basis for transfers of prescribed classes of financial products to be effected through the settlement facility in accordance with its operating rules.  
› Legally binding nature of the SSFs’ operating rules. Section 822B of the Corporations Act provides that the operating rules of each of the SSFs have effect as a contract under seal between:  
› the SSF and each issuer,  
› the 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 (PSNA). In the event that a participant in the CS facility enters into external administration, the PSNA provides certain protections under Australian law, from reversal or invalidation under the laws of any jurisdiction, of termination, netting and settlement of obligations effected in accordance with the operating rules of ASX’s CS facilities, as follows:  
› Part 2 protects real time gross settlements effected through an approved RTGS system (each of Austraclear and ASX Settlement has 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); and,  
› Part 3 protects net settlements effected through an approved netting arrangement (each of Austraclear and ASX Settlement has this approval).  
› The legal bases outlined above apply under Australian law irrespective of the jurisdiction in which a participant in the SSF may be incorporated.
### Key Consideration 2
An FMI should have rules, procedures and contracts that are clear, understandable and consistent with relevant laws and regulations.

**FSS 1.3**

- **Rules, procedures and contracts in place:**
  - Rules and procedures. Each SSF has its own set of operating rules and procedures which govern the operation of its CS 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 Group and its subsidiaries, and then ‘on-supply’ the services to the relevant ASX Group entity. ASX Limited agrees to ensure that each 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 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).

- **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 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.
  - ASIC and RBA conduct annual assessments of ASX Group’s compliance with licence obligations, which provides further oversight of the FMIs’ 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.

**FSS 1.4**

- **How the SSFs articulate the legal basis for their activities to stakeholders:**
  - The legal basis for the activities of the SSFs and the facilities’ protection under Parts 2 and 3 of the PSNA are set out on ASX’s public website in this Disclosure Framework document.
  - ASX Limited (on behalf of each licensed entity within the ASX Group, including the SSFs) submits an ‘Annual Group Licence Report’ to ASIC. This report sets out the legal basis for the SSFs’ activities (namely the licence obligations), and is used by ASIC in the preparation of ASIC’s ‘market assessment reports’ which are published on ASIC’s website.
  - 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.

**FSS 1.5**

**HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY**

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

- **Contracts.** The contracts entered into by the SSFs and third parties are enforceable under Australian contract law.

- **Actions taken by a SSF under its operating rules.**
  - The status of actions taken by a 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 SSF under Australian law where one of its participants defaults and enters into administration is addressed by the PSNA, which, as noted above, provides certain protections under Australian law from reversal or invalidation under the laws of any jurisdiction, of netting and settlement of obligations effected in accordance with a SSF’s operating rules.

### 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.

**FSS 1.6**

**HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY**

- **The operating rules of the 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 SSF may be incorporated.**
### PFMI Disclosure Framework 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.

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<td><strong>Key Consideration 1</strong>&lt;br&gt;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.</td>
<td>&lt;br&gt;› These obligations are addressed in the ASX Limited Board and CS Boards Charters. These, and other relevant governance documents, are published on the ASX website.&lt;br&gt;› The ASX Limited Board Charter sets out the functions of the Board, which include, but are not limited to, overseeing the conduct of the affairs of the ASX Group consistent with licence obligations as well as public policy objectives directed at financial market and payment systems integrity.&lt;br&gt;› The CS Boards Charter sets out the responsibilities of the CS Boards, which include, but are not limited to, reviewing the risk management framework, and overseeing the internal controls, systems and processes for management of clearing and settlement risks and systems and processes in place to achieve compliance with the Financial Stability Standards. 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 CS facility’s services in a fair and effective way and having adequate conflict handling and compliance arrangements.</td>
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<td><strong>Key Consideration 2</strong>&lt;br&gt;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.</td>
<td>&lt;br&gt;› 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.&lt;br&gt;› The ASX Limited Board Charter sets out how it relies on the CS Boards to oversee the clearing and settlement operations of the CS subsidiaries.&lt;br&gt;› The CS Boards Charter sets out how the CS Boards oversee clearing and settlement management’s implementation of risk management controls, systems and processes, and compliance with licence obligations, as well as the assurance provided to the CS Boards by the external audit, Internal Audit and Enterprise Compliance functions.&lt;br&gt;› The Audit and Risk Committee Charter sets out the Committee’s role reviewing the ASX Group’s framework to identify, monitor and manage enterprise risks, cyber resilience matters and controls. It also sets out the Committee’s role overseeing the compliance and conflict handling arrangements of the ASX Group’s clearing and settlement facilities.&lt;br&gt;› The Remuneration Committee Charter sets out the Committee’s role overseeing executive remuneration and performance management processes. The CS Boards review the performance of the Chief Risk Officer (CRO) and Chief Operating Officer (COO) and advise the Remuneration Committee of the outcomes.&lt;br&gt;› The Managing Director &amp; CEO (CEO) is responsible for the appointment and termination of both of these roles following consultation with the ASX Limited Board and with the agreement of the CS Boards.&lt;br&gt;› The Nomination Committee Charter sets out the Committee’s role in reviewing nomination matters relating to the composition and performance of the CS Boards.&lt;br&gt;› The CS Boards Charter sets out that both the General Manager Enterprise Compliance and General Manager Internal Audit have a direct line of reporting to the CS Boards, with periodic reporting provided.</td>
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### PFMI Disclosure Framework **Principle 2 | Governance**

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<td>› The CS Boards and ASX Limited Board Committees report regularly to the ASX Limited Board and to each other on relevant matters. Minutes of their meetings are made available to the ASX Limited Board, except where the CS Boards consider confidential or competitively sensitive information. This would usually arise in a situation where another market operator or listing venue is obtaining services from, or access to, the CS facility. In those cases, no directors who are also on the ASX Limited Board may attend that meeting and neither the matter discussed nor the minutes of that meeting are reported to those directors or the ASX Limited Board.</td>
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**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. 

FSS 2.3

|          | › Board roles and responsibilities are set out in the CS Boards, ASX Limited Board and ASX Board Committee Charters. |
|          | › Board responsibility for effective monitoring of senior management is addressed in the CS Boards and Remuneration Committee Charters. |
|          | › Board responsibility for nomination matters is addressed in the CS Boards and Nomination Committee Charters. The Nomination Committee reviews nomination matters, with reporting to the CS Boards and ASX Limited Board, and to ASX Board Committees, as appropriate. |
|          | › Board responsibility for risk management, cyber resilience and internal controls is addressed in the CS Boards Charter and the ARC Charter. |
|          | › Board responsibility for compliance with all supervisory and oversight requirements, and consideration of financial stability and other relevant public interests, is addressed in the CS Boards and ARC Charters. |
|          | › Board performance reviews of CS Boards are addressed in the CS Boards Charter. |
|          | › Conflicts handling is addressed in the CS Boards Charter, ARC Charter and ASX’s Conflict Handling Policy, a copy of which is published on the ASX website. These include the additional management protocols in place to govern the communication of and access to confidential or competitively sensitive information within the ASX Group. |

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

FSS 2.4

|          | › These obligations are addressed in the ASX Limited Board, CS Boards, Nomination Committee, ARC and Remuneration Committee Charters. |
|          | › The Nomination Committee Charter sets out that the Committee is responsible for reviewing the necessary and desirable skills and experience of the CS Boards. Director appointments to the CS Boards are made by the respective CS Board and may also be made by the ASX Limited Board. |
|          | › A majority of CS Board directors are independent non-executives. The CEO is a director of each CS Board. |
|          | › The Remuneration Committee Charter sets out that the Committee is responsible for reviewing remuneration for CS Board directors. Independent non-executive CS Board directors do not receive any performance-related remuneration. |
|          | › Director information, including directors’ interests, details of ASX Group cross-directorships and independence is published on the ASX website. |
### PFMI Disclosure Framework Principle 2 | Governance

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<td>› Director independence is reviewed annually. The CS Boards have adopted the ASX Limited Board Policy and Guideline to Relationships Affecting Independent Status, which sets out the matters which will be considered when assessing director independence. This policy is published on ASX’s website.</td>
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<td>› Directors’ interests are tabled at each meeting of the CS Boards.</td>
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<td>› No tenure limit in CS Boards Charter.</td>
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#### 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.

