2014 Assessment of ASX Clearing and Settlement Facilities

CPSS-IOSCO Principles for Financial Market Infrastructures

September 2014

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1. Introduction and Executive Summary

The *Principles for Financial Market Infrastructures* (the PFMIs), published by the Committee on Payment and Settlement Systems (CPSS, now the Committee on Payments and Market Infrastructures (CPMI)) and the Technical Committee of the International Organization of Securities Commissions (IOSCO) in April 2012,¹ establish a set of international standards for financial market infrastructures (FMIs). The principles within the PFMIs consist of 24 headline 'Principles', each supported by one or more 'Key Considerations' containing more detailed requirements for FMIs. The scope of the Principles includes central counterparties (CCPs) and securities settlement facilities (SSFs) – collectively, clearing and settlement (CS) facilities – as well as systemically important payment systems and trade repositories.²

This report presents the joint Assessment of the Australian Securities and Investments Commission (ASIC) and the Reserve Bank (the Bank) as to how well the four licensed CS facilities in the ASX Group (ASX) – the two CCPs, ASX Clear Pty Limited (ASX Clear) and ASX Clear (Futures) Pty Limited (ASX Clear (Futures)); and the two SSFs, ASX Settlement Pty Limited (ASX Settlement) and Austraclear Limited (Austraclear) – observed the requirements of the Principles as at 30 June 2014 (the PFMI Assessment). Consistent with their international responsibilities, ASIC and the Bank have committed to periodically carry out PFMI Assessments of licensed domestic CS facilities.

The PFMI Assessment draws heavily on the Bank's assessment of the ASX CS facilities against Financial Stability Standards (FSS) determined by the Bank, which is published alongside this report (the FSS Assessment).³ The FSS are fully aligned to requirements in the Principles and associated Key Considerations that address matters relevant to financial stability. They do not, however, incorporate several Principles and Key Considerations that are solely relevant to ASIC's regulatory remit. In addition, the FSS contain several more detailed requirements that go beyond the minimum standard set out in the Principles. This report therefore repackages the material in the FSS Assessment, principally for an international audience, and adds information relevant to ASIC's responsibilities so as to cover the full range of relevant Principles. Also published alongside this report is a Self-assessment of ASIC's and the Bank's regulation and oversight of CS facilities against the *Responsibilities for central banks, regulators and other relevant authorities for financial market infrastructures* (the Responsibilities), which also form part of the PFMIs.⁴

¹ The Principles are available at http://www.bis.org/publ/cpss101.htm>

² In this report, 'clearing and settlement facility' is defined as in Part 7.1, Division 6 of the *Corporations Act 2001*.

³ The FSS Assessment is available at <http://www.rba.gov.au/payments-system/clearingsettlement/assessments/2013-2014/index.html>.

⁴ The Self-assessment against the Responsibilities is available at <http://www.rba.gov.au/payments-system/policyframework/principles-fmi/responsibilities-of-authorities.html>.

This report has been produced by ASIC's Financial Market Infrastructure Stakeholder Team and the Bank's Payments Policy Department. It is expected that this report will be an input into ongoing work of the CPMI and IOSCO to monitor implementation of the PFMIs across jurisdictions, including Australia.

The Assessment concludes that the ASX CS facilities either observe or broadly observe all relevant Principles. ASIC and the Bank have nevertheless made a number of recommendations to further strengthen the ASX facilities' observance of requirements under the Principles. Some recommendations have also been made to encourage continuous improvement, even where relevant requirements have been observed.

1.1 Background

The *Corporations Act 2001* establishes conditions for the licensing and operation of CS facilities in Australia and gives ASIC and the Bank powers and responsibilities relating to these facilities. These powers are exercised under the governance of ASIC's Commission and the Bank's Payments System Board (PSB), respectively. The regulators' respective roles are defined in the Corporations Act.

- The Bank is responsible for ensuring that CS facilities comply with FSS that it determines, and that facilities take any other necessary steps to reduce systemic risk.
- ASIC is responsible for ensuring that CS facilities comply with all other obligations under the Corporations Act, including the fair and effective provision of services.

The Bank has determined two sets of FSS relevant to its oversight of CS facilities: one which applies to CCPs (CCP Standards), and another which applies to SSFs (SSF Standards).

ASX operates four licensed CS facilities: two CCPs and two SSFs.

- *CCPs*. A CCP acts as the buyer to every seller, and the seller to every buyer in a financial market. It does so by interposing itself as the legal counterparty to all purchases and sales via a process known as novation:
 - ASX Clear provides CCP services for cash equities, debt products and warrants traded on the ASX and Chi-X markets, and equity-related derivatives traded on the ASX market.
 - ASX Clear (Futures) provides CCP services for futures and options on interest rate, equities, energy and commodity products traded on the ASX 24 market, as well as Australian dollardenominated over-the-counter (OTC) interest rate derivatives.
- SSFs. A SSF provides for the final settlement of securities transactions and the maintenance of records of transfer of title:
 - ASX Settlement provides SSF services for cash equities, debt products and warrants traded on the ASX and Chi-X markets; ASX Settlement also provides SSF services for non-ASX listed securities.
 - Austraclear provides SSF services for trades in debt securities, including government bonds and repurchase agreements.

1.2 Assessment

This Assessment was conducted as at the end of June 2014. Consistent with the division of responsibilities for oversight of CS facilities under the Corporations Act, ASIC and the Bank have allocated responsibility for the assessment of each of the Principles between the two authorities (see Section 2.2 and Table A1 in Appendix A). On the basis of the evidence presented in this report, ASIC and the Bank have concluded that the ASX CS facilities either observe or broadly observe all relevant Principles. The areas in which the ASX facilities have been found to broadly observe the requirements of the Principles relate to the CCPs' model validation framework and investment policy, as well as three areas in which the Bank granted transitional relief from the corresponding requirements of the FSS: recovery planning; segregation and portability; and liquidity risk management.

Model validation

During 2013/14, ASX significantly enhanced its model validation approach, including by:

- implementing substantial enhancements to the backtesting and sensitivity analysis of margin models
- introducing reverse stress testing
- engaging external experts for a three-year period to undertake a comprehensive validations of all key risk models.

As a result of ASX's progress in this area, the Bank's assessment is that both ASX Clear and ASX Clear (Futures) have observed most relevant model validation requirements under the Principles. Aside from a specific recommendation around liquidity stress testing at ASX Clear (see below), it is expected that both CCPs will fully observe all relevant requirements once the first year of the independent external model validation program has been completed. The CCPs are also encouraged to continually refine and enhance their margin backtesting, sensitivity analysis and reverse stress-testing methodologies and their integration into existing risk management processes.

Investment risks

In its recent assessments of the ASX CCPs against the FSS, the Bank has expressed the concern that the ASX CCPs' treasury investment policy allows relatively large and concentrated exposures to a small number of domestic banks. In response, ASX has lowered the limits on its unsecured exposures to the large domestic banks, and taken steps to improve its capacity to both make secured investments and invest with a broader range of high-quality counterparties. While the Bank welcomes the steps taken to date, it expects further progress before the ASX CCPs will be deemed to have fully observed the relevant Principle. The Bank has opened a dialogue with ASX on the detail of its expectations around credit limits on unsecured exposures to non-government-related entities and the liquidity profile of the investment portfolio. This dialogue will reveal any practical issues or implementation challenges. It will also clarify a reasonable time frame over which a transition should be achieved.

FSS transitional relief

A small number of CCP and SSF Standards that were previously subject to transitional relief came into effect at end March 2014. ASX has made a number of enhancements to rules and processes relevant

to the CS facilities' observance of the corresponding requirements of the Principles. Some of this work is, however, ongoing. It is expected that the relevant ASX facilities will fully observe these requirements once the remaining work is completed (in most cases during the coming year).

- Recovery planning.⁵ While final CPSS-IOSCO guidance on recovery planning has still not yet been published, in early 2014 ASX developed a basic recovery plan based on the facilities' existing powers under their Operating Rules. ASX has also formulated a plan to enhance those rules in order to be able to fully address any uncovered credit losses and liquidity shortfalls and replenish financial resources following a participant default. It plans to consult on its proposed recovery approach in the second half of 2014.
- Segregation and portability. In accordance with requirements of the Principles, ASX Clear (Futures) has introduced individual client segregation within its account structures for both OTC derivatives and exchange-traded futures. Sitting alongside the pre-existing omnibus client account structure for exchange-traded products, the new arrangements give clients a choice in the level of protection they receive and the likelihood that positions and associated collateral could be transferred to an alternative participant in the event of a clearing participant default. ASX Clear has also implemented the first of two phases of enhancements to its cash market arrangements to provide clients with equivalent protection to house/client omnibus segregation. Implementation of the second phase will be required for ASX Clear to fully observe the relevant Principle.
- Liquidity risk. Both CCPs' prefunded liquid resources are currently considered to be sufficient to meet the required level of cover for liquidity exposures arising from derivatives transactions. However, ASX Clear's prefunded liquid resources may not be sufficient to cover extreme but plausible payment obligations arising from the settlement of cash equity transactions. In April 2014, ASX introduced changes to its Operating Rules whereby participants commit to provide liquidity to ASX Clear to address any funding shortfall. Under these arrangements, ASX Clear would settle transactions by entering into 'offsetting transaction arrangements' with participants that were due to deliver securities to the defaulted participant. The Bank considers these arrangements to be consistent with the relevant Principle. ASX plans to make enhancements to ASX Clear's liquidity stress testing, including to routinely provide more information to management and the Bank on the degree of contingent reliance on offsetting transaction arrangements. The Bank will monitor these enhancements and discuss further with ASX how such information might best be disseminated to participants to support their liquidity management and planning.

The remainder of this report is structured as follows. Section 2 provides an overview of the clearing and settlement landscape in Australia, while Section 3 summarises the conclusions and recommendations arising from ASIC's and the Bank's detailed assessment of each ASX CS facility against the Principles. Finally, the detailed assessments of the ASX CS facilities against the Key Considerations for each Principle are set out in Appendix A.

⁵ Recovery refers to steps taken by an FMI to respond to a threat to its continued viability; the related concept of resolution refers to steps taken by public authorities to restore an FMI in distress to viability or wind it down.

2. Overview of the Clearing and Settlement Landscape

2.1 Clearing and Settlement in Australia

CCPs and SSFs are key components of the financial system, delivering services critical to the smooth functioning of securities and derivatives markets.

- A CCP acts as the buyer to every seller, and the seller to every buyer in a financial market. It does so by interposing itself as the legal counterparty to all purchases and sales via a process known as novation. Following novation, the exposure of all parties whether it be for the few days until an equity trade is settled, or for the several years of payment flows under a longer-term interest rate swap contract is to the CCP, rather than the bilateral counterparty in the original trade.
- A SSF provides for the final settlement of securities transactions, executed either over the counter or on an exchange, and the maintenance of records of transfer of title. Settlement typically involves transfer of the title to the security and transfer of cash. These functions are linked via appropriate delivery-versus-payment (DvP) arrangements incorporated within the settlement process.

Well-designed and reliable CS facilities can be a source of both financial stability and operational efficiency. Indeed, this has been the experience in Australia and internationally. CS facilities act as a coordinating device in financial markets, bringing a network of counterparties together to support liquidity and the netting of exposures and settlement obligations. They also establish secure arrangements for the timely clearing and settlement of obligations between counterparties, assist institutions in the management of counterparty credit risks, and help to coordinate actions in the event of a market participant's default.

Many of these benefits derive from the size and breadth of the network that a CS facility controls. Accordingly, there is a tendency towards a single CS facility, or relatively few CS facilities, providing services in any given market. This is currently the case in Australia where, with the exception of CCP services in the market for OTC derivatives, only one CS facility operates in each product market.