*FSS 2.5*

|  | › The roles and responsibilities of senior management relevant to CS operations are set out in the CS Boards Charter and more fully in defined position descriptions. |
|  | › The CRO has responsibility for the overall clearing risk management of the CS subsidiaries and for ensuring relevant CS licence obligations are met. |
|  | › The COO has responsibility for the overall settlement risk management of the CS subsidiaries and for ensuring relevant CS licence obligations are met. |
|  | › The CEO has responsibility for the overall operational, business and profit performance of ASX. The CRO and COO report to the CEO. |
|  | › The CS Boards Charter sets out that the Remuneration Committee will review remuneration arrangements for the CRO and COO. The CS Boards provide input to the Remuneration Committee as part of the annual performance management process. |
|  | › The CS Boards review the application of ASX’s remuneration arrangements to the CS licensees, to confirm these are structured in such a way as to promote the soundness and effectiveness of risk management and with regard to other regulatory requirements. Reporting is provided to the Remuneration Committee. |
|  | › Executive KPIs are structured to promote soundness and effectiveness of risk management. |

#### 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.

*FSS 2.6*

|  | › These obligations are addressed in the CS Boards, ARC and Internal Audit Charters, and the ASX Enterprise Risk Management Framework. Further details are provided under Principle 3; Key Consideration 1. |
|  | › The CS Boards are responsible for oversight of risk management relevant to the CS subsidiaries and the ARC is responsible for oversight of enterprise wide risk, including cyber resilience. The ARC reports to the CS Boards on matters the ARC is responsible for that may impact on CS operations. |
|  | › Each of the CRO, COO, GM Enterprise Compliance and GM Internal Audit have a direct line of reporting to the CS Boards. The GM Technology Security and Governance has a direct line of reporting to the ARC. |
|  | › The Internal Audit Charter addresses the independence of Internal Audit. The Internal Audit Plan is approved by the ARC, and by the CS Boards for matters relevant to the CS subsidiaries. |
### PFMI Disclosure Framework Principle 2 | Governance

**PFMI/FSS**

A SSF’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.

**FSS 2.7**

**How ASX Securities Settlement Facilities Comply**

- These obligations are addressed in the CS Boards, ARC and Internal Audit Charters.
- The CS Boards are responsible for oversight of risk management (including internal controls and Internal Audit matters) relevant to the CS subsidiaries and the ARC is responsible for oversight of enterprise wide risk, including cyber resilience matters. The ARC reports to the CS Boards on matters the ARC is responsible for that may impact on CS operations.
- The Internal Audit Charter sets out that the principal objective of Internal Audit is to provide independent, objective assurance and advisory services to add value and improve the operations of ASX.
- The Internal Audit Plan is approved by the ARC, and by the CS Boards for matters relevant to the CS subsidiaries.
- The ARC regularly assesses the independence and performance of Internal Audit. The external auditor has access to the reports of the Internal Audit department. An external assessment of the internal audit department is performed periodically.
- Each of the CRO, COO, GM Enterprise Compliance and GM Internal Audit have a direct line of reporting to the CS Boards on relevant matters. The GM Technology Security and Governance has a direct line of reporting to the ARC.
- The external auditor reviews the CS licensee financial statements.

**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.

**FSS 2.8**

- Stakeholder management is addressed within the ASX Limited Board, CS Boards and Customer Charters.
- ASX’s Customer Charter sets out how ASX balances the interests of customers, shareholders and the broader financial markets. ASX regularly seeks feedback from participants and stakeholders, including through consultation and stakeholder committees.
- 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.
- ASX also seeks participant input into the design, operation and development of Austraclear through an Austraclear user group.
### PFMI Disclosure Framework Principle 2 | Governance

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| A SSF 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 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 should consider specific procedures for preventing and managing conflicts of interest, including with respect to intragroup outsourcing arrangements.  
  
  **FSS 2.9** |  
  > Conflict and information handling is specifically addressed in the CS Boards Charter, ARC Charter and ASX’s Group Conflict Handling Policy. Arrangements are in place to address the SSF being part of a corporate group. These documents are published on the ASX website.  
  > Director information, including directors’ interests, ASX Group cross-directorships and independence, is published on the ASX website.  
  > Directors’ interests are tabled at each Board meeting.  
  > Outsourcing clauses in intra-group outsourcing arrangements address conflicts of interest, including specifying that ASX Group staff are under a duty to act in the best interests of the SSF receiving the services.  
  > ASX Clear and ASX Settlement Boards periodically meet separately from the other CS Boards. 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 made up of 6 directors, at least 50% of whom must be non-executives who are not directors of ASX Limited. The only executive director is the ASX CEO. Currently, three of the five non-executive directors of ASX Clear and ASX Settlement, including the Chair, are not directors on the ASX Limited Board. Two of these three directors can form a quorum to meet and consider any commercially sensitive matters. The non-ASX Limited directors meet regularly.  
  > Each other CS Board is also constituted such that directors who are not on the ASX Limited Board can form a quorum and meet if required. This would usually arise if one of the CS Boards was required to consider confidential or competitively sensitive information where another market operator or listing venue is obtaining services from, or access to, the CS facility.  
  > If any CS Board is required to consider confidential or competitively sensitive information, no directors who are also on the ASX Limited Board attend that meeting, and neither the matter discussed nor the minutes of that meeting are reported to those directors or the ASX Limited Board. |
### PFMI Disclosure Framework **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.

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| **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.  
*FSS 3.1*  |
| › The ASX Enterprise Risk Management Framework is based on the International Standard (ISO 31000) for risk management and approved by the ARC.  
› The SSFs have identified the range of risks that arise from their activities and considered them in seven key categories.  
› ASX has in place a Settlement Risk Policy Framework which encompasses settlement policies and standards. Existing settlement policies and standards are documented and reviewed on a periodic basis and material changes are approved by the CS Boards.  
› ASX Operations has systems and reports which identify key risk indicators and balances.  
› Internal Audit includes SSF activities in its risk based audit plan. The Internal Audit Charter is on the ASX website. |
| **A 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.**  
*FSS 3.2*  |
| › The SSFs’ settlement risk policies are aligned to scale and nature or participant risk exposures and activities and subject to periodic review.  
› The SSFs’ operating rules are designed and implemented in a way to recognise the criticality of the individual participant’s activities. The SSFs’ Operating Rules are on the ASX website. |
| **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.  
*FSS 3.3*  |
| › Incentives for ASX Settlement participants to manage their risks are via fees for failed settlements, security bonds (settlement bond for all ASX General Settlement participants and sponsorship bonds for any ASX Settlement Participant that is not also a Market Participant), etc.  
› 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.  
› Penalties for non-compliance with SSF operating rules may be applied.  
› Participants may be required to seek alternative settlement arrangements if they are unable to manage their risks to a level acceptable to ASX’s SSFs. The ASX Settlement and Austraclear Operating Rules are on the ASX website.  
› Information is provided to SSF participants to allow them to manage their risks and include daily gross and net settlement positions (ASX Settlement). |
**PFMI Disclosure Framework** **Principle 3 | Framework for the comprehensive management of risks**

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| **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.  
*FSS 3.4*  | *›* Periodic assessments of material risks posed by external entities to the SSFs are performed which include credit, liquidity, general and operational risk management, business continuity arrangements, and recovery planning.  
› Stress scenario analysis is undertaken periodically as part of recovery plan reviews, including critical service provider interdependencies.  
› ASX has engaged with ASIC to better communicate to participants and their customers the risks associated with settlement arrangements. Incentives for participants to manage their risks are via capital requirements, fees for failed settlements (ASX Settlement only), etc. |
| **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.  
*FSS 3.5*  | *›* The SSFs have developed recovery plans which identified scenarios that may prevent them from providing their critical services as a going concern and the available options for recovery or orderly wind-down. ASX has in place arrangements for review and testing of the recovery plans. |
APPENDIX I: ASX CS Facilities’ Compliance with the Principles for Financial Market Infrastructures and the Australian Financial Stability Standards

PFMI Disclosure Framework **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.

<table>
<thead>
<tr>
<th>PFMI/FSS</th>
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<tbody>
<tr>
<td><strong>Key Consideration 1</strong>&lt;br&gt;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.&lt;br&gt;<em>FSS 4.1</em></td>
<td>Not applicable – the SSFs do not enter into arrangements with participants that give rise to credit risk.</td>
</tr>
<tr>
<td><strong>Key Consideration 2</strong>&lt;br&gt;An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk management tools to control these risks.&lt;br&gt;<em>FSS 4.2</em></td>
<td>Not applicable – the SSFs do not enter into arrangements with participants that give rise to credit risk.</td>
</tr>
<tr>
<td>A SSF should have the authority to impose activity restrictions or additional credit risk controls on a participant in situations where the SSF determines that the participant’s credit standing may be in doubt.&lt;br&gt;<em>FSS 4.3</em></td>
<td>Not applicable – the SSFs do not enter into arrangements with participants that give rise to credit risk.</td>
</tr>
<tr>
<td><strong>Key Consideration 3</strong>&lt;br&gt;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.&lt;br&gt;<em>FSS 4.4</em></td>
<td>Not applicable – the SSFs do not enter into arrangements with participants that give rise to credit risk.</td>
</tr>
</tbody>
</table>
### PFMI Disclosure Framework Principle 4 | Credit Risk

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<tr>
<th>PFMI/FSS</th>
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<tbody>
<tr>
<td><strong>Key Considerations 4, 5 &amp; 6</strong>&lt;br&gt;&lt;br&gt;No corresponding FSS</td>
<td>‣ Applicable to CCPs only.</td>
</tr>
<tr>
<td><strong>Key Consideration 7</strong>&lt;br&gt;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.&lt;br&gt;&lt;br&gt;<em>FSS 4.5</em></td>
<td>‣ Not applicable – the SSFs do not enter into arrangements with participants that give rise to credit risk.</td>
</tr>
</tbody>
</table>
**PFMI Disclosure Framework 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 SSF should also set and enforce appropriately conservative haircuts and concentration limits.

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<th>PFMI/FSS</th>
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<tbody>
<tr>
<td><strong>Key Consideration 1</strong>&lt;br&gt;An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity and market risks. &lt;br&gt;<em>FSS 5.1</em></td>
<td>› Not applicable – the SSFs do not undertake activities that require the lodgement of collateral.</td>
</tr>
<tr>
<td>In determining its collateral policies, a SSF should take into consideration the broad effect of these policies on the market. As part of this, a SSF should consider allowing the use of collateral commonly accepted in the relevant jurisdictions in which it operates. &lt;br&gt;<em>FSS 5.2</em></td>
<td>› Not applicable – the SSFs do not undertake activities that require the lodgement of collateral.</td>
</tr>
<tr>
<td><strong>Key Consideration 2</strong>&lt;br&gt;An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions. &lt;br&gt;<em>FSS 5.3</em></td>
<td>› Not applicable – the SSFs do not undertake activities that require the lodgement of collateral.</td>
</tr>
<tr>
<td><strong>Key Consideration 3</strong>&lt;br&gt;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. &lt;br&gt;<em>FSS 5.4</em></td>
<td>› Not applicable – the SSFs do not undertake activities that require the lodgement of collateral.</td>
</tr>
<tr>
<td><strong>Key Consideration 4</strong>&lt;br&gt;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. &lt;br&gt;<em>FSS 5.5</em></td>
<td>› Not applicable – the SSFs do not undertake activities that require the lodgement of collateral.</td>
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</table>
## PFMI Disclosure Framework **Principle 5 | Collateral**

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<tbody>
<tr>
<td><strong>Key Consideration 5</strong>&lt;br&gt;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.&lt;br&gt;<em>FSS 5.6</em></td>
<td>› Not applicable – the SSFs do not undertake activities that require the lodgement of collateral.</td>
</tr>
<tr>
<td><strong>Key Consideration 6</strong>&lt;br&gt;An FMI should use a collateral management system that is well designed and operationally flexible.&lt;br&gt;<em>FSS 5.7</em></td>
<td>› Not applicable – the SSFs do not undertake activities that require the lodgement of collateral.</td>
</tr>
</tbody>
</table>

## PFMI Disclosure Framework **Principle 6 | Margin**

*Not applicable to SSFs.*
## PFMI Disclosure Framework **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.

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<tr>
<th>PFMI/FSS</th>
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<tbody>
<tr>
<td><strong>Key Consideration 1</strong>&lt;br&gt;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.</td>
<td>Not applicable – the SSFs do not undertake activities that give rise to funding requirements.</td>
</tr>
<tr>
<td><strong>FSS 6.1</strong></td>
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<tr>
<td><strong>Key Consideration 2</strong>&lt;br&gt;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.</td>
<td>Not applicable – the SSFs do not undertake activities that give rise to funding requirements.</td>
</tr>
<tr>
<td><strong>FSS 6.2</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Key Consideration 3</strong>&lt;br&gt;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.</td>
<td>Not applicable – the SSFs do not undertake activities that give rise to funding requirements.</td>
</tr>
<tr>
<td><strong>FSS 6.3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Key Consideration 4</strong>&lt;br&gt;<em>No corresponding FFS</em></td>
<td>Applicable to CCPs only.</td>
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## PFMI Disclosure Framework Principle 7 | Liquidity Risk

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<tr>
<td><strong>Key Consideration 5</strong>&lt;br&gt;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.&lt;br&gt;&lt;br&gt;&lt;i&gt;FSS 6.4&lt;/i&gt;</td>
<td>› Not applicable – the SSFs do not undertake activities that give rise to funding requirements.</td>
</tr>
<tr>
<td><strong>Key Consideration 6</strong>&lt;br&gt;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.&lt;br&gt;&lt;br&gt;&lt;i&gt;FSS 6.5&lt;/i&gt;</td>
<td>› Not applicable – the SSFs do not undertake activities that give rise to funding requirements.</td>
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## PFMI Disclosure Framework Principle 7 | Liquidity Risk

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<tr>
<td><strong>Key Consideration 7</strong>&lt;br&gt; 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.&lt;br&gt;&lt;br&gt;<strong>FSS 6.6</strong>&lt;br&gt;</td>
<td>• Not applicable – the SSFs do not undertake activities that give rise to funding requirements.</td>
</tr>
<tr>
<td><strong>Key Consideration 8</strong>&lt;br&gt; 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.&lt;br&gt;&lt;br&gt;<strong>FSS 6.7</strong>&lt;br&gt;</td>
<td>• Not applicable – the SSFs do not undertake activities that give rise to funding requirements.</td>
</tr>
<tr>
<td><strong>Key Consideration 9</strong>&lt;br&gt; 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 defaults.</td>
<td>• Not applicable – the SSFs do not undertake activities that give rise to funding requirements.</td>
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<tr>
<td>PFMI/FSS</td>
<td>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</td>
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<tr>
<td>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. FSS 6.8</td>
<td></td>
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<tr>
<td><strong>Key Consideration 10</strong></td>
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<tr>
<td>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. FSS 6.9</td>
<td></td>
</tr>
<tr>
<td>› Not applicable – the SSFs do not undertake activities that give rise to funding requirements.</td>
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</tbody>
</table>
### PFMI Disclosure Framework 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.

**FSS 7.1**

- For ASX Settlement, movement of equity securities in CHESS 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 ESA accounts.
- The point at which settlement is final for equity securities in CHESS 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 CHESS 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.
- Settlement occurs simultaneously within Austraclear and CHESS after cash settlement across the ESA account within RITS. Movement of securities in Austraclear will only occur once a message is received from RITS that the cash leg has settled across ESA accounts.
- The point at which settlement is final is set out in the Austraclear Regulations at Sections 14, 15 and 16.
- For cash transactions in a foreign currency in Austraclear, the point at which settlement is final is set out in Austraclear Regulation 29.1.

#### 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 real-time gross settlement or multiple-batch processing during the settlement day.

**FSS 7.2**

- DvP Model 1 (Austraclear) and DvP Model 3 (Equities - ASX Settlement) settlement systems are used.
- In addition, CHESS facilitates RTGS (ASX Settlement).
- Settlement occurs simultaneously within Austraclear and CHESS after cash settlement across the ESA account within RITS. Movement of securities in Austraclear will only occur once a message is received from RITS that the cash leg has settled across ESA accounts. If a settlement instruction remains unsettled (neither cash nor securities legs have settled), the transaction is cancelled and purged from the Austraclear System. (This applies equally to cash transactions in a foreign currency in Austraclear).
- For ASX Settlement, movement of equity securities in CHESS 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 ESA accounts.
- The deadlines for completion of the ASX Settlement equity batch settlement and the obligations of Payment Providers are set out in the CHESS Payments Interface Standard Payments Provider Deed.
- See ASX Settlement Operating Rules, Section 10.
- See Austraclear Regulations Sections 14, 15 and 16.
### PFMI Disclosure Framework Principle 8 | Settlement Finality

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<tbody>
<tr>
<td><strong>Key Consideration 3</strong></td>
<td>ASX SSFs complete settlement in accordance with the Operating Rules and Procedures of ASX Settlement and Austraclear, at:</td>
</tr>
<tr>
<td></td>
<td>- Refer ASX Settlement – Section 10</td>
</tr>
<tr>
<td></td>
<td>- Refer Austraclear Regulations – Sections 14, 15 &amp; 16.</td>
</tr>
<tr>
<td></td>
<td>Movement of securities in Austraclear will only occur once a message is received from RITS that the cash leg has settled across ESA accounts. The point at which settlement is final is set out in the Austraclear Regulations at Sections 14, 15 and 16.</td>
</tr>
<tr>
<td></td>
<td>For ASX Settlement, movement of equity securities in CHESS 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 ESA accounts. The point at which settlement is final is set out in the ASX Settlement Operating Rules at Section 10.</td>
</tr>
<tr>
<td></td>
<td>Unsettled transactions may not be revoked after they match and the cash leg has settled across ESA accounts.</td>
</tr>
<tr>
<td></td>
<td>Unsettled transactions in Austraclear are removed from the system after the end of the business day under Regulations 14.4 and 14.4A.</td>
</tr>
</tbody>
</table>
### PFMI Disclosure Framework 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.