Given their typically large size, their lack of substitutability in the markets they serve, and strong connections with banks and other financial institutions, CS facilities are generally systemically important. Indeed, this is the presumption in the PFMIs (PFMIs, p 12). Accordingly, it is critical that both CCPs and SSFs identify and properly control risks associated with their operations and conduct their affairs in accordance with regulatory standards that promote overall stability in the financial system.

Table 1 presents an overview of the systemically important CCPs and SSFs currently licensed to operate in Australia. Under the Corporations Act, these facilities are regulated jointly by ASIC and the Bank. The applicable regulatory regime is introduced in Section 2.2 below.

	Description of Activity	Values Cleared/Settled, Daily) ^(b)	Number of participants ^(c)
Central Counte	erparties		
ASX Clear	Clearing of cash equities and equity- related derivatives	Cash equities: \$4 billion traded value Equity options: \$115 million traded value/\$2.8 billion underlying	36 active direct participants (including Australian/foreign banks, brokers)
ASX Clear (Futures)	Clearing of ASX 24 exchange-traded derivatives and AUD OTC interest rate derivatives	\$167 billion for five major listed financial contracts \$4.1 billion notional value for OTC derivatives	19 direct participants (including Australian/foreign banks). Large number of indirect participants for listed derivatives
LCH.Clearnet Ltd's SwapClear Service	Clearing of OTC interest rate derivatives	\$1.3 trillion notional value for all currencies \$11.7 billion notional value for AUD-denominated trades ^(d)	90 direct participants internationally (including two Australian banks)
Securities Sett	lement Facilities		
ASX Settlement	Settlement of cash equities	\$8.3 billion ^(e)	78 direct participants (including Australian/ foreign banks, brokers)
Austraclear	Settlement of OTC trades in debt securities, AUD payments	\$41 billion for securities trades \$11 billion for payment-only transactions	847 participants (including financial institutions and corporates); some access indirectly

Table 1: Systemically Important CCPs and SSFs Operating in Australia^(a)

(a) A third small licensed SSF is operated by IMB Limited for trades in its own securities. Since the value of financial obligations settled by IMB Limited in any financial year falls well below \$200 million, IMB Limited is not subject to the Bank's FSS for SSFs (SSF Standards).

(b) Average for the year ended 30 June 2014; ASX OTC derivatives data for June 2014.

(c) As at 30 June 2014.

(d) Average single-sided notional value of trades registered per day. Data for AUD-denominated trades are for 1 September 2013 to 30 June 2014.

(e) Includes settlement of off-market trades.

Sources: ASX; Bloomberg; LCH.Clearnet Limited; RBA

2.2 Regulatory Framework

Part 7.3 of the Corporations Act establishes a licensing regime for CS facilities in Australia. Licensing authority rests ultimately with the responsible Minister, with licence obligations specified in the Corporations Act – and in any supplementary licence conditions – administered by ASIC and compliance overseen jointly by ASIC and the Bank.

 Under s 827D of the Corporations Act, the Bank may determine standards 'for the purposes of ensuring that CS facility licensees conduct their affairs in a way that causes or promotes overall stability in the Australian financial system'. In accordance with this provision, the Bank has determined FSS, with which all the licensees listed in Table 1 must comply. The Bank also has responsibility to ensure that licensees take any other necessary steps to reduce systemic risk. The Bank carries out continuous oversight of CS facilities against the FSS, periodically conducting formal assessments of licensees' compliance and reporting its findings to the Minister. These formal assessments are published on the Bank's website.⁶

- Under the *Reserve Bank Act 1959*, responsibility for the exercise of the powers granted to the Bank in the Corporations Act is assigned to the PSB. The PSB is tasked with ensuring that its powers are exercised in a way that 'will best contribute to the overall stability of the financial system'. Also relevant to its responsibility for stability, the PSB has powers under the *Payment Systems and Netting Act 1998* (PSNA) to ensure that settlement finality in approved payment, clearing and settlement systems and netting arrangements is legally certain (see Section 2.2.2, below). The PSB comprises the Governor as chair, one other Bank appointee, an appointee from the Australian Prudential Regulation Authority (APRA), and up to five other members.
- Under the Corporations Act, ASIC is responsible for ensuring that CS facilities comply with all
 other obligations, including for the fair and effective provision of services. Together, the
 Corporations Act and the Australian Securities and Investment Commission Act 2001 (ASIC Act)
 give ASIC a range of inspection, investigation and enforcement powers. These enable ASIC to
 carry out its regulatory functions, including for licensed CS facilities.

In the exercise of its regulatory functions and powers, ASIC considers whether a CS facility licensee is providing its services in a fair and effective manner such that it would meet the desired regulatory outcomes in Part 7.3 of the Corporations Act. These desired regulatory outcomes are elaborated in ASIC *Regulatory Guide 211: Clearing and Settlement Facilities: Australian and Overseas Operators* (RG 211).⁷ The outcomes cover four key regulatory areas: CS facility stability; the clearing and settlement process; facility and participant supervision; and risk management. In considering whether a CS facility is meeting these regulatory outcomes, ASIC considers a range of matters, including the reliability of operations, the transparency of the clearing and settlement process, participants' confidence in the facility, the licensee's supervision of participants, and the facility's risk management.

The Principles have been implemented in Australia and are applied as regulatory standards jointly by ASIC and the Bank. Since both ASIC and the Bank are responsible for overseeing CS facility licensees under the Corporations Act, implementing the Principles in Australia involves coordination between the regulators. A statement issued by ASIC and the Bank in December 2012 (the Joint Statement) sets out the actions taken by the regulators to implement the Principles in Australia:⁸

⁶ The Bank has set out its policy on frequency of formal assessments of CS facilities, confirming that systemically important facilities will be assessed annually: see 'Frequency of Regulatory Assessments of Licensed Clearing and Settlement Facilities', available at <http://www.rba.gov.au/payments-system/policy-framework/frequency-ofassessments.html>. The Bank's assessments of CS facility licensees have been published on the Bank's website since 2007. Annual assessments of the CS facilities under the ASX group are available at <http://www.rba.gov.au/payments-system/clearing-settlement/assessments/2012-2013/index.html>.

⁷ ASIC's RG 211 is available at <http://www.ASIC.gov.au/rg>.

⁸ A policy statement setting out how the Principles have been implemented in Australia is available at <http://www. rba.gov.au/payments-system/policy-framework/principles-fmi/implementing-principles-australia.html>.

- ASIC revised its regulatory guidance on licensing and oversight of CS facility licensees in RG 211. The updated regulatory guidance incorporates the Principles that are relevant to ASIC's regulatory remit as matters it will consider in:
 - framing its advice to the Minister about any CS facility licence application
 - assessing a CS facility licensee's compliance with its ongoing obligations under the Corporations Act.
- The PSB approved the determination of new FSS in November 2012.⁹ These standards, which became effective from 29 March 2013, are aligned with the requirements in the Principles that address matters relevant to financial stability (see Section 2.2.1, below).

While the Bank has the power to set standards and assess licensees' compliance, enforcement powers rest with the Minister and ASIC. A failure to comply with licence obligations may be a trigger for the exercise of enforcement powers. The Minister or ASIC may take enforcement action independently or on the advice of the Bank. ASIC and the Bank have agreed an MOU, which is intended to promote transparency, help prevent unnecessary duplication of effort, and minimise the regulatory burden on CS facilities.¹⁰ Further to these objectives, ASIC and the Bank have agreed on the appropriate division of each of the Principles between the two regulators, as published in Appendix 2 of RG 211 (see also Table A1 of Appendix A). Some Principles are relevant to both regulators and accordingly are jointly overseen. ASIC and the Bank have recently undertaken a joint Self-assessment against the Responsibilities that form part of the PFMIs.¹¹

Following a request by the then Deputy Prime Minister and Treasurer in 2011, the Council of Financial Regulators (CFR, comprising the heads of regulatory authorities) consulted on a number of enhancements to the regulatory framework for FMIs. A number of recommendations were made to the government in February 2012. Some of these, relating to the application of 'location requirements' for FMIs operating across borders, were reflected in revisions to ASIC's RG 211 and the FSS in 2012. Other proposals are being developed by the CFR agencies, including in relation to special resolution arrangements for FMIs.¹²

2.2.1 The Bank's Financial Stability Standards

In accordance with its responsibilities under the Corporations Act, the Bank first determined FSS for licensed CCPs and SSFs in 2003. The standards were drafted at a high level, establishing an obligation for licensees to conduct their affairs 'in a prudent manner' so as to contribute to 'the overall stability of the Australian financial system'. Each FSS was supported by a set of measures and guidance that

⁹ The Bank's FSS are available at <http://www.rba.gov.au/payments-system/clearing-settlement/standards/index.html>.

¹⁰ The MOU between ASIC and the Bank is available at <http://www.rba.gov.au/media-releases/2002/mr-02-08.html#mou>.

¹¹ The Self-assessment is available at <http://www.rba.gov.au/payments-system/policy-framework/principlesfmi/responsibilities-of-authorities.html>.

¹² The Council of Financial Regulators' recommendations to the Deputy Prime Minister and Treasurer are available at <<u>http://www.treasury.gov.au/~/media/Treasury/Consultations%20and%20Reviews/Consultations/2012/CFRWG%200</u> n%20Financial%20Market%20Infrastructure%20Regulation/Key%20Documents/CoFR_Letter_to_Deputy_PM.ashx>.

the Bank would take into account in assessing a licensee's compliance. Minor variations were made to the FSS in 2005 and 2009.

As noted above, following the release of the Principles, the Bank updated its FSS to bring them into line with the stability-related Principles. The updated FSS also introduce some additional and varied requirements to reflect the Australian regulatory and institutional context. These include measures to ensure that regulators can maintain appropriate influence over cross-border facilities.

Consistent with the higher level of detail of the Principles relative to the previous international standards, the new FSS are specified at a more detailed level than the earlier standards. They cover matters such as legal basis, governance, credit and liquidity management, settlement models, operational resilience, and management of business and investment risks. Reflecting standards introduced in the Principles, the new FSS include more specific requirements for financial resources held to cover any losses incurred by CCPs in the event of a participant default, and a new requirement to develop a comprehensive and effective plan for the recovery or orderly wind-down of a CCP or SSF in the event that it experienced a threat to its continued viability.

2.2.2 The Payments Systems and Netting Act

The Bank, under the governance of the PSB, has powers under the PSNA to remove two important legal risks in the Australian payments system:

- the risk that a court may apply the 'zero hour' rule and unwind any payments that have settled since midnight of the day preceding a bankruptcy order
- the risk that a court may unwind net payment obligations, restoring gross obligations.

Practically, this is achieved through the Bank having the power to 'approve' a real-time gross settlement (RTGS) system or a netting arrangement. Any RTGS system approved under the PSNA is protected from zero hour risk, while any netting arrangement approved under that Act is protected from both zero hour risk and the possible unwinding of netting. In assessing an application for approval, the PSNA sets out a number of tests including that, without such approval, the bankruptcy of a participant could cause systemic disruption.

To date, the Bank has approved three RTGS systems, including the Reserve Bank Information and Transfer System, in which all CS facilities ultimately settle in central bank money, as well as Austraclear. The Bank has also approved a number of multilateral netting arrangements, including the multilateral net settlement batch for cash equities operated by ASX Settlement.

Separately, the Commonwealth Treasury has responsibility for approving market netting arrangements under the PSNA. Approval provides legal certainty in respect of a number of matters relevant to CCPs, particularly in the event that a participant becomes insolvent. These include arrangements for novation and netting, and dealing with securities posted as collateral by participants.