<table>
<thead>
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<tbody>
<tr>
<td><strong>Key Consideration 1</strong>&lt;br&gt;An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.&lt;br&gt;<strong>FSS 8.1</strong></td>
<td>⬣ All $AUD settlements are conducted via CHESS (for ASX Settlement) and Austraclear across ESAs in RITS.  ⬣ The ESA account for settlement of cash equities is held in the name of ASX Settlement.</td>
</tr>
<tr>
<td><strong>Key Consideration 2</strong>&lt;br&gt;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.&lt;br&gt;<strong>FSS 8.2</strong></td>
<td>⬣ All settlements involving the SSFs are completed in central bank money, 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.</td>
</tr>
<tr>
<td><strong>Key Consideration 3</strong>&lt;br&gt;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.&lt;br&gt;<strong>FSS 8.3</strong></td>
<td>⬣ Subject to the following, all settlements involving the SSFs are completed in central bank money.  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.</td>
</tr>
<tr>
<td><strong>Key Consideration 4</strong>&lt;br&gt;If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.&lt;br&gt;<strong>FSS 8.4</strong></td>
<td>⬣ Not applicable.</td>
</tr>
</tbody>
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### PFMI Disclosure Framework Principle 9 | Money Settlements

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<tr>
<td><strong>Key Consideration 5</strong>&lt;br&gt; 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 effectuated, 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.&lt;br&gt;&lt;br&gt;<em>FSS 8.5</em></td>
<td>› Not applicable 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.</td>
</tr>
</tbody>
</table>

### PFMI Disclosure Framework 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.

Not applicable to ASX's SSFs. No corresponding FSS for SSFs.
APPENDIX I: ASX CS Facilities’ Compliance with the Principles for Financial Market Infrastructures and the Australian Financial Stability Standards

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PFMI Disclosure Framework **Principle 11 | Central Securities Depositories (CSD)**

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.

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<tr>
<td><strong>Key Consideration 1</strong></td>
<td>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.</td>
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<tr>
<td></td>
<td><strong>FSS 9.1</strong></td>
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<tr>
<td></td>
<td>▶ <strong>Austraclear and ASX Settlement</strong> have rules, procedures and controls to:</td>
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<tr>
<td></td>
<td>• safeguard the rights of securities issuers and owners; and</td>
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<td></td>
<td>• prevent the unauthorised creation or deletion/withdrawal of securities.</td>
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<td></td>
<td>▶ <strong>A reconciliation of securities issues is conducted on a daily basis.</strong></td>
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<td>▶ <strong>Austraclear</strong></td>
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<td>• Austraclear’s rules and procedures adequately address the following issues, in respect of both non-paper securities and dematerialised securities:</td>
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<tr>
<td></td>
<td>• <strong>Type of title:</strong></td>
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<td></td>
<td>• Non-paper securities:</td>
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<td>• Under the Austraclear Regulations:</td>
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<td></td>
<td>• non-paper securities are debt obligations (or certain rights or interests that are equivalent to debt obligations); and,</td>
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<tr>
<td></td>
<td>• Austraclear holds non-paper securities as nominee for the owner.</td>
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<td></td>
<td>Therefore, owners of non-paper securities hold a beneficial interest.</td>
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<td></td>
<td>• Dematerialised securities:</td>
</tr>
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<td></td>
<td>• Under the Austraclear Regulations:</td>
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<tr>
<td></td>
<td>• dematerialised securities are electronically recorded debt obligations;</td>
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<tr>
<td></td>
<td>• the holder of a dematerialised security has good title provided it is taken in good faith for value and without notice at that time of any defect in title; and,</td>
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<td></td>
<td>• the rights of a holder of a dematerialised security are equivalent to those which the holder would be entitled to if it held an equivalent paper security.</td>
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<tr>
<td></td>
<td>• <strong>Method of transfer:</strong></td>
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<tr>
<td></td>
<td>• Non-paper securities:</td>
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<tr>
<td></td>
<td>• The Austraclear Regulations provide a comprehensive framework for the requirements and conditions relating to the transfer of these securities and related payments.</td>
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<tr>
<td></td>
<td>• Dematerialised securities:</td>
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<tr>
<td></td>
<td>• The Austraclear Regulations provide a comprehensive framework for the requirements and conditions relating to the transfer of these securities and related payments.</td>
</tr>
<tr>
<td></td>
<td>• Whether the SSF has any claim over securities:</td>
</tr>
<tr>
<td></td>
<td>• Non-paper securities:</td>
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<tr>
<td></td>
<td>• The creditors of Austraclear Limited have no claim over non-paper securities registered by participants in the facility, because Austraclear holds non-paper securities as nominee for the Owners.</td>
</tr>
</tbody>
</table>
### PFMI Disclosure Framework Principle 11 | Central Securities Depositories (CSD)

<table>
<thead>
<tr>
<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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<tbody>
<tr>
<td>Dematerialised securities:</td>
<td>- Dematerialised securities:</td>
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<tr>
<td></td>
<td>- The creditors of Austraclear Limited have no claim over dematerialised securities registered by participants in the facility, because Austraclear has no title in such securities.</td>
</tr>
<tr>
<td>ASX Settlement – CHESS Holdings:</td>
<td>- ASX Settlement’s rules and procedures adequately address the following issues: in respect of CHESS Holdings on an electronic CHESS subregister.</td>
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<tr>
<td></td>
<td>- Type of title:</td>
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<td></td>
<td>- Dematerialised securities:</td>
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<tr>
<td></td>
<td>- 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)).</td>
</tr>
<tr>
<td></td>
<td>- Method of transfer:</td>
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<tr>
<td></td>
<td>- 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.</td>
</tr>
<tr>
<td></td>
<td>- Whether the SSF has any claim over securities:</td>
</tr>
<tr>
<td></td>
<td>- The creditors of ASX Settlement have no claim over securities in CHESS because ASX Settlement has no title in such securities.</td>
</tr>
</tbody>
</table>

### Key Consideration 2
A CSD should prohibit overdrafts and debit balances in securities accounts.

*FSS 9.2*

- Austraclear and ASX Settlement do not permit overdrafts and 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.

*FSS 9.3*

- Austraclear and ASX Settlement maintain securities in a dematerialised form for their transfer by book entry.
### PFMI Disclosure Framework: Principle 11 | Central Securities Depositories (CSD)

<table>
<thead>
<tr>
<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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</table>
| **Key Consideration 4**  
A CSD should protect assets against custody risk through appropriate rules and procedures consistent with its legal framework.  
*FSS 9.4* | › Custody risk (protection of assets against creditor claims through operating rules) – as above, the creditors of Austraclear and ASX Settlement have no claim over securities registered in the facility/ies, because:  
• in respect of non-paper securities, Austraclear holds non-paper securities as nominee for the owners; and  
• in respect of 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.  
*FSS 9.5* | › 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. |
| **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.  
*FSS 9.6* | › Austraclear and ASX Settlement are included in ASX Group's approach to enterprise-wide risk management. |
APPENDIX I: ASX CS Facilities’ Compliance with the Principles for Financial Market Infrastructures and the Australian Financial Stability Standards

PFMI Disclosure Framework **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.

<table>
<thead>
<tr>
<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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<tbody>
<tr>
<td><strong>Key Consideration 1</strong>&lt;br&gt;An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.&lt;br&gt;( FSS\ 10.1 )</td>
<td>› Neither ASX Settlement nor Austraclear are counterparties to transactions that settle through the settlement facilities and therefore are not exposed to principal risk.&lt;br&gt;› Principal risk of users of the facilities is managed in the following ways:&lt;br&gt;• DvP Model 1 (Austraclear) and DvP Model 3 (Equities – ASX Settlement) settlement systems are used.&lt;br&gt;• Electronic dematerialised DvP settlement.&lt;br&gt;• Movement of securities in Austraclear will only occur once a message is received from RITS that the cash leg has settled across ESA accounts.&lt;br&gt;• Movement of foreign currency securities in Austraclear will only occur once the cash leg has passed any requisite testing of the Paying Participant’s Foreign Currency Cash Record with the Foreign Currency Settlement Bank in Austraclear.&lt;br&gt;• Movement of equity securities in CHESS from delivering settlement Entrepot accounts to receiving Entrepot accounts will only occur after receipt of a message from RITS to ASX Settlement indicating that cash has settled across ESA accounts.&lt;br&gt;› See ASX Settlement Operating Rules Section 10.&lt;br&gt;› See ASX Clear Operating Rules Section 12.&lt;br&gt;› See Austraclear Regulations Sections 14, 15 and 16.</td>
</tr>
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</table>

A 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.<br>\( FSS\ 10.2 \) | › Neither ASX Settlement nor Austraclear are counterparties to transactions that settle through the settlement facilities and therefore are not exposed to principal risk.<br>› Principal risk of users of the facilities is managed in the following ways:<br>• DvP Model 1 (Austraclear) and DvP Model 3 (Equities – ASX Settlement) settlement systems are used.<br>• Electronic dematerialised DvP settlement.<br>• Movement of securities in Austraclear will only occur once a message is received from RITS that the cash leg has settled across ESA accounts.<br>• Movement of equity securities in CHESS from delivering settlement Entrepot accounts to receiving Entrepot accounts will only occur after receipt of a message from RITS to ASX Settlement indicating that cash has settled across ESA accounts.<br>› See ASX Settlement Operating Rules Section 10.<br>› See ASX Clear Operating Rules Section 12.<br>› See Austraclear Regulations Sections 14, 15 and 16. |
**PFMI Disclosure Framework 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.

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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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</table>
| 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. 
*FSS 11.1* | The ASX Operating Rules detail the powers and actions available to a SSF in the event of a default. |
| 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. 
*FSS 11.2* | The ASX operating rule framework places an obligation on all ASX Settlement and Austraclear Participants to self-report to ASX if they become aware of any circumstances which may prevent them being able to continue their obligations as a settlement participant in those facilities. 
ASX Settlement has issued guidance on participant suspensions and terminations. 
The PIRG coordinates the SSF’s response in the event of an incident affecting a settlement Participant. |
| Key Consideration 3 | An FMI should publicly disclose key aspects of its default rules and procedures. 
*FSS 11.3* | The ASX Operating Rules detail the powers and actions available to a SSF in the event of a default. |
| 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. 
*FSS 11.4* | Not applicable for the SSFs. |
|  | A 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. 
*FSS 11.5* | Not applicable for the SSFs. |
PFMI Disclosure Framework **Principle 14 | Segregation and portability**

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

Not applicable to ASX's SSFs. No corresponding FSS for SSFs.

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**PFMI Disclosure Framework **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.

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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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<tr>
<td><strong>Key Consideration 1</strong></td>
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</table>
| 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. | ☐ ASX's SSFs have robust management and control systems to identify, monitor and manage their general business risks.
☐ Risk profiling and assessment is the principal method by which the business identifies, assesses and reports on both its organisational business unit-level risks, as well as 'Top 10' key risks. Sources of business risk and their potential impact on operations and services are identified and assessed. Financial results and available resources are reviewed at least monthly and expected impacts are considered. Annual financial planning and budgeting processes are in place. Major loss analysis is undertaken periodically. Capital forecasting and cash flow sensitivity analysis is undertaken. |
| **FSS 12.1** |  |

| 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. | ☐ ASX has set aside capital for operational and business risk across the two SSFs if they incur general business losses. Each SSF has a separate allocation - $132 million for ASX Settlement and $131 million for Austraclear - for business risk capital that is explicitly made available to the SSFs from ASX Limited.
☐ In determining the sufficiency of the operational and business risk capital set aside for ASX's SSFs, ASX has adopted a methodology that applies a capital charge for operational and business risk to the value of securities held in the facility. 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.
☐ ASX's SSF business/operational risk capital is determined and reviewed by the Risk Committee periodically and monitored quarterly.
☐ Annual financial forecasts, budgets, major loss scenario assessments etc. are undertaken to ensure the SSFs have adequate liquid assets to continue as a going concern should business risks eventuate. |
| **FSS 12.2** |  |
## PFMI Disclosure Framework Principle 15 | General business risk

### PFMI/FSS

<table>
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<tr>
<th>Key Consideration 3</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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</table>
| 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. | ・The SSFs have developed recovery plans which identified scenarios that may prevent them from providing their critical services as a going concern and the available options for recovery or orderly wind-down. ASX has in place arrangements for review and testing of the recovery plans.  
 ・General business risk capital is held on behalf of the SSFs at the ASX Group level. A group-wide capital buffer provides protection to allocated business risk capital against potential losses sustained elsewhere in the group. This arrangement has been included in the ASX Group Support Agreement.  
 ・The amount of operational and business risk capital set aside for the SSFs exceeds the capital required to cover six months of current operating expenses. Periodic loss scenario analysis is undertaken which aims to ensure that the level of operational and business risk capital is sufficient to meet the single largest uninsured business loss event for an SSF. Loss scenarios considered include closure due to external events such as pandemics, the fraudulent redirection of payments, or the unauthorised transfer of funds. 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. |

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<tr>
<th>Key Consideration 4</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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</table>
|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. | ・The assets held to cover general business risks are liquid net assets funded by equity and reserves.  
 ・The liquid net assets comprise at call and fixed term bank deposits, bank bills and negotiable certificates of deposits.  
 ・The ASX Investment Mandate, which is approved by the ASX Limited Board, sets out allowed asset types and liquidity limits. Compliance with the mandate is reviewed daily. |

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<tr>
<th>Key Consideration 5</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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<tbody>
<tr>
<td>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.</td>
<td>・ASX Limited manages its operational and business risk capital at the group level. The ASX Limited Board monitors the ongoing capital adequacy of the ASX Group as part of its regular capital planning activities and has in place a viable plan to recapitalise the FMIs if their capital is depleted below the amount needed. The Board determines the most appropriate means of raising additional capital when needed, giving due consideration to prevailing market conditions and available alternative financing mechanisms. For example, in mid-2013 ASX Limited conducted a capital raising in the form of a $553 million share entitlement offer, with the bulk of the funds being used to increase the risk capital and default funds of the CS facilities. ASX has in place a viable plan to recapitalise the FMIs.</td>
</tr>
</tbody>
</table>
PFMI Disclosure Framework **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.

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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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</table>
| **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.  
*FSS 13.1* |  
› Austraclear’s cash assets are invested in accordance with the Austraclear Investment Mandate. It does not have non-cash assets.  
› ASX Settlement does not have cash or non-cash assets. |
| **Key Consideration 2**  
An FMI should have prompt access to its assets and the assets provided by participants, when required.  
*FSS 13.2* |  
› Austraclear’s cash assets are invested in accordance with the Austraclear Investment Mandate which defines its liquidity requirements. It does not have non-cash assets.  
› Austraclear and ASX Settlement have no legal rights to access Participants’ assets. They can, however, facilitate movements of Participants’ assets through Austraclear and CHEDS, if required. |
| **Key Consideration 3**  
An FMI should evaluate and understand its exposures to its custodians, taking into account the full scope of its relationships with each.  
*FSS 13.3* |  
› ASX’s 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.  
*FSS 13.4* |  
› Austraclear’s cash assets are invested in accordance with the Austraclear Investment Mandate which defines its liquidity requirements. It does not have non-cash assets.  
› ASX Settlement does not have investments.  
› ASX Settlement does not have cash or non-cash assets. |
### PFMI Disclosure Framework **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.