2.3 ASX Clearing and Settlement Facilities

The ASX Group operates four CS facilities: two CCPs and two SSFs. Each of these facilities holds a CS facility licence, and each is required under the Corporations Act to comply with applicable FSS determined by the Bank and to do all other things necessary to reduce systemic risk. The ASX CS facilities are currently the only facilities of significant size incorporated and based primarily in

Australia, and hence for which ASIC and the Bank are the authorities responsible for primary oversight in respect of the Principles (Table 1). LCH.Clearnet Limited, a third licensed CCP, operates under an overseas CS facility licence; its primary regulator is the Bank of England.

2.3.1 ASX Group Structure

All four CS facilities are part of the ASX Group (ASX). In the ASX corporate structure, the two central counterparties (CCPs) – ASX Clear and ASX Clear (Futures) – are subsidiaries of ASX Clearing Corporation Limited (ASXCC), while the two securities settlement facilities (SSFs) – ASX Settlement and Austraclear – are subsidiaries of ASX Settlement Corporation Limited (Figure 1). ASXCC and ASX Settlement Corporation Limited is the licensed operator of the ASX market, while another subsidiary, Australian Securities Exchange Limited, is the licensed operator of the ASX 24 market. The ASX market provides a trading platform for ASX listed securities and equity derivatives, while ASX 24 is an exchange for futures products. ASX Clear and ASX Settlement provide clearing and settlement services for the ASX market, and ASX Clear (Futures) provides clearing services for the ASX 24 market.¹³



ASX Limited is a listed company. The ASX Limited Board is responsible for overseeing the processes for identifying significant risks to ASX and ensuring that appropriate policies as well as adequate control, monitoring and reporting mechanisms are in place. In addition, ASX Limited's Board assigns certain responsibilities to subsidiaries within the group, including the boards of the four CS facilities (the CS Boards). The CS Boards are responsible for managing the particular clearing and settlement risks faced by each respective CS facility, including through compliance with the FSS. The CS Boards are subject to common governance arrangements with high-level objectives set out in the CS Boards' Charter. A majority of the directors on the CS Boards are common to the boards of all four CS facilities; however, one of the directors on the ASX Clear and ASX Settlement Boards does not sit on

¹³ ASX Clear and ASX Settlement also provide clearing and settlement services for markets other than ASX; these are noted in Section 2.3.2.

the ASX Clear (Futures) and Austraclear Boards, and two of the directors on the ASX Clear (Futures) and Austraclear Boards do not sit on the ASX Clear and ASX Settlement Boards.

ASX Clearing Corporation Limited (ASXCC) is a wholly owned subsidiary of ASX Limited. ASXCC is the holding company for and manages the financial resources of the two CCPs. It invests these resources according to a treasury investment policy and investment mandate approved by the CS Boards.

The CS facilities rely in the delivery of their services on group-wide operational and compliance resources that reside in ASX Operations Pty Limited, which is a wholly owned subsidiary of ASX Limited.

- ASX Operations Pty Limited (ASX Operations) provides most operational resources required by the CS facilities, including services to enable ASX Compliance to perform its services.
- ASX Compliance Pty Limited (ASX Compliance) provides compliance services to the licensed entities of the ASX Group, including monitoring and enforcing participants' compliance with the Operating Rules of the CS facilities.

ASX has adopted a group-wide organisational structure to manage the business operations of its various entities, including the CS facilities. Its business units are organised into nine main divisions:

- Office of the Chief Executive Officer (CEO)
- Risk
- Operations
- Technology
- Business Development
- ASX Compliance
- Office of General Counsel and Company Secretariat, Regulatory Policy and Regulatory Assurance
- Chief Financial Officer (CFO) Office
- Human Resources.

Risk contains a number of departments that play key roles in the management of risks faced by the CS facilities:

- Clearing Risk Strategy and Policy develops and maintains policies and standards related to CCP risk management, with a focus on longer term strategic initiatives.
- Clearing Risk Quantification maintains and validates CCP risk and pricing models.
- Clearing Risk Management implements CCP risk management policies and standards, and maintains effective procedures for carrying out those policies and standards.
- Enterprise Risk responsible for enterprise-wide risk management, including general business risk.
- Portfolio Risk Management responsible for managing investment and liquidity risks associated with ASXCC's investment portfolio.
- Internal Audit conducts risk-based reviews of internal controls and procedures across ASX. Internal Audit reports to the Chief Risk Officer for administrative purposes only.

ASX's clearing risk policy framework also sets out roles for a number of internal committees that bring together decision makers and experts from departments across the group:

- Clearing Risk Policy Committee (CRPC) reviews policies and standards prior to CS Board submission.
- Capital and Liquidity Committee (CALCO) advises on changes to clearing risk policies and standards related to capital, liquidity and balance sheet management.
- CCP Risk, Operations and Compliance Committee (CROCC) discusses and shares information across relevant operational, compliance and risk management departments.
- Enterprise Risk Management Committee (ERMC) reviews and approves enterprise risk management policy and related reporting prior to Board submission.
- Risk Quantification Group (RQG) responsible for quantitative risk management matters.
- Default Management Committee (DMC) coordinates ASX's response to a clearing participant default, and conducts the review and testing of the CCPs' default management approach.

ASX's settlement risk policy framework sets out roles for a number of additional internal committees:

- Settlement Risk Policy Committee (SRPC) reviews policies and standards prior to CS Board submission.
- SSF Risk, Operations and Compliance Committee (SROCC) discusses and shares information across relevant operational, compliance and risk management departments.
- Participant Incident Response Committee (PIRC) coordinates ASX's response to a settlement
 participant incident, and provides input into policy determinations and settings as necessary in
 response to such incidents.

2.3.2 ASX central counterparties

The ASX Group includes two CCPs that are required to conduct their affairs in accordance with the Principles. Primary responsibility for the design and operation of a CCP in accordance with the Principles lies with a CS facility licensee's board and senior management.

- ASX Clear provides CCP services for cash equities, debt products and warrants traded on the ASX and Chi-X markets, and equity-related derivatives traded on the ASX market.
- ASX Clear (Futures) provides CCP services for futures and options on interest rate, equities, energy and commodity products, as well as Australian dollar-denominated OTC interest rate derivatives.

2.3.3 ASX securities settlement facilities

The ASX Group includes two SSFs that are required to conduct their affairs in accordance with the Principles. Primary responsibility for the design and operation of an SSF in accordance with the Principles lies with a CS facility licensee's board and senior management.

• ASX Settlement provides SSF services for cash equities, debt products and warrants traded on the ASX and Chi-X markets; ASX Settlement also provides SSF services for non-ASX listed securities.

• *Austraclear* provides SSF services for trades in debt securities, including government bonds and repurchase agreements.

3. Summary Assessment and Recommendations

This Section summarises ASIC's and the Bank's Assessment of the ASX CS facilities, and sets out recommendations identified by ASIC and the Bank from this Assessment.

3.1 Summary Assessment

Tables 2 to 5 summarise ASIC and the Bank's Assessment of ASX's CS facilities against the Principles. In setting out this Assessment, ASIC and the Bank have applied the rating system used in the *Principles for Financial Market Infrastructures: Disclosure Framework and Assessment Methodology* produced by CPSS and IOSCO in December 2012.¹⁴ Under this rating system, a facility's observance of a Principle may be rated as:

Observed – The FMI observes the Principle. Any identified gaps and shortcomings are not issues of concern and are minor, manageable and of a nature that the FMI could consider taking them up in the normal course of its business.

Broadly observed – The FMI broadly observes the Principle. The assessment has identified one or more issues of concern that the FMI should address and follow up on in a defined timeline.

Partly observed – The FMI partly observes the Principle. The assessment has identified one or more issues of concern that could become serious if not addressed promptly. The FMI should accord a high priority to addressing these issues.

Not observed – The FMI does not observe the Principle. The assessment has identified one or more serious issues of concern that warrant immediate action. Therefore, the FMI should accord the highest priority to addressing these issues.

Not applicable – The Principle does not apply to the type of FMI being assessed because of the particular legal, institutional, structural or other characteristics of the FMI.

ASIC and the Bank have assessed how well each CS facility has complied with each Principle, and applied a single overall rating to each Principle, reflecting this assessment. The summarised assessments of each of the CS facilities against the Principles are supplemented by detailed information under each Key Consideration set out in Appendix A. Recommendations arising from the Assessment are set out in Section 3.2.

¹⁴ The disclosure framework and assessment methodology are available at <http://www.bis.org/publ/cpss106.htm>.

Table 2: ASX Clear Summary Assessment

Summary Assessment by Principle

Principle 1. Legal basis

Rating: Observed

ASX Clear is a separate legal entity within the ASX Group that solely provides clearing services. ASX Clear's legal basis is founded on clear and understandable rules that operate within the framework of relevant laws and regulations (Key Considerations 1, 2). The certainty of this legal basis in relevant jurisdictions is reinforced by supporting legislation, including ASX Clear's protection as a netting market under the PSNA, and protection for settlements conducted via ASX Settlement and Austraclear under the same legislation, and is subject to periodic review by ASX Legal (Key Considerations 1, 4). ASX Clear has publicly outlined the key features of its legal basis on its website and, from time to time, for information, may provide legal opinions to participants or other stakeholders in respect of the legal basis of significant new services (Key Consideration 3). ASX has not identified any material risks arising from potential conflicts of law relating to the operations of ASX Clear (Key Consideration 5).

Principle 2. Governance

Rating: Observed

ASX Clear pursues objectives that place a high priority on risk management, through compliance with relevant FSS and the broader Corporations Act requirement to do all other things necessary to reduce systemic risk. ASX Clear must also comply with all its other obligations under Part 7.3 of the Corporations Act, including to operate in a fair and effective manner. ASX Clear also acknowledges public policy objectives directed at financial market and payments system integrity, as well as the interests of customers and other stakeholders (Key Consideration 1). ASX Clear's governance arrangements are documented and publicly disclosed. These arrangements give ultimate responsibility for the oversight of operations and risk management of ASX Clear to the ASX Limited Board and the ASX Clear Board. Board and committee charters document Board roles and lines of responsibility and accountability (Key Considerations 2, 3). ASX has conflict handling procedures in place to address potential conflicts of interest that may arise by virtue of its group structure, requiring staff and directors to act in the best interests of each facility as appropriate. Changes to the composition of the CS facility Boards (CS Boards) during 2013/14 further support these conflict handling procedures (Key Consideration 3). The performance of each relevant Board is reviewed at least annually for both individual directors and the Board as a whole. The relevant Boards each include a majority of independent non-executive directors, and the ASX Clear Board includes members appointed for their expertise in clearing and settlement matters (Key Consideration 4). Board remuneration is designed to attract and retain appropriately skilled and qualified directors.

The reporting lines of management are set out in the CS Boards' Charter, along with roles and responsibilities of key management personnel (Key Consideration 5). Remuneration of senior management in risk management roles is structured to provide appropriate incentives for sound and effective risk management. ASX maintains a clear and documented risk management framework, subject to regular internal and external review. Key processes and internal controls are subject to review by ASX's Internal Audit department, which is itself subject to periodic external review (Key Consideration 6). ASX utilises formal and informal consultation processes to ensure that the design and decisions of ASX Clear reflect the interests of participants and other stakeholders. This includes the establishment of a new advisory forum, introduced in accordance with commitments under the ASX *Code of Practice for Clearing and Settlement of Cash Equities in Australia* (the Code of Practice), which provides user feedback in relation to the ongoing development of cash market clearing and settlement infrastructure and services (Key Consideration 7).

Principle 3. Framework for the comprehensive management of risks

Rating: Broadly observed

ASX maintains an Enterprise Risk Management Policy that sets out its framework for managing the full range of strategic, legal, financial and operational risks faced by ASX Clear. This high-level framework is supported by more granular policies and a governance structure to oversee ASX Clear's risk management activities (Key Consideration 1). ASX Clear's risk management framework imposes proportional, risk-based obligations such as initial margin, and places incentives on participants, including additional collateral requirements where required, to control the risks that they bring to the CCP (Key Consideration 2). As part of its risk management framework, ASX Clear reviews risks associated with interdependencies with other entities on an ongoing basis, and in relation to new initiatives, applying appropriate tools to manage these risks (Key Consideration 3). ASX Clear has prepared a basic recovery plan on the basis of its existing powers and plans to consult on enhancements to its Operating Rules that would support a more comprehensive recovery plan (Key Consideration 4).

Principle 4. Credit risk

Rating: Broadly observed

ASX Clear maintains a comprehensive framework for managing its credit exposures to participants (Key Consideration 1). Under this framework, ASX Clear regularly monitors information on participants' credit standing through financial reporting requirements, public information, and further investigation where required. Monitoring of participants' credit standing is risk based, and ASX maintains a list of participants deemed to warrant more intensive monitoring. In responding to any issues identified through monitoring, ASX Clear is able to impose activity restrictions or additional controls, including calls for additional collateral (Key Consideration 2).

ASX Clear also monitors and manages the magnitude of exposures to participants through both daily and intraday initial and variation margin calculations (Key Consideration 2), and through daily stress tests that measure the effects of extreme but plausible scenarios on exposures (Key Consideration 5). ASX Clear holds sufficient financial resources to cover its largest potential credit exposure to any single participant and its affiliates in the extreme but plausible scenarios covered in its stress tests (Key Considerations 4, 6). ASX Clear has the capacity to call additional margin from participants in the event that their stress-test exposures exceed pre-determined stress-test exposure limits (STELs). During 2013/14, ASX Clear enhanced the review of its capital stress-test model by introducing monthly reverse stress testing and review of market conditions to supplement the existing daily and formal annual review of scenarios. ASX Clear has also engaged an external expert to conduct an annual validation of the capital stress-test model. This work is ongoing. Responsibility for increasing financial resources in response to persistent and widespread STEL breaches that exceed available financial resources lies with the CS Boards and the ASX Limited Board (Key Consideration 5). ASX Clear can allocate any uncovered credit losses to participants via Emergency Assessments, which are subject to a cap. ASX plans to consult on proposals to enhance its loss allocation and replenishment powers (Key Consideration 7).

Principle 5. Collateral

Rating: Observed

ASX Clear limits the assets it routinely accepts as collateral to cash, or highly liquid stocks or funds with low credit and market risks (Key Consideration 1). ASX Clear applies haircuts to collateral that are calibrated to stressed market conditions, to avoid the need for procyclical adjustments (Key Consideration 2, 3). Collateral holdings are not sufficiently concentrated as to impair ASX Clear's ability to liquidate such assets quickly without significant adverse price effects (Key Consideration 4). ASX Clear does not accept cross-border or foreign currency collateral (Key Consideration 5). ASX Clear employs well-designed and operationally flexible systems to manage collateral movements for securities and derivatives trades (Key Consideration 6).

Principle 6. Margin

Rating: Broadly observed

ASX Clear applies initial and variation margin to both derivatives exposures and cash securities transactions, using margin systems that are tailored to the particular attributes of these product types (Key Consideration 1). Timely price data are available for most products subject to ASX Clear's margining systems, and ASX Clear applies appropriate models to estimate prices when timely and reliable data are not available (Key Consideration 2). ASX Clear's margin models for both cash securities and derivatives ensure that initial margin meets a single-tailed confidence level of 99.7 per cent of the estimated distribution of future exposure, applying appropriate and conservative assumptions regarding close-out periods, product risks, portfolio effects, product offsets and floors to limit the need for procyclical changes (Key Considerations 3, 5). In addition, ASX Clear applies variation margin to both securities and derivatives positions daily, and may call intraday margin on derivatives positions in the event of significant market movements (Key Consideration 4).

ASX Clear performs daily and periodic backtesting of its margin models to assess the adequacy of initial margin against the targeted level of cover, and performs an annual review of margin policy. ASX Clear uses quarterly sensitivity analysis to validate the assumptions underpinning margin models, including to test the reliability of implicit or explicit product offsets (Key Consideration 6). ASX Clear regularly reviews and validates its margin models. An external expert was recently engaged for a three-year period to conduct a comprehensive review of all key risk models, including those that support margining (Key Consideration 7). This work is ongoing.

Principle 7. Liquidity risk

Rating: Broadly observed

ASX Clear maintains a robust framework for managing its liquidity risk (Key Consideration 1). Under this framework, ASX Clear provides participants with information to assist them in managing their liquidity needs and risks, and employs an experienced Portfolio Risk Manager to monitor and manage ASX Clear's own settlement and funding flows (Key Consideration 2). ASX Clear holds sufficient liquid resources to meet its payment obligations on time in the event that the participant with the largest payment obligation to the CCP was to default in the extreme but plausible scenarios envisaged in its stress tests (Key Considerations 4, 9). These liquid resources comprise a portfolio of high-quality liquid assets managed by ASXCC on ASX Clear's behalf, supported by procedures to ensure timely and reliable access to liquidity from the portfolio as required (Key Considerations 5, 7). In addition, ASX Clear is able to source liquidity from participants via offsetting transaction arrangements to address liquidity shortfalls related to cash equity transactions (Key Consideration 4). To enhance its management of liquidity risk, ASX Clear has access, via ASXCC's Exchange Settlement Account (ESA), to Australian dollar liquidity from the Reserve Bank against eligible collateral (Key Consideration 8). The use of offsetting transaction arrangements with participants should ensure that ASX Clear does not face a liquidity shortfalls in respect of cash market transactions, while ASX plans to consult on proposals to address uncovered liquidity shortfalls in respect of derivatives transactions as part of broader enhancements to its recovery plan (Key Consideration 10).

Principle 8. Settlement finality

Rating: Observed

ASX Clear's settlements involve AUD cash payments between participants and the CCP for the purposes of margin payments and other derivative related payments such as options premia and the settlement of cash securities trades. Cash settlements of margin occur via Austraclear, with interbank obligations settled on a real-time gross settlement (RTGS) basis across ESAs at the Bank, via RITS. Settlement of securities trades and lodgement of non-cash collateral takes place in ASX Settlement, with securities delivery obligations effected within CHESS and interbank cash obligations also settled via RITS on an RTGS basis.

ASX Clear defines the point at which settlement is final through contract specifications set out in its Operating Rules and Procedures, and those of ASX. The finality of its money settlements is further defined in the Austraclear Regulations and ASX Settlement Operating Rules, supported by the PSNA (Key Consideration 1). Contract specifications set out in ASX Clear's and ASX's Operating Rules and Procedures also specify procedures and timetables for final settlement (Key Consideration 2). Participants are not able to submit payment or transfer instructions in ASX Clear that may be revoked (Key Consideration 3).

Principle 9. Money settlements

Rating: Observed

ASX Clear conducts its money settlements across ESAs at the Bank, via RITS (Key Consideration 1). Margin payments are settled in RITS via Austraclear instructions, while securities-related payment obligations are settled in RITS via the CHESS batch operated by ASX Settlement. ASX Clear does not conduct settlement across its own books or in commercial bank money (Key Considerations 2, 3, 4, 5). The role and responsibilities of commercial settlement banks acting on behalf of participants for money settlements, known as Payment Providers, are governed by legal agreements between those banks, ASX Clear, ASX Settlement and the Australian Payments Clearing Association (APCA). ASX is considering the introduction of a formal framework to engage Payment Providers on changes to settlement processes.

Principle 10. Physical deliveries

Rating: Not applicable

ASX Clear does not clear any contracts with physical delivery obligations.

Principle 11. Central securities depositories

Rating: Not applicable

Principle 11 not relevant to central counterparties.

Principle 12. Exchange-of-value settlement systems

Rating: Observed

ASX Clear eliminates principal risk in the settlement of cash equity transactions by ensuring that the transfer of securities occurs if and only if the associated payment is settled at the same time (Key Consideration 1). In order to eliminate principal risk, ASX Clear employs the DvP model 3 settlement mechanism in ASX Settlement.

Principle 13. Participant-default rules and procedures

Rating: Observed

ASX Clear has sufficient powers under its Operating Rules and Procedures to manage a participant default, and has documented an internal framework setting out its default management approach (Key Consideration 1). Powers and tools available to ASX Clear include the power to suspend a defaulted participant, the power to apply margin and pooled financial resources to meet losses, and a range of close-out and hedging tools (Key Considerations 1, 2). Participants are also required to report any default event or expected default to the CCP. ASX Clear has published its Operating Rules that set out its default management powers and a high-level overview of its approach to default management (Key Consideration 3). Default management procedures are tested and reviewed on at least an annual basis (Key Consideration 4).

Principle 14. Segregation and portability

Rating: Broadly observed

ASX Clear offers three types of account structure: individual client segregation for options and futures; omnibus segregation with net margining for futures; and single accounts for all house and client cash market transactions (Key Consideration 2). Individual client segregation for options and futures provides protection to customers (or 'clients') against the default of both their clearing participant and a fellow client, and supports transfer to another clearing participant in such a scenario. ASX has proposed an arrangement for cash market transactions that ensures that commingled accounts will afford materially equivalent protection to that provided by omnibus protection. The first of two stages of implementation of arrangements to enhance protection of client cash equities positions in this way has been completed (Key Considerations 1, 2 and 3). ASX Clear has publicly disclosed its current segregation and portability arrangements, including the current obstacles to portability (Key Consideration 4).

Principle 15. General business risk

Rating: Broadly observed

ASX Clear identifies, monitors and manages its general business risks in the context of its overall Enterprise Risk Management Policy (Key Consideration 1). It has access to sufficient funds held at group level to support continued operations as a going concern if it incurs general business losses. These funds are backed by equity and invested in liquid assets. The legal basis of ASX Clear's access to funds held at group level has been enhanced through a new clause in the ASX Group Support Agreement (Key Considerations 2, 3, 4). ASX Clear has developed a basic recovery plan and has commenced work towards enhancing this plan in line with forthcoming CPSS-IOSCO guidance on recovery planning (Key Consideration 3). ASX maintains viable arrangements to raise additional equity for its CS facilities as required (Key Consideration 5).

Principle 16. Custody and investment risks

Rating: Broadly observed

The assets of ASX Clear and its participants are administered and held within the ASX Group in accordance with robust group-wide controls (Key Consideration 1). A portion of these assets is held in liquid form to ensure prompt access as required (Key Consideration 2). ASXCC invests the assets of ASX Clear according to its Investment Mandate in instruments with low credit, market and liquidity risk. Following changes during 2013/14, ASX Clear's treasury investments place less reliance on unsecured investments concentrated in the large domestic banks (Key Consideration 4). ASX is in dialogue with the Bank about its expectations for further reductions in these exposures. ASXCC does not use custodian banks for its investments (Key Consideration 3).

Principle 17. Operational risk

Rating: Observed

ASX Clear's key operating systems are DCS and CHESS.

ASX Clear manages its operational risks in the context of its group-wide Enterprise Risk Management Framework. ASX Clear considers that it has sufficient well-trained and competent personnel and other resources to operate DCS and CHESS, and has taken steps to ensure that business development work does not risk the availability of these resources for key systems (Key Consideration 1). Responsibility for approving and reviewing operational risk management policy is shared between the ASX Limited and CS Boards, the Audit and Risk Committee and individual departments. The management of each department is responsible for implementing operational risk controls in their respective areas (Key Consideration 2). ASX Clear sets clear operational reliability objectives and pursues policies designed to achieve those objectives. Key objectives for DCS and CHESS, such as minimum availability of 99.8 per cent and peak capacity utilisation of 50 per cent, were met during 2013/14 (Key Considerations 3, 4). ASX Clear maintains physical and information security policies based on relevant domestic and international standards (Key Consideration 5).