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<tr>
<th>Key Consideration 1</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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</table>
| An FMI should establish a robust operational risk management framework with appropriate systems, policies, procedures and controls to identify, monitor and manage operational risks.  
*FSS 14.1* |  
› ASX’s SSFs adopt ASX’s framework for risk management which is described in its Enterprise Risk Management Framework and the COO Operational Risk Management Framework. These outline: the overall risk environment in the ASX Group; 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 stated tolerance for technology, counterparty, financial, operational, legal and regulatory risks is ‘very low’ as per the Board-approved Risk Appetite Statement.  
› Systems, procedures and controls are in place to support operational processes.  
› The SSFs integrate commercial standards into their operational risk management frameworks. For instance, the ERM Framework is assessed against the international standard ISO 31000 Risk Management – Principles and Guidelines. The Business Continuity Framework has been prepared with reference to the ISO International Standard on business continuity and Business Continuity Institute’s Good Practice Guidelines. The COO Operational Risk Management Framework aligns with the ERM Framework, The ASX Fraud Control Policy references Standards Australia’s Standard on Fraud and Corruption Control. |

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<tr>
<th>Key Consideration 2</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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</table>
| 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.  
*FSS 14.2* |  
› The ASX Board has endorsed the ASX ERM Framework which assigns specific risk responsibilities across the ASX Group, including to the ASX Limited Board of Directors, the Audit and Risk Committee, the Risk Committee, Enterprise Risk, Enterprise Compliance, Executive management, and business unit management and staff. The Settlement Boards oversee the ASX SSF operational risks as per carve out in the ARC Charter.  
› The Risk Committee, comprising executives from across the departments, is responsible for overseeing the implementation and adequacy of enterprise risk management policy, the ERM Framework and risk processes, to ensure risks are being managed within the board approved risk appetite.  
› Individual departments are responsible for: identifying business-specific risks; applying controls; maintaining risk management systems; reporting on the effectiveness of risk controls; and implementing enhancements and taking remedial action as appropriate. Each department is required to maintain a record of its risk profile, reviewing this on a periodic basis and updating as appropriate. More frequent reviews are undertaken where there are potential changes to technology, legal or regulatory requirements, or business drivers.  
› Policies and procedures are the subject of internal and external review. ASX’s Internal Audit department routinely monitors compliance with operational policy, reporting to the Audit and Risk Committee on a quarterly basis. Audit findings may prompt a review of policy, which would be conducted in consultation with key stakeholders. Technology-related security policy is considered by external auditors as required by the scope of the audit.  
› Change Management Procedures include comprehensive checks to ensure changes are implemented effectively. |
**APPENDIX I: ASX CS Facilities’ Compliance with the Principles for Financial Market Infrastructures and the Australian Financial Stability Standards**

### PFMI/FSS Disclosure Framework

**Principle 17 | Operational risk**

<table>
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<tr>
<th>Key Consideration 3</th>
<th>How ASX Securities Settlement Facilities Comply</th>
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</table>
| An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives. | - Clearly defined operational objectives are in place. The monthly management reporting summarises performance against system availability targets and other measures such as critical system capacity and headroom and includes a description of any incidents where an outage has occurred to a critical service. The actual capacity and performance of SSF systems is tested on a periodic basis. A required level of redundant capacity is taken into account. There are tools/controls in place that are used to monitor, review and test the capacity and performance of the systems.  
- The system's performance is reported quarterly to the ARC and to the RBA.  
- The SSFs' physical and information security policies are reviewed and assessed annually. The security policies recognise that employees, contractors and consultants have an obligation and a significant role to play in helping protect the information systems resources of ASX.  
- Availability targets are documented and defined formally for critical services. The 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 Reserve Bank). |

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<tr>
<th>Key Consideration 4</th>
<th>How ASX Securities Settlement Facilities Comply</th>
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<tr>
<td>An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.</td>
<td>- ASX’s SSFs are designed to have scalable capacity which is maintained at levels to support increasing volumes and service availability objectives. The guideline for target capacity is to maintain 50% over peak recorded daily volumes, with the ability to increase to 100% over peak within six months. Reviews of current and projected capacity requirements are undertaken when a service does not meet 100% available headroom or when there is an environment change to the service.</td>
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<tr>
<th>Key Consideration 5</th>
<th>How ASX Securities Settlement Facilities Comply</th>
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</table>
| An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats. | - The ASX Employee Physical Security Policy outlines the SSF requirements in regards to the protection of people, information and other assets and to ensure security risks from crime, activism and terrorism are minimised.  
- ASX has a range of security policies designed to safeguard the SSFs technology environment against threats which may disable or affect its effectiveness. Policies, standards and guidelines cover user access and administration, infrastructure builds, default security requirements, firewalls, encryption, virus protection, passwords, removable media, email, internet and other risks. |

*No corresponding FSS*
## PFMI Disclosure Framework Principle 17 | Operational risk

### 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*

ASXs SSFs maintain business continuity plans detailing the operational responses to a facility disruption. The plans identify and address events that pose a significant risk of disrupting operations, e.g. events such as technology failure, staff unavailability, pandemic, cyber-attack, greater CBD inaccessibility and primary site & systems unusable. These plans are updated 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. Front-end servers handling communications with participants are configured to provide automatic failover across sites.

The SSFs regularly test their business continuity arrangements. Dual site operational teams across the primary and alternate secondary operations sites effectively test backup operational processes on a continuous basis. For those teams not located across both sites, connectivity and procedural testing of the backup secondary site are performed. Live tests, where settlement services are provided in real time from the alternate backup data centre site, are conducted annually.

Austraclear has alternative arrangements in place (for example, manual paper-based procedures) to allow for the processing of time-critical transactions in extreme circumstances, which have been tested and agreed with the RBA.

### A 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.

*FSS 14.4*

The SSFs employ sufficient well-qualified personnel. Appropriate human resource policies are implemented to mitigate the effects of high rates of staff turnover and key-person risk. Examples of policies in place are: Workplace Health & Safety, Recruitment, Secondment & Transfers, Ethics & Conduct and Security - Workplace Surveillance and Information Security.

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 SSFs to retain the use of operational resources.

Major projects are overseen by the Portfolio Governance Group and reported through to the Board via the Technology, Operations and Security Committee. Delivery of major projects is managed by the Delivery Group. All projects affecting core systems are allocated an enterprise priority and risk rating to ensure that they receive appropriate access to resources.

### 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.

*FSS 14.5*

SSF risk profiling considers the risk they pose to external parties and vice-versa.

The SSFs inform the RBA of major risks and dependencies as part of their active engagement programme.
## PFMI Disclosure Framework **Principle 17 | Operational risk**

### HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY

| PFMI/FSS | A participant of a 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 SSF’s rules and procedures should clearly specify operational requirements for participants.  
**FSS 14.6** |
| --- | --- |
|  | The SSFs consider 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 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 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 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’ business continuity management are conducted, if risk factors are identified, to examine the participant’s governance and processes for resilience and business continuity.  
|  | The SSFs’ Operating Rules have criteria for operational requirements.  
|  | SSF BCPs are in place, and include the recovery and resumption of critical operations within the RTO specified by ASX. The BCPs identify and address events that pose a significant risk of disrupting operations, e.g. events such as technology failure, cyber-attack, staff unavailability, pandemic, greater CBD inaccessibility and primary site and systems being unable to be used.  
|  | ASX’s business continuity activities are underpinned by a three site dual operations model including primary and back up data centres with operational teams split across separate sites.  
|  | Technology recovery arrangements include inter- and intra-site system redundancy and data recovery.  
|  | Participants are required to be involved in testing each time the SSFs roll out a major change or new system.  
|  | Connectivity testing with the participants is undertaken regularly. An external testing environment is in place.  