ASX Clear maintains business continuity arrangements that provide a high degree of redundancy and, through the use of dual sites, target the resumption of operations within two hours following disruptive events. These arrangements are regularly tested in real time during live operations. Participants are required to maintain appropriate operational and business continuity arrangements that complement ASX Clear's own arrangements, and are appropriate to the nature and scale of their business. ASX Clear monitors participants' compliance with these requirements, and broader operational performance, on an ongoing basis (Key Consideration 6).

ASX Clear manages operational interdependencies with participants, ASX Settlement and Austraclear through its participant monitoring processes and group-wide risk management framework. Its dependencies on service providers and utilities are subject to ongoing monitoring and contingency arrangements where appropriate. ASX Clear has introduced clauses in its legal agreements with key outsourcing and critical service providers that impose requirements on those providers equivalent to those under the FSS (which align with the Principles). Additional clauses provide for access to information for the Bank, and notice to the Bank in the case of termination (Key Consideration 7).

Principle 18. Access and participation requirements

Rating: Observed

ASX Clear has objective and transparent participation requirements set out in its Operating Rules and Procedures (Key Consideration 1). These include minimum capital and other financial requirements, which were reviewed in 2013/14, as well as the requirement that participants maintain operational and risk management arrangements tailored to the specific activities of ASX Clear. ASX Clear's participation requirements promote the efficient operation of the facility, and do not impose discriminatory or restrictive access constraints such as minimum turnover levels (Key Consideration 2). ASX Clear monitors participants' compliance with requirements on an ongoing basis, and has the authority to suspend or terminate participation, or take other disciplinary or remedial action in the event of a breach of these requirements (Key Consideration 3).

Principle 19. Tiered participation arrangements

Rating: Observed

ASX Clear applies a risk-based approach to its monitoring of tiered participation arrangements, with a particular focus on client activity in exchange-traded derivatives. ASX Clear does not formally monitor concentration in tiered participation arrangements for cash market transactions due to the relatively low exposures involved. ASX Clear has a formal standard that governs its risk-based approach to monitoring of concentration in tiered participation arrangements and documents mitigating steps (Key Consideration 4).

During 2013/14, clients of ASX Clear's participants represented 78 per cent of the initial margin held by ASX Clear to cover its derivatives-related credit exposures to both participants and (indirectly) their clients. In managing the risks associated with tiered arrangements, ASX Clear's ability to monitor tiering risks on cash market transactions is limited by the commingling of house and client positions. ASX can, however, gather more detailed information from participants on an ad hoc basis (Key Considerations 1, 2). ASX Clear does not maintain formal thresholds at which substantial indirect participants are encouraged to seek direct participation, but does actively manage risks posed by indirect participant activity through its relationship with the direct participant (Key Consideration 3). ASX Clear conducts daily monitoring of client-level data on derivatives-related exposures, with the use of predefined triggers for further action.

Principle 20. FMI links

Rating: Observed

ASX Clear maintains links to two other FMIs: ASX Settlement and Austraclear. ASX Clear assumes no direct financial risks from these links, but is exposed to operational risks. These are managed in the context of ASX's group-wide framework for operational risk management (Key Consideration 1). The legal basis of each link is supported by finality legislation (Key Consideration 2). ASX Clear does not maintain links with any other CCPs (Key Considerations 7, 8).

Principle 21. Efficiency and effectiveness

Rating: Observed

ASX Clear offers a range of participation options and clearing services designed to meet the needs of its participants and the ASX and Chi-X markets. ASX's Code of Practice for cash equities clearing and settlement addresses transparency and accessibility in the provision of these services and formalises avenues for user governance, including via a user Forum (Key Consideration 1, see also Principle 2). ASX Clear's goals and objectives are determined by the ASX Limited Board (for group-level strategic direction and business priorities) and the ASX Clear Board (for goals and objectives specific to the clearing service) (Key Consideration 2). ASX Clear measures the effectiveness of its services via participant and user feedback. ASX Clear performance reports are presented to ASX management on a monthly basis. Matters covered in these reports include operational performance, settlement and netting efficiency, incident management and participant complaints (Key Consideration 3).

Principle 22. Communication procedures and standards

Rating: Observed

While ASX Clear uses a proprietary messaging standard, this is acceptable given the domestic orientation of the service. ASX Clear is consulting with users, via a Technical Committee established under the Code of Practice, on a proposal to adopt the internationally accepted ISO 20022 SWIFT standard as part of a broader renewal of its CHESS system (Key Consideration 1).

Principle 23. Disclosure of rules, key procedures, and market data

Rating: Observed

ASX Clear fully discloses its Operating Rules and Procedures to participants, and publicly discloses its rules, fees and a range of additional relevant information on its risk management procedures (Key Consideration 1). This includes information regarding the process of novation, and general descriptions of system design and the roles and obligations of ASX Clear and its participants (Key Consideration 2). ASX Clear provides new participants with comprehensive documentation, and verifies their understanding of their responsibilities as participants; existing participants are also provided with education on their obligations where required (Key Consideration 3). A full breakdown of the various fees ASX Clear charges, including available discount and incentive schemes, is published on the ASX website (Key Consideration 4). ASX has published its response to the CPSS-IOSCO Disclosure Framework and plans to periodically update and enhance this document where appropriate (Key Consideration 5). During 2013/14, ASX redesigned its website, providing links to information that is subject to disclosure requirements from a central location.

Principle 24. Disclosure of market data by trade repositories

Rating: Not applicable

Principle 24 not relevant to central counterparties.

Table 3: ASX Clear (Futures) Summary Assessment

Summary Assessment by Principle

Principle 1. Legal basis

Rating: Observed

ASX Clear (Futures) is a separate legal entity within the ASX Group that solely provides clearing services. ASX Clear (Futures)' legal basis is founded on clear and understandable rules that operate within the framework of relevant laws and regulations (Key Considerations 1, 2). The certainty of this legal basis in relevant jurisdictions is reinforced by supporting legislation, including ASX Clear (Futures)' protection as a netting market under the PSNA and the protection of money settlement finality through Austraclear under the same legislation, and is subject to periodic review by ASX Legal (Key Considerations 1, 4). ASX Clear (Futures) has publicly outlined the key features of its legal basis on its website and, from time to time, for information, provides legal opinions to participants or other stakeholders in respect of the legal basis of significant new services (Key Consideration 3). ASX has not identified any material risks arising from potential conflicts of law relating to the operations of ASX Clear (Futures) (Key Consideration 5).

Principle 2. Governance

Rating: Observed

ASX Clear (Futures) pursues objectives that place a high priority on risk management, through compliance with relevant FSS and the broader Corporations Act requirement to do all other things necessary to reduce systemic risk. ASX Clear (Futures) must also comply with all its other obligations under Part 7.3 of the Corporations Act, including to operate in a fair and effective manner. ASX Clear (Futures) also acknowledges public policy objectives directed at financial market and payments system integrity, as well as the interests of customers and other stakeholders (Key Consideration 1). ASX Clear (Futures)' governance arrangements are documented and publicly disclosed. These arrangements give ultimate responsibility for the oversight of operations and risk management of ASX Clear (Futures) to the ASX Limited Board and the ASX Clear (Futures) Board. Board and committee charters document Board roles and lines of responsibility and accountability (Key Considerations 2, 3). ASX has conflict handling procedures in place to address potential conflicts of interest that may arise by virtue of its group structure, requiring staff and directors to act in the best interests of each facility as appropriate. Changes to the composition of the CS Boards during 2013/14 further support these conflict handling procedures (Key Consideration 3). The performance of each relevant Board is reviewed at least annually for both individual directors and the ASX Clear (Futures) Board includes directors appointed for their expertise in clearing and settlement matters (Key Consideration 4). Board remuneration is designed to attract and retain appropriately skilled and qualified directors.

The reporting lines of management are set out in the CS Boards' Charter, along with roles and responsibilities of key management personnel (Key Consideration 5). Remuneration of senior management in risk management roles is structured to provide appropriate incentives for sound and effective risk management. ASX maintains a clear and documented risk management framework, subject to regular internal and external review. Governance of this risk management framework is supported by a newly established participant Risk Committee. Key processes and internal controls are subject to review by ASX's Internal Audit unit, which is itself subject to periodic external review (Key Consideration 6). ASX utilises formal and informal consultation processes to ensure that the design and decisions of ASX Clear (Futures) reflect the interests of participants and other stakeholders, including via the new participant Risk Committee (Key Consideration 7).

Principle 3. Framework for the comprehensive management of risks

Rating: Broadly observed

ASX maintains an Enterprise Risk Management Policy that sets out its framework for managing the full range of strategic, legal, financial and operational risks faced by ASX Clear (Futures). This high-level framework is supported by more granular policies and a governance structure to oversee ASX Clear (Futures)' risk management activities (Key Consideration 1). ASX Clear (Futures)' risk management framework imposes proportional, risk-based obligations such as initial margin and contributions to pooled risk resources that are related to exposures, and places incentives on participants, including additional collateral requirements where required, to control the risks that they bring to the CCP (Key Consideration 2). As part of its risk management framework, ASX Clear (Futures) reviews risks associated with interdependencies with other entities on an ongoing basis, and in relation to new initiatives, applying appropriate tools to manage these risks (Key Consideration 3). ASX Clear (Futures) has prepared a basic recovery plan on the basis of its existing powers and plans to consult on enhancements to its Operating Rules that would support a more comprehensive recovery plan (Key Consideration 4).

Principle 4. Credit risk

Rating: Broadly observed

ASX Clear (Futures) maintains a comprehensive framework for managing its credit exposures to participants (Key Consideration 1). Under this framework, ASX Clear (Futures) regularly monitors information on participants' credit standing through financial reporting requirements, public information, and further investigation where required. Monitoring of participants' credit standing is risk based, and ASX maintains a list of participants deemed to warrant more intensive monitoring. In responding to any issues identified through monitoring, ASX Clear (Futures) is able to impose activity restrictions or additional controls, including calls for additional collateral (Key Consideration 2).

ASX Clear (Futures) also monitors and manages the magnitude of exposures to participants through both daily and intraday initial and variation margin calculations (Key Consideration 2), and through daily stress tests that measure the effects of extreme but plausible scenarios on exposures (Key Consideration 5). ASX Clear (Futures) holds sufficient financial resources to cover its largest potential credit exposure to any two participants and their affiliates in the extreme but plausible scenarios covered in its stress tests, consistent with the Bank's view that ASX Clear (Futures) is systemically important in multiple jurisdictions (Key Considerations 4, 6). ASX Clear (Futures) has the capacity to call additional margin from participants in the event that their stress-test exposures exceed predetermined STELs. During 2013/14, ASX Clear (Futures) enhanced the review of its capital stress-test model by introducing monthly reverse stress testing and review of market conditions to supplement the existing daily and formal annual review of scenarios. ASX Clear (Futures) has also engaged an external expert to conduct an annual validation of the capital stress-test model. This work is ongoing. Responsibility for increasing financial resources in response to persistent and widespread STEL breaches that exceed available financial resources lies with the CS Boards and the ASX Limited Board (Key Consideration 5). While ASX Clear (Futures) has some discretionary powers to address uncovered credit olsses, these are not sufficient to reliably and fully address losses in all scenarios. ASX plans to consult on proposals to enhance its loss allocation and replenishment powers (Key Consideration 7).

Principle 5. Collateral

Rating: Observed

ASX Clear (Futures) limits the assets it routinely accepts as collateral to cash, or assets with low credit and market risks (Key Consideration 1). ASX Clear (Futures) applies haircuts to collateral. These are calibrated to stressed market conditions, to limit the need for procyclical adjustments (Key Considerations 2, 3). Collateral holdings are not sufficiently concentrated as to impair ASX Clear (Futures)' ability to liquidate such assets quickly without significant adverse price effects (Key Consideration 4). ASX Clear (Futures) retains discretion over whether to accept foreign currency collateral on a case-by-case basis, and takes into account concentration limits in exercising this discretion (Key Consideration 5). ASX Clear (Futures) employs well-designed and operationally flexible systems to manage collateral movements for securities and derivatives trades (Key Consideration 6).

Principle 6. Margin

Rating: Broadly observed

ASX Clear (Futures) applies initial and variation margin to derivatives exposures, using margin systems that are tailored to the particular attributes of the cleared products (Key Consideration 1). Timely price data are available for most products subject to ASX Clear (Futures)' margin systems, and ASX Clear (Futures) applies appropriate models to estimate prices when timely and reliable data are not available (Key Consideration 2). ASX Clear (Futures)' margin models ensure that initial margin meets a single-tailed confidence level of 99.7 per cent of the estimated distribution of future exposure, applying appropriate and conservative assumptions regarding close-out periods, product risks, portfolio effects, product offsets and floors to limit the need for procyclical changes (Key Considerations 3, 5). In addition, ASX Clear (Futures) applies variation margin to derivatives positions daily, and may call intraday margin as part of scheduled processes or in the event of significant market movements (Key Consideration 4).

ASX Clear (Futures) performs daily and periodic backtesting of its margin models to assess the adequacy of initial margin against the targeted level of cover and performs an annual review of margin policy. ASX Clear (Futures) uses quarterly sensitivity analysis to validate the assumptions underpinning margin models, including to test the reliability of implicit or explicit product offsets (Key Consideration 6). ASX Clear (Futures) regularly reviews and validates its margin models. An external expert was recently engaged for a three-year period to conduct a comprehensive review of all key risk models, including those that support margining (Key Consideration 7). This work is ongoing.

Principle 7. Liquidity risk

Rating: Broadly observed

ASX Clear (Futures) maintains a robust framework for managing its liquidity risk (Key Consideration 1). Under this framework, ASX Clear (Futures) provides participants with information to assist them in managing their liquidity needs and risks, and employs an experienced Portfolio Risk Manager to monitor and manage ASX Clear (Futures)' own settlement and funding flows (Key Consideration 2). ASX Clear (Futures) holds sufficient liquid resources to meet its payment obligations on time in the event that the two participants with the largest aggregate payment obligation to the CCP were to default in the extreme but plausible scenarios envisaged in its stress tests (Key Considerations 4, 9). These liquid resources comprise a portfolio of high quality assets managed by ASXCC on ASX Clear (Futures)' behalf, supported by procedures to ensure timely and reliable access to liquidity from the portfolio as required (Key Considerations 5, 7). To enhance its management of liquidity risk, ASX Clear (Futures) has access, via ASXCC as an ESA holder, to Australian dollar liquidity from the Reserve Bank against eligible collateral (Key Consideration 8). ASX plans to consult on proposals to address uncovered liquidity shortfalls in ASX Clear (Futures) as part of broader enhancements to its recovery plan (Key Consideration 10).

Principle 8. Settlement finality

Rating: Observed

The vast majority of ASX Clear (Futures) settlements involve AUD cash payments between participants and the CCP for the purposes of margin payments and the settlement of cash-settled derivatives contracts. Each day, ASX Clear (Futures) calculates the net obligations of each of its participants. Those participants with a net obligation to the CCP are required to make payments to ASX Clear (Futures) by 11.00 am, for both AUD and NZD-denominated contracts. Once these payments have been received, ASX Clear (Futures) makes payments to those participants with a net obligation from the CCP. AUD cash settlements occur via Austraclear, with interbank obligations settled on an RTGS basis across ESAs at the Reserve Bank of Australia, via RITS. NZD cash settlements occur via NZClear, an SSF owned and operated by the Reserve Bank of New Zealand.

ASX Clear (Futures) defines the point at which settlement is final through contract specifications set out in its Operating Rules and Procedures, and those of ASX 24. The finality of its money settlements is further defined in the Austraclear and NZClear rules, supported by finality legislation in the relevant jurisdictions (Key Consideration 1). Contract specifications set out in ASX Clear (Futures)' and ASX 24's Operating Rules and Procedures also specify procedures and timetables for final settlement (Key Consideration 2). ASX Clear (Futures) does not allow settlement instructions that may be revoked (Key Consideration 3).

Principle 9. Money settlements

Rating: Observed

ASX Clear (Futures) conducts its AUD money settlements, which constitute over 98 per cent of its settlement flows, via Austraclear instructions that settle across ESAs at the Bank, via RITS. NZD money settlements are also conducted in central bank money via participation as a non-bank in the NZClear system (Key Consideration 1). Other foreign currency settlements take place in commercial bank money (Key Considerations 2, 4). Commercial banks involved in the settlement of foreign currency transactions must be highly rated and subject to prudential regulation to ensure that credit, liquidity and operational risks are minimised (Key Consideration 3). Arrangements with commercial banks are also governed by standard legal agreements that include general information regarding the timing and availability of funds (Key Consideration 5).

Principle 10. Physical deliveries

Rating: Observed

ASX Clear (Futures)' Operating Rules and Procedures clearly state its and participants' obligations with respect to the delivery of physical instruments or commodities (Key Consideration 1). In accordance with these rules and procedures, ASX Clear (Futures) monitors and enforces compliance with delivery procedures (Key Consideration 2).

Principle 11. Central securities depositories

Rating: Not applicable

Principle 11 not relevant to central counterparties.

Principle 12. Exchange-of-value settlement systems

Rating: Observed

ASX Clear (Futures) eliminates principal risk in the settlement of derivatives contracts involving the transfer of a security or physical asset in exchange for cash by ensuring that delivery occurs only if payment occurs (Key Consideration 1). For transactions involving securities transfers, ASX Clear (Futures) employs the DvP model 1 settlement mechanism in Austraclear.

Principle 13. Participant-default rules and procedures

Rating: Observed

ASX Clear (Futures) has sufficient powers under its Operating Rules and Procedures to manage a participant default, and has documented an internal framework setting out its default management approach (Key Consideration 1). Powers and tools available to ASX Clear (Futures) include the power to suspend a defaulted participant, the power to apply margin and pooled financial resources to meet losses, and a range of close-out and hedging tools, including the auction of open OTC derivatives positions to surviving participants (Key Considerations 1, 2). During 2013/14, ASX introduced a mechanism to encourage participants to participate competitively in the auction of a defaulted participants' portfolio. Participants are also required to report any default event or expected default to the CCP. ASX Clear (Futures) has published its Operating Rules that set out its default management powers, and a high-level overview of its approach to default management (Key Consideration 3). Default management procedures are tested and reviewed on at least an annual basis. Participants clearing OTC derivatives are represented on a Default Management Group that participates in annual tests of OTC default management arrangements, including the auction process (Key Consideration 4).

Principle 14. Segregation and portability

Rating: Observed¹⁵

ASX Clear (Futures) offers individual and omnibus segregation to customers (or 'clients') of its OTC clearing participants and in July 2014 added an individual segregation offering to the existing omnibus segregation for exchange-traded derivatives (Key Consideration 2). Individual segregation provides protection to clients not only in the event of the default of their clearing participant, but also the concurrent default of a fellow client (Key Consideration 1). The availability of individually segregated client accounts, margined on a gross basis, also increases the likelihood that client positions could be transferred in the event of a clearing participant default (Key Consideration 3). ASX Clear (Futures) plans to extend its segregation arrangements to support the posting of excess client collateral. ASX Clear (Futures) has produced a fact sheet on its segregation and portability arrangements, which it requires that participants make available to their clients. This is published on ASX's website (Key Consideration 4).

Principle 15. General business risk

Rating: Broadly observed

ASX Clear (Futures) identifies, monitors and manages its general business risks in the context of its overall Enterprise Risk Management Policy (Key Consideration 1). It has access to sufficient funds held at group level to support continued operations as a going concern if it incurs general business losses. These funds are backed by equity and invested in liquid assets. The legal basis of ASX Clear (Futures)' access to funds held at group level has been enhanced through a clause in the ASX Group Support Agreement (Key Considerations 2, 3, 4). ASX Clear (Futures) has developed a basic recovery plan and has commenced work towards enhancing this plan in line with forthcoming CPSS-IOSCO guidance on recovery planning (Key Consideration 3). ASX maintains viable arrangements to raise additional equity for its CS facilities, as required (Key Consideration 5).

¹⁵ While ASX Clear (Futures) is assessed as observing Principle 14, the Bank has assessed that ASX Clear (Futures) broadly observes the corresponding CCP Standard 13. This difference in ratings is due to an additional requirement under the Bank's supplementary interpretation of CCP Standards 13.2 and 13.3 that ASX Clear (Futures) offer an account structure that provides protection for client collateral in excess of margin requirements lodged with the CCP. ASX Clear (Futures) is consulting on proposals to provide this additional protection for client collateral.

Principle 16. Custody and investment risks

Rating: Broadly observed

The assets of ASX Clear (Futures) and its participants are administered and held within the ASX Group in accordance with robust group-wide controls (Key Consideration 1). A portion of these assets is held in liquid form to ensure prompt access as required (Key Consideration 2). ASXCC invests the assets of ASX Clear (Futures) according to an Investment Mandate in instruments with low credit, market and liquidity risk. Following changes during 2013/14, ASX Clear (Futures)' treasury investments place less reliance on unsecured investments concentrated in the large domestic banks (Key Consideration 4). ASX is in dialogue with the Bank about its expectations for further reductions in these exposures. ASXCC does not use custodian banks for its investments (Key Consideration 3).

Principle 17. Operational risk

Rating: Observed

ASX Clear (Futures)' key operating systems are Genium INET (Genium) and Calypso. Genium replaced the previous SECUR system for the clearing of exchange-traded derivatives in May 2014. Calypso was first used for the clearing of OTC derivatives transactions in September 2013.

ASX Clear (Futures) manages its operational risks in the context of its group-wide Enterprise Risk Management Framework. ASX Clear (Futures) considers that it has sufficient well-trained and competent personnel and other resources to operate Genium and Calypso, and has taken steps to ensure that business development work does not risk the availability of these resources for key systems, including recently for the introduction of Genium and Calypso (Key Consideration 1). Responsibility for approving and reviewing operational risk management policy is shared between the ASX Limited and CS Boards, the Audit and Risk Committee and individual departments. The management of each department is responsible for implementing operational risk controls in their respective areas (Key Consideration 2). ASX Clear (Futures) sets clear operational reliability objectives and pursues policies designed to achieve those objectives. Key objectives for Genium, SECUR and Calypso, such as minimum availability of 99.8 per cent and peak capacity utilisation of 50 per cent, were met during 2013/14 (Key Consideration 3, 4). ASX Clear (Futures) maintains physical and information security policies based on relevant domestic and international standards (Key Consideration 5).

ASX Clear (Futures) also maintains business continuity arrangements that provide a high degree of redundancy and, through the use of dual sites, target the resumption of operations within two hours following disruptive events. These arrangements are regularly tested in real time during live operations. Participants are required to maintain appropriate operational and business continuity arrangements that complement ASX Clear (Futures)' own arrangements, and are appropriate to the nature and scale of their business. ASX Clear (Futures) monitors participants' compliance with these requirements, and broader operational performance, on an ongoing basis (Key Consideration 6).