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**FSS 14.7**

A 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 SSF to facilitate settlement by the end of the day of the disruption, even in case of extreme circumstances. The SSF should regularly test these arrangements.
### PFMI/FSS

**HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY**

<table>
<thead>
<tr>
<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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<tbody>
<tr>
<td>A 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 SSF. <em>FSS 14.8</em></td>
<td>› The SSFs’ Operating Rules include arrangements to ensure BCP arrangements are appropriate for the nature and size of the participant’s business. These are assessed at time of admission and, on a risk based approach, periodically, as part of ASX Participants Compliance monitoring and enforcement procedures. The guidance issued by ASX Settlement on these obligations includes guidance that a participant should test its disaster recovery and business continuity arrangements at least once annually and as soon as practicable following a material change to its business or its disaster recovery business continuity arrangements.</td>
</tr>
</tbody>
</table>
| A 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 SSF Standards and equivalent requirements of any other jurisdictions in which it operates. *FSS 14.9* | › ASX has developed a set of standard clauses for inclusion in contracts with third-party critical service providers to the SSFs. The clauses seek to ensure that the agreements meet the resilience, security and operational performance requirements of the FSS.  
 › In particular, the clauses allow the RBA to gather information from the service provider about the operation of critical functions and, in the event that the RBA concludes that the terms of the service provider agreement do not meet FSS requirements, the clauses require the service provider to negotiate acceptable new terms with ASX.  
 › Furthermore, the standard clauses allow the RBA to take steps to remedy a breach to a contract with a critical service provider to the SSFs (or negotiate a replacement contract) if the contract may be terminated as a consequence of insolvency of an ASX entity.  
 › ASX is applying these clauses to all new agreements with critical service providers, and has incorporated them into all of its key existing service agreements. |
| All of a 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 SSF should consult with the Reserve Bank prior to entering into an outsourcing or service provision arrangement for critical functions. *FSS 14.10* | › ASX’s standard clauses for agreements with critical service providers to the SSFs require the provider to grant reasonable access to the RBA in respect of information relating to its operation of a critical function. ASX is applying these clauses to all new agreements with critical service providers to the SSFs, and has incorporated them into agreements with key existing critical service providers to the SSFs. |
| A 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 SSF’s operations. *FSS 14.11* | › Standard clauses in the SSF agreements with critical service providers require that those providers give the RBA notice of any intention to terminate the agreement as a consequence of SSF failure to pay fees, or in the event of the insolvency of a SSF or any other relevant ASX entity. This is intended to give the RBA an opportunity to take action to remedy the breach on behalf of the SSF or take other steps to ensure continued service provision.  
 › The SSF’s arrangements to ensure continuity of operations in the event of a crisis will be aligned to the new resolution regime for FMIs once introduced to Australian law. |
### 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.

**FSS 15.1**

- 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. 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.

- Comprehensive information about the range of participation choices are publicly available. See also high level information regarding participation options on the ASX website for [ASX Settlement](https://www.asx.com.au) and [Austraclear](https://www.austraclear.com.au).


- Austraclear [Regulations 2-5](https://www.austraclear.com.au/).

### 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.

**FSS 15.2**

- Comprehensive information about the range of participation choices are publicly available. See also high level information regarding participation options on the ASX website for [ASX Settlement](https://www.asx.com.au) and [Austraclear](https://www.austraclear.com.au).


- Austraclear [Regulations 2-5](https://www.austraclear.com.au/).
### PFMI Disclosure Framework Principle 18 | Access and participation requirements

<table>
<thead>
<tr>
<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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</thead>
</table>
| **Key Consideration 3**<br>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.  <br>**FSS 15.3** | ▶ Relevant documents which are disclosed on the ASX website include:  
  - Monitoring and Enforcing Compliance:  
    - Refer [Monitoring](#).  
    - Refer [Enforcing](#).  
  - Relevant Operating Rule oversight and Guidance Notes can be found on the ASX website.  
    - Refer ASX Settlement: [Section 3](#).  
    - Refer ASX Settlement: [Section 12](#).  
    - Refer ASX Settlement [Guidance Note 5: Suspension and Termination of Participants](#).  
    - Refer Austraclear: [Regulation 6](#).  
    - Refer Austraclear [Guidance Note 5: Suspension and Termination of Participants](#).  
  - Refer [Default Management Overview](#). |
### PFMI Disclosure Framework **Principle 19 | Tiered participation arrangements**

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

<table>
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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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<tbody>
<tr>
<td><strong>Key Consideration 1</strong>&lt;br&gt;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. <strong>FSS 16.1</strong>&lt;br&gt;› The ASX operating rule framework allows ASX to request information on any activities covered under the ASX operating rule framework.&lt;br&gt;› 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 SSF) and therefore there is no risk to either SSF.</td>
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<tr>
<td><strong>Key Consideration 2</strong>&lt;br&gt;An FMI should identify material dependencies between direct and indirect participants that might affect the FMI. <strong>FSS 16.2</strong>&lt;br&gt;› 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 SSF) and therefore, in the event of a default of one settlement participant, the transaction would be cancelled.</td>
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<tr>
<td><strong>Key Consideration 3</strong>&lt;br&gt;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. <strong>FSS 16.3</strong>&lt;br&gt;› 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 SSF) and therefore, in the event of a default of one settlement participant, the transaction would be cancelled.</td>
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<tr>
<td><strong>Key Consideration 4</strong>&lt;br&gt;An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate. <strong>FSS 16.4</strong>&lt;br&gt;› 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 SSF) and therefore, in the event of a default of one settlement participant, the transaction would be cancelled.</td>
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### 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 PFMI.

**FSS 17.1**

- 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 group-wide framework for operational risk management.
- Austraclear maintains four links:
  - ASX Clear, for settlement of cash margins;
  - ASX Clear (Futures), for settlement of cash margins, for lodgement of AUD-denominated non-cash collateral, and for settlement of 90-day bank bill futures;
  - Clearstream, in relation to Euro entitlements managed in Austraclear. 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; and
  - LCH.Clearnet Limited (LCH.C Ltd), for the management of LCH.C Ltd’s AUD liquidity requirements. The inclusion of LCH.C Ltd as an FMI link reflects the RBA’s interpretation of an FMI link as “a set of contractual and operational arrangements between two or more FMIs that connect the FMIs directly or through an intermediary”. As advised by the RBA, 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.C Ltd as part of the arrangement.
- Austraclear is not exposed to financial risk through these links and the operational risk inherent in the links is managed under ASX’s group-wide framework for operational risk management.

### 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.

**FSS 17.2**

- The legal basis of the link is supported by contractual arrangements including, where applicable, the operating rules of the FMI.

### 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 – CSD arrangements do not involve credit or liquidity requirements.
### PFMI Disclosure Framework Principle 20 | FMI links

<table>
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<tr>
<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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<tr>
<td><strong>Key Consideration 4</strong>&lt;br&gt;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.</td>
<td>Not applicable – CSD arrangements do not involve the transfer of securities.</td>
</tr>
<tr>
<td><em>No corresponding FSS</em></td>
<td></td>
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<tr>
<td><strong>Key Consideration 5</strong>&lt;br&gt;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.</td>
<td>This obligation is not applicable to the SSFs.</td>
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<tr>
<td><em>No corresponding FSS</em></td>
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<tr>
<td><strong>Key Consideration 6</strong>&lt;br&gt;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.</td>
<td>This obligation is not applicable to the SSFs.</td>
</tr>
<tr>
<td><em>No corresponding FSS</em></td>
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<tr>
<td>Where relevant to its operations in Australia, a SSF should consult with the Reserve Bank prior to entering into a link arrangement with another FMI.</td>
<td>The RBA is consulted on the design of all new ASX services involving another FMI prior to entering into the arrangement.</td>
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<tr>
<td><em>FSS 17.3</em></td>
<td></td>
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<td>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.</td>
<td>Not applicable – CSD arrangements do not involve credit or liquidity requirements.</td>
</tr>
<tr>
<td><em>FSS 17.4</em></td>
<td></td>
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<tr>
<td>PFMI/FSS</td>
<td>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</td>
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<tr>
<td>Provisional transfers of securities between a SSF operating a central</td>
<td>Not applicable – CSD arrangements do not</td>
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<td>securities depository and another central securities depository should</td>
<td>involve transfer if securities.</td>
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<td>be prohibited or, at a minimum, the retransfer of provisionally</td>
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<td>transferred securities should be prohibited prior to the transfer</td>
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<td>becoming final.</td>
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<tr>
<td><strong>FSS 17.5</strong></td>
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<tr>
<td>Key Considerations 7 &amp; 8</td>
<td>Applicable to CCPs only.</td>
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<tr>
<td><em>No corresponding FSS</em></td>
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<tr>
<td>Key Consideration 9</td>
<td>Applicable to Trade Repositories only.</td>
</tr>
<tr>
<td><em>No corresponding FSS</em></td>
<td></td>
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</tbody>
</table>
### APPENDIX I: ASX CS Facilities’ Compliance with the Principles for Financial Market Infrastructures and the Australian Financial Stability Standards

#### PFMI/FSS

**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**

- ASX Settlement and Austraclear provide a range of participation choices to suit the market. They also tailor the application process and arrangements to the services available.
- Information on becoming an ASX Settlement Participant is available on the [ASX website](#).
- Information on Austraclear is available on the [ASX website](#).
- The Austraclear participation application is available on the [ASX Online website](#).
- ASX has been extensively consulting with the market regarding the new system it is building to replace CHESS, including on desired new functionality, updated technology and implementation of global messaging standards. Refer to the [CHESS replacement website](#) for consultation papers, details of various work streams of stakeholder engagement and comprehensive announcements regarding progress with the delivery of the new system.