ASX Clear (Futures) manages operational interdependencies with participants and Austraclear through its participant monitoring processes and group-wide risk management framework. Its dependencies on service providers and utilities are subject to ongoing monitoring and contingency arrangements where appropriate, including an escrow arrangement for Genium and Calypso source code subject to third-party vendor support. ASX Clear (Futures) has introduced clauses in its legal agreements with key outsourcing and critical service providers that impose requirements on those providers equivalent to those under the FSS (which align with the Principles). Additional clauses provide for access to information for the Bank, and notice to the Bank in the case of termination (Key Consideration 7).

Principle 18. Access and participation requirements

Rating: Observed

ASX Clear (Futures) has objective and transparent participation requirements set out in its Operating Rules and Procedures (Key Consideration 1). These include minimum capital and other financial requirements, as well as the requirement that participants maintain operational and risk management arrangements tailored to the specific activities of ASX Clear (Futures). Additional requirements apply for OTC derivatives clearing participants. ASX Clear (Futures)' participation requirements promote the efficient operation of the facility, and do not impose discriminatory or restrictive access constraints such as minimum turnover levels or location requirements (Key Consideration 2). ASX Clear (Futures) monitors participants' compliance with requirements on an ongoing basis and has the authority to suspend or terminate participation or take other disciplinary or remedial action in the event of a breach of these requirements (Key Consideration 3).

Principle 19. Tiered participation arrangements

Rating: Observed

ASX Clear (Futures) applies a risk-based approach to its monitoring of tiered participation arrangements. To date, the focus of this monitoring has been on client activity in exchange-traded derivatives, since an account structure that permits client clearing of OTC derivatives transactions has only relatively recently been introduced. ASX Clear (Futures) has a formal standard that governs its risk-based approach to monitoring of concentration in tiered participation arrangements and documents mitigating steps (Key Consideration 4).

During 2013/14, clients of ASX Clear (Futures)' participants represented 69 per cent of initial margin held by ASX Clear (Futures) to cover its credit exposures to both participants and (indirectly) their clients. In managing the risks associated with tiered arrangements, ASX Clear (Futures) is able to gather information on indirect participation, although with some limitations. ASX Clear (Futures) will obtain better data to support its monitoring as participants and their clients make use of the newly introduced individually segregated account structure for both OTC and exchange-traded derivatives. Where data limitations remain, ASX can also seek more detailed information from participants on an ad hoc basis (Key Considerations 1, 2). ASX Clear (Futures) does not maintain formal thresholds at which large indirect participants are encouraged to seek direct participation, but does actively manage risks posed by indirect participant activity through its relationship with the direct participant (Key Consideration 3). ASX Clear (Futures) conducts daily monitoring of its client-level data, with the use of predefined triggers for further action.

Principle 20. FMI links

Rating: Observed

ASX Clear (Futures) maintains links to two other FMIs: Austraclear and NZClear. ASX Clear (Futures) assumes no direct financial risks from these links, but is exposed to operational risks. These are managed in the context of the operational risk management practices of both FMIs (Key Consideration 1). The legal basis of each link is supported by finality legislation (Key Consideration 2). ASX Clear (Futures) does not maintain links with any other CCPs (Key Considerations 7, 8).

Principle 21. Efficiency and effectiveness

Rating: Observed

ASX Clear (Futures) offers a range of participation options and clearing services designed to meet the needs of its participants and the ASX 24 market. ASX Clear (Futures) participants are able to influence risk management policies and broader service developments via a participant Risk Committee and OTC Product Committee that make recommendations and proposals to the ASX Clear (Futures) Board (Key Consideration 1, see also Principle 2). ASX Clear (Futures)' goals and objectives are determined by the ASX Limited Board (for group-level strategic direction and business priorities) and the ASX Clear (Futures) Board (for group-level strategic direction and business priorities) and the ASX Clear (Futures) Board (for goals and objectives specific to the clearing service) (Key Consideration 2). ASX Clear (Futures) measures the effectiveness of its services via participant and user feedback. ASX Clear (Futures) performance reports are presented to ASX management on a monthly basis. Matters covered in these reports include operational performance, netting efficiency, incident management and participant complaints (Key Consideration 3).

Principle 22. Communication procedures and standards

Rating: Observed

ASX Clear (Futures) uses the internationally used OMnet Application Programming Interface as a communication standard for clearing of financial products traded on ASX 24. For OTC interest rate derivatives, ASX Clear (Futures) uses the internationally used Calypso clearing system for clearing-related messaging (Key Consideration 1).

Principle 23. Disclosure of rules, key procedures, and market data

Rating: Observed

ASX Clear (Futures) fully discloses its Operating Rules and Procedures (including the OTC Handbook) to participants, and publicly discloses its rules, fees and a range of additional relevant information on its risk management procedures (Key Consideration 1). This includes information regarding the process of novation, and general descriptions of system design and the roles and obligations of ASX Clear (Futures) and its participants (Key Consideration 2). ASX Clear (Futures) provides new participants with comprehensive documentation, and verifies their understanding of their responsibilities as participants; existing participants are also provided with education on their obligations where required (Key Consideration 3). A full breakdown of the various fees ASX Clear (Futures) charges, including available discount and incentive schemes, is published on the ASX website (Key Consideration 4). ASX has published its response to the CPSS-IOSCO Disclosure Framework and plans to periodically update and enhance this document where appropriate (Key Consideration 5). During 2013/14, ASX redesigned its website, providing links to information that is subject to disclosure requirements from a central location.

Principle 24. Disclosure of market data by trade repositories

Rating: Not applicable

Principle 24 not relevant to central counterparties.

Table 4: ASX Settlement Summary Assessment

Summary Assessment by Principle

Principle 1. Legal basis

Rating: Observed

ASX Settlement is a legal entity within the ASX Group that solely provides settlement services. ASX Settlement's legal basis is founded on clear and understandable rules that operate within the framework of relevant laws and regulations (Key Considerations 1, 2). The certainty of this legal basis in relevant jurisdictions is reinforced by supporting legislation, including ASX Settlement's protection as an approved netting arrangement under the PSNA, and is subject to periodic review by ASX Legal (Key Considerations 1, 4). ASX Settlement has publicly outlined the key features of its legal basis on its website and, from time to time, for information, may provide legal opinions to participants or other stakeholders in respect of the legal basis of significant new services (Key Consideration 3). ASX has not identified any material risks arising from potential conflicts of law relating to the operations of ASX Settlement (Key Consideration 5).

Principle 2. Governance

Rating: Observed

ASX Settlement pursues objectives that place a high priority on risk management, through compliance with relevant FSS and the broader Corporations Act requirement to do all other things necessary to reduce systemic risk. ASX Settlement must also comply with all its other obligations under Part 7.3 of the Corporations Act, including to operate in a fair and effective manner. ASX Settlement also acknowledges public policy objectives directed at financial market and payments system integrity, as well as the interests of customers and other stakeholders (Key Consideration 1). ASX Settlement's governance arrangements are documented and publicly disclosed. These arrangements give ultimate responsibility for the oversight of the operations and risk management of ASX Settlement to the ASX Limited Board and the ASX Settlement Board. Board and committee charters document Board roles and lines of responsibility and accountability (Key Considerations 2, 3). ASX has conflict handling procedures in place to address potential conflicts of interest that may arise by virtue of its group structure, requiring staff and directors to act in the best interests of each facility as appropriate. Changes to the composition of the CS Boards during the 2013/14 further support these conflict handling procedures (Key Consideration 3). The performance of each relevant Board is reviewed at least annually for both individual directors and the Board as a whole. The relevant Boards each include a majority of independent non-executive directors and the ASX Settlement Board includes directors appointed for their expertise in clearing and settlement matters (Key Consideration 4). Board remuneration is designed to attract and retain appropriately skilled and qualified directors.

The reporting lines of management are set out in the CS Boards' Charter, along with roles and responsibilities of key management personnel (Key Consideration 5). Remuneration of senior management in risk management roles is structured to provide appropriate incentives for sound and effective risk management. ASX maintains a clear and documented risk management framework, subject to regular internal and external review. Key processes and internal controls are subject to review by ASX's Internal Audit department, which is itself subject to periodic external review (Key Consideration 6). ASX utilises formal and informal consultation processes to ensure that the design and decisions of ASX Settlement reflect the interests of participants and other stakeholders. This includes the establishment of a new advisory forum, introduced in accordance with commitments under the ASX *Code of Practice for Clearing and Settlement of Cash Equities in Australia* (the Code of Practice), which provides user feedback in relation to the ongoing development of cash market clearing and settlement infrastructure and services (Key Consideration 7).

Principle 3. Framework for the comprehensive management of risks

Rating: Broadly observed

ASX maintains an Enterprise Risk Management Policy that sets out its framework for managing the full range of strategic, legal, financial and operational risks faced by ASX Settlement. This high-level framework is supported by more granular policies (currently being refreshed) and a governance structure to oversee ASX Settlement's risk management activities (Key Consideration 1). ASX Settlement's risk management framework does not place financial obligations on participants, but provides incentives to participants to control the risks that they bring to the SSF (Key Consideration 2). As part of its risk management reviews on an ongoing basis risks associated with interdependencies with other entities, and in relation to new initiatives, applies appropriate tools to manage these risks (Key Consideration 3). ASX Settlement has prepared a basic recovery plan on the basis of its existing powers and intends to enhance this plan in line with forthcoming CPSS-IOSCO guidance on recovery planning (Key Consideration 4).

Principle 4. Credit risk

Rating: Not applicable

ASX Settlement does not extend credit to participants or provide a settlement guarantee. Accordingly, ASX Settlement does not assume credit risk as principal. ASX Settlement's use of a DvP settlement mechanism ensures that participants do not face credit risks arising from ASX Settlement's settlement processes.

Principle 5. Collateral

Rating: Not applicable

Since ASX Settlement does not assume credit risk as principal (see Principle 4), it does not collect collateral from participants.

Principle 6. Margin

Rating: Not applicable

Principle 6 not relevant to securities settlement facilities.

Principle 7. Liquidity risk

Rating: Observed

ASX Settlement conducts settlement on a DvP Model 3 basis, and does not assume payment obligations in the settlement process. While participants face liquidity exposures arising from the possible reconstitution of the multilateral net batch in a default, including via the implementation of offsetting transaction arrangements related to novated transactions, ASX Settlement's back-out procedures are designed to limit concentrated liquidity exposures for non-defaulting participants (Key Consideration 1). These procedures are disclosed to participants through ASX Settlement's Operating Rules and Procedures (Key Consideration 2). ASX Settlement does not assume liquidity risk as principal through its settlement process (Key Considerations 3, 5, 6, 7, 8, 9, 10). ASX is considering whether any additional information could be disclosed to participants on the potential liquidity impact of reconstitution of the ASX Settlement batch in scenarios that extend beyond the management of an ASX Clear participant default.

Principle 8. Settlement finality

Rating: Observed

ASX Settlement defines the point at which settlement is final in its Operating Rules, and finality is ensured by its approval under Part 3 of the PSNA. Money settlements linked to securities transfers in ASX Settlement occur in RITS. The finality of interbank obligations arising from its settlements is protected by the approval of RITS under Part 2 of the same legislation (Key Consideration 1). Final settlement occurs each day in a single multilateral net batch on a DvP Model 3 basis (Key Consideration 2). ASX Settlement defines clear cut-off times for the cancellation of payment or transfer instructions (Key Consideration 3).

Principle 9. Money settlements

Rating: Observed

ASX Settlement conducts its money settlements across the ESAs of Payment Providers at the Bank, via RITS (Key Consideration 1). ASX Settlement does not conduct settlements across its own books or in commercial bank money (Key Considerations 2, 3, 4, 5). Payment Providers that effect money settlements on behalf of participants must be prudentially regulated and meet ASX Settlement's application criteria. The roles and responsibilities of commercial bank Payment Providers are governed by legal agreements between those banks, ASX Settlement, ASX Clear and the Australian Payments Clearing Association (APCA). ASX is considering the introduction of a formal framework to engage Payment Providers on changes to settlement processes.