#### 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**

- In respect of each FMI:
  - Operational targets – ASX has availability targets for critical systems which have been set and are monitored and reported to relevant governance committees including the Audit and Risk Committee and Settlement Boards on a regular basis. (In terms of service level agreements, ASX Settlement has a minimum availability target of 99.8 per cent and a minimum capacity headroom target of 50 per cent of total capacity, while Austraclear has a 99.9 per cent minimum availability target stipulated in Austraclear’s ‘Step-in and Service Agreement’ with the RBA.)
  - Operating Rules and Procedures, together with other participant communications such as guidance notes and circulars, provide transparency to participants and other stakeholders regarding the operation of the FMI and are available on the ASX website.
  - Risk Management Expectation – ASX has a comprehensive suite of policies and procedures regarding the risk management of each of the facilities.
  - Business priorities – ASX has a vision, strategy and execution plan approved by the ASX Board and reviewed on a continuous basis.
PFMI Disclosure Framework Principle 21 | Efficiency and effectiveness

Key Consideration 3
An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.

No corresponding FSS

HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY

- The business plan/strategy noted above is reviewed annually. Customer feedback – from regular customer engagement – also 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.
- ASX Group has a robust corporate governance framework, which enables ASX to oversee its FMIs’ efficiency and effectiveness.
- Senior management report periodically on the goals and objectives of the CS facilities to the various boards and committees.
- The Settlement Boards review relevant efficiency and effectiveness statistics and reports on a quarterly basis.
- The ASX Business Committee provides a mechanism for input into ASX’s governance framework for consideration by ASX Management and the board of ASX Settlement.
- ASX undertakes regular customer engagement. Participant feedback provides an important basis to test against efficiency and effectiveness standards.
- As part of its commitment to continuous improvement, the ASX Operations and Risk divisions have a comprehensive suite of policies and procedures to support the activities to supervise the FMIs, which are reviewed on a regular basis.
- ASX business streams capture results and track progress.

PFMI Disclosure Framework 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

HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY

- Austraclear uses internationally accepted messaging standards (SWIFT). CHESS currently uses proprietary messaging protocols (as at the date of this disclosure). As part of the project to replace CHESS, the replacement system will use ISO 20022 global messaging standards.
- ASX Group is informed of any changes to connectivity protocols (either standardised or commercial) and there are processes and procedures in place to determine impact and actions required to accommodate changes. Similarly well-established processes and procedures exist for the notification of changes to downstream users and dependent applications.
PFMI Disclosure Framework **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 they incur by participating in the SSF. All relevant rules and key policies and procedures should be publicly disclosed.

<table>
<thead>
<tr>
<th>Key Consideration 1</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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<tbody>
<tr>
<td>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.</td>
<td>Clear and comprehensive rules, policies and procedures are publicly disclosed in the following places:</td>
</tr>
<tr>
<td>FSS 18.1</td>
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<tr>
<th>Key Consideration 2</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
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<tbody>
<tr>
<td>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.</td>
<td>Clear descriptions of the SSFs' systems, operations and services, together with descriptions of participation in the SSFs are disclosed in the following places:</td>
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<tr>
<td>FSS 18.2</td>
<td></td>
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<td></td>
<td>• For the system ASX is building to replace CHESS, details of the system design and operations are released <a href="http://www.asx.com.au/services/settlement/asx-settlement.htm">publicly</a>, once available.</td>
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<td>• Refer also to “System design and operations” in the Introductory section of this document.</td>
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<tr>
<th>Key Consideration 3</th>
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<tbody>
<tr>
<td>An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules, policies and procedures and the risks they face from participating in the FMI.</td>
<td>As above.</td>
</tr>
<tr>
<td>FSS 18.3</td>
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</table>

A SSF should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the SSF's rules, policies and procedures and the risks they face from participating in the SSF.

| FSS 18.4 | Regular forums and workshops are held with Participants to communicate current and upcoming developments. |
|  | ASX Operations provides a helpdesk for Participants, covering operational hours. |
|  | Education modules are also available [online](http://www.asx.com.au/services/settlement/austraclear.htm). |
**PFMI Disclosure Framework Principle 23 | Disclosure of rules, key procedures and market data**

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.

**FSS 18.5**

**PFMI/FSS** | **HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY**
---|---
**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*

- Fees schedules are available on the [ASX Online website](http://www.asx.com.au).  

**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.

FSS 18.5


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**PFMI Disclosure Framework 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’s SSFs.
PFMI Disclosure Framework FSS 19 | Regulatory reporting

A 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 SSF should also regularly provide information to the Reserve Bank regarding its financial position and risk controls on a timely basis.

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</table>
| A SSF 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 SSF 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 SSF becomes subject to external administration, or if the SSF 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 SSF has reasonable grounds for suspecting that a participant will become subject to external administration;  
  e) a participant fails to meet its obligations under the SSF’s risk control requirements or has its participation suspended or cancelled because of a failure to meet the SSF’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) if any of these matters arose, ASX would notify the RBA as soon as reasonably practicable following an incident.  
  j) Identification and monitoring measures include:  
  a) Ongoing monitoring; formal periodic review of FSS compliance obligations.  
  b) The financial position of the SSFs is provided quarterly to the RBA.  
  c) ASX Group, including wholly owned subsidiaries’ financial position is reviewed by the ASXL Board at every meeting and by the ARC every six months. Externally audited financial statements are produced annually.  
  d) A PIRG would be convened and relevant information communicated to regulators. Updates would continue to be provided as further information becomes available.  
  e) A PIRG would be convened and relevant information communicated to regulators. Updates would continue to be provided as further information becomes available.  
  f) Breach of risk controls are escalated to senior risk and operational management. The severity of the breach will determine as to immediate or periodic reporting to regulators.  
  g) Discussion at liaison meetings with the RBA.  
  h) Any incidents are escalated to senior operational and technical management. Incident reports may be provided to regulators. The severity of the disruption will determine as to immediate or periodic reporting to regulators.  
  i) Reviews are provided to regulators, upon request.  
  j) Breach, or the potential breach, of risk controls are escalated to senior risk and operational management. The severity will determine as to immediate or periodic reporting to regulators.  
  k) Discussion at liaison meetings with the RBA.  
  l) No such interests exist.  
  m) No such arrangements exist.  
  n) The severity will determine as to immediate or periodic reporting to regulators.  
  In addition to the above:  
  • information is discussed with the RBA at quarterly liaison meetings and ad hoc meetings and presentations, as required; and,  
  • the RBA Austraclear Step-In Agreement and the Austraclear System Business Operations Plan contain certain provisions relating to regulatory reporting. |
<table>
<thead>
<tr>
<th>PFMI/FSS</th>
<th>HOW ASX SECURITIES SETTLEMENT FACILITIES COMPLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>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;</td>
<td></td>
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<tr>
<td>j) its operations or risk controls are affected, or are likely to be affected, by distress in financial markets;</td>
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<tr>
<td>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;</td>
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<tr>
<td>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);</td>
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<tr>
<td>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 SSF; or</td>
<td></td>
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<tr>
<td>n) any other matter arises which has or is likely to have a significant impact on its risk control arrangements (see also SSF Standards 1.6, 14.10 and 17.3).</td>
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</table>

*FSS 19.1*
### Regulatory reporting

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<tr>
<td>An SSF should also provide to the Reserve Bank, on a timely basis:</td>
<td>› All of the required reports and data are on the deliverable lists of responsible executives within ASX.</td>
</tr>
<tr>
<td>a) audited annual accounts;</td>
<td>a) Annually audited licensed accounts for Austraclear are provided to the RBA. ASX Settlement is exempt due to the</td>
</tr>
<tr>
<td>b) management accounts on a regular basis, and at least quarterly;</td>
<td>entity being a small proprietary company.</td>
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<tr>
<td>c) risk management reports, including detailed information on margining and stress testing, on a regular basis, and at least quarterly;</td>
<td>b) Management accounts for cash market settlement and cash market clearing are provided to the ARC, CS Boards and the RBA every six months.</td>
</tr>
<tr>
<td>d) periodic activity, risk and operational data, as agreed with the Reserve Bank; and,</td>
<td>c) Not applicable to the SSFs.</td>
</tr>
<tr>
<td>e) any other information as specified by the Reserve Bank from time to time.</td>
<td>d) FSS-related data is provided to the RBA quarterly.</td>
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<tr>
<td><strong>FSS 19.2</strong></td>
<td>e) Information is discussed with the RBA at quarterly liaison meetings and ad hoc meetings and presentations, as required.</td>
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