Principle 10. Physical deliveries

Rating: Not applicable

ASX Settlement does not settle obligations requiring physical delivery.

Principle 11. Central securities depositories

Rating: Observed

ASX Settlement operates a central securities depository that maintains a record of securities holdings and movements for ASX-listed securities, and securities listed by Approved Listing Market Operators (ALMOs), through the CHESS sub-register. Securities registries maintain a separate record of holdings on behalf of issuers, using information on securities movements provided by CHESS. ASX Settlement employs a range of controls to ensure the integrity of these securities. These controls are subject to annual audit. ASX Settlement's Operating Rules and Procedures identify participants' interests in each type of security held within ASX Settlement, identify how these interests can be transferred within the facility, and provide that participants' securities would not be subject to claims by creditors in the event that ASX Settlement entered external administration (Key Consideration 1).

ASX Settlement does not allow overdrafts or debit balances in securities accounts within its system, and all securities (or interests in securities) are held in a dematerialised form (Key Considerations 2, 3). ASX Settlement's Operating Rules set out its obligations in providing safekeeping of participant assets, and ASX Settlement employs operational controls and insurance to mitigate custody risk (Key Consideration 4). Participant assets are segregated from ASX Settlement's own assets, and ASX Settlement supports the segregation of participant and client assets through the use of identifiers for securities holders (Key Consideration 5). ASX Settlement does not provide any ancillary services that could pose a risk to its central securities depository function (Key Consideration 6).

Principle 12. Exchange-of-value settlement systems

Rating: Observed

ASX Settlement eliminates principal risk in settlements involving the transfer of a security in exchange for cash by ensuring that delivery occurs if and only if the associated payment is settled at the same time (Key Consideration 1). For the purchase of securities, ASX Settlement does this through the use of a DvP Model 3 settlement mechanism, which completes settlement via a multilateral net batch.

Principle 13. Participant-default rules and procedures

Rating: Observed

ASX Settlement has powers under its Operating Rules and Procedures to manage a participant default, and has documented procedures setting out how to manage a default. Powers available to ASX Settlement include powers to suspend or terminate the participant status of a defaulted participant (Key Considerations 1, 2). Participants are also required to report any default event or expected default to the SSF. ASX Settlement sets out its default management powers in its Operating Rules and Procedures (Key Consideration 3). Given that ASX Settlement is not exposed to financial loss in the event of a participant default, its handling of a default situation is largely procedural in nature (Key Consideration 4).

Principle 14. Segregation and portability

Rating: Not applicable

Principle 14 not relevant to securities settlement facilities.

Principle 15. General business risk

Rating: Broadly observed

ASX Settlement identifies, monitors and manages its general business risks in the context of its overall Enterprise Risk Management Policy (Key Consideration 1). It has access to sufficient funds held at group level to support continued operations as a going concern if it incurs general business losses. These funds are backed by equity and invested in liquid assets. The legal basis of ASX Settlement's access to funds held at group level has been enhanced through a clause in the ASX Group Support Agreement (Key Considerations 2, 3, 4). ASX Settlement has developed a basic recovery plan and has commenced work towards enhancing this plan in line with forthcoming CPSS-IOSCO guidance on recovery planning (Key Consideration 3). ASX maintains viable arrangements to raise additional equity for its CS facilities as required (Key Consideration 5).

Principle 16. Custody and investment risks

Rating: Not applicable

ASX Settlement does not have any financial investments, and its participants do not lodge collateral or other assets with the SSF. General business risk capital covering the needs of ASX Settlement is invested at the group level. Arrangements for the investment of those funds are discussed under Principle 15.

Principle 17. Operational risk

Rating: Observed

ASX Settlement's key operating system is CHESS.

ASX Settlement manages its operational risks in the context of its group-wide Enterprise Risk Management Framework. ASX Settlement considers that it has sufficient well-trained and competent personnel and other resources to operate CHESS, and has taken steps to ensure that business development work does not risk the availability of these resources for key systems (Key Consideration 1). Responsibility for approving and reviewing operational risk management policy is shared between the ASX Limited and CS Boards, the Audit and Risk Committee and individual departments. The management of each department is responsible for implementing operational risk controls in their respective areas (Key Consideration 2). ASX Settlement sets clear operational reliability objectives and pursues policies designed to achieve those objectives. Key objectives for CHESS, such as minimum availability of 99.8 per cent and peak capacity utilisation of 50 per cent, were met during 2013/14 (Key Considerations 3, 4). ASX Settlement maintains physical and information security policies based on relevant domestic and international standards (Key Consideration 5).

ASX Settlement also maintains business continuity arrangements that provide a high degree of redundancy and, through the use of dual sites, target the resumption of operations within two hours following disruptive events. These arrangements are regularly tested in real time during live operations. Participants are required to maintain appropriate operational and business continuity arrangements that complement ASX Settlement's own arrangements, and are appropriate to the nature and scale of their business. ASX Settlement monitors participants' compliance with these requirements, and broader operational performance, on an ongoing basis (Key Consideration 6).

ASX Settlement manages operational interdependencies with participants and ASX Clear through its participant monitoring processes and group-wide risk management framework. Its dependencies on service providers and utilities are subject to ongoing monitoring and contingency arrangements where appropriate. ASX Settlement has introduced clauses in its legal agreements with key outsourcing and critical service providers that impose requirements on those providers equivalent to those under the FSS (which align with the Principles). Additional clauses provide for access to information for the Bank, and notice to the Bank in the case of termination (Key Consideration 7).

Principle 18. Access and participation requirements

Rating: Observed

ASX Settlement has objective and transparent participation requirements set out in its Operating Rules and Procedures (Key Consideration 1). These include financial requirements, as well as the requirement that participants maintain operational arrangements tailored to the specific activities of ASX Settlement. ASX Settlement's participation requirements promote the efficient operation of the facility, and do not impose discriminatory or restrictive access constraints such as minimum turnover levels (Key Consideration 2). ASX Settlement monitors participants' compliance with requirements on an ongoing basis, and has the authority to suspend or terminate participation or take other disciplinary or remedial action in the event of a breach of these requirements (Key Consideration 3).

Principle 19. Tiered participation arrangements

Rating: Observed

In managing the risks associated with tiered arrangements, ASX Settlement is able to gather basic information on indirect participation (Key Considerations 1, 2). ASX Settlement does not maintain formal thresholds at which substantial indirect participants are encouraged to seek direct participation, but does actively manage risks posed by indirect participant activity through its relationship with the direct participant (Key Consideration 3). The partially overlapping participation base between ASX Settlement and ASX Clear allows for tiered participation risks to be monitored and addressed jointly (Key Consideration 4).

Principle 20. FMI links

Rating: Observed

ASX Settlement maintains a link to one other FMI, ASX Clear, for the settlement of novated securities transactions. There are no direct financial risks associated with this link, but ASX Settlement is exposed to operational risks. These are managed in the context of ASX's group-wide framework for operational risk management (Key Consideration 1). The legal basis of the link is supported by finality legislation (Key Consideration 2). ASX Settlement does not maintain links with any other central securities depositories (Key Considerations 3, 4, 5, 6).

Principle 21. Efficiency and effectiveness

Rating: Observed

ASX Settlement offers a range of participation options and settlement services designed to meet the needs of its participants, the ASX and Chi-X markets, and the ALMOs that it serves. ASX's Code of Practice for cash equities clearing and settlement addresses transparency and accessibility in the provision of these services and formalises avenues for user governance, including via a user Forum (Key Consideration 1, see also Principle 2). ASX Settlement's goals and objectives are determined by the ASX Limited Board (for group-level strategic direction and business priorities) and the ASX Settlement Board (for goals and objective specific to the cash market settlement service). ASX Settlement measures the effectiveness of its services via participant and user feedback. ASX Settlement performance reports are presented to ASX management on a monthly basis. Matters covered in these reports include operational performance, settlement and netting efficiency, incident management and participant complaints (Key Consideration 3).

Principle 22. Communication procedures and standards

Rating: Observed

While ASX Settlement uses a proprietary messaging standard, this is acceptable given the domestic orientation of its service. ASX Settlement is consulting with users, via a Technical Committee established under the Code of Practice, on a proposal to adopt the internationally accepted ISO 20022 SWIFT standard as part of a broader renewal of its CHESS system (Key Consideration 1).

Principle 23. Disclosure of rules, key procedures, and market data

Rating: Observed

ASX Settlement fully discloses its Operating Rules and Procedures to participants, and publicly discloses its rules, fees and a range of additional relevant information on its risk management procedures (Key Consideration 1). This includes information regarding the general descriptions of system design and the roles and obligations of ASX Settlement and its participants (Key Consideration 2). ASX Settlement provides new participants with comprehensive documentation, and verifies their understanding of their responsibilities as participants; existing participants are also provided with education on their obligations where required (Key Consideration 3). A full breakdown of the various fees ASX Settlement charges, including available discount and incentive schemes, is published on the ASX website (Key Consideration 4). ASX has published its response to the CPSS-IOSCO Disclosure Framework and plans to periodically update and enhance this document where appropriate (Key Consideration 5). During 2013/14, ASX redesigned its website, providing links to information that is subject to disclosure requirements from a central location.

Principle 24. Disclosure of market data by trade repositories

Rating: Not applicable

Principle 24 not relevant to securities settlement facilities.

Table 5: Austraclear Summary Assessment

Summary Assessment by Principle

Principle 1. Legal basis

Rating: Observed

Austraclear is a separate legal entity within the ASX Group that solely provides settlement and related depository services. Austraclear's legal basis is founded on clear and understandable rules that operate within the framework of relevant laws and regulations (Key Considerations 1, 2). The certainty of this legal basis in relevant jurisdictions is reinforced by supporting legislation, including Austraclear's protection as an RTGS system under the PSNA, and is subject to periodic review by ASX Legal (Key Considerations 1, 4). Austraclear has publicly outlined the key features of its legal basis on its website and, from time to time, for information, provides legal opinions to participants or other stakeholders in respect of the legal basis of significant new services (Key Consideration 3). ASX has not identified any material risks arising from potential conflicts of law relating to the operations of Austraclear (Key Consideration 5).

Principle 2. Governance

Rating: Observed

Austraclear pursues objectives that place a high priority on risk management, through compliance with relevant FSS and the broader Corporations Act requirement to do all other things necessary to reduce systemic risk. Austraclear must also comply with all its other obligations under Part 7.3 of the Corporations Act, including to operate in a fair and effective manner. Austraclear also acknowledges public policy objectives directed at financial market and payments system integrity, as well as the interests of customers and other stakeholders (Key Consideration 1). Austraclear's governance arrangements are documented and publicly disclosed. These arrangements give ultimate responsibility for the oversight of operations and risk management of Austraclear to the ASX Limited Board and the Austraclear Board. Board and committee charters document Board roles and lines of responsibility and accountability (Key Considerations 2, 3). ASX has conflict handling procedures in place to address potential conflicts of interest that may arise by virtue of its group structure, requiring staff and directors to act in the best interests of each facility as appropriate. Changes to the composition of the CS Boards during 2013/14 further support these conflict handling procedures (Key Consideration 3). The performance of each relevant Board is reviewed at least annually for both individual directors and the Board as a whole. The relevant Boards each include a majority of independent non-executive directors and the Austraclear Board includes directors appointed for their expertise in clearing and settlement matters (Key Consideration 4). Board remuneration is designed to attract and retain appropriately skilled and qualified directors.

The reporting lines of management are set out in the CS Boards' Charter, along with roles and responsibilities of key management personnel (Key Consideration 5). Remuneration of senior management in risk management roles is structured to provide appropriate incentives for sound and effective risk management. ASX maintains a clear and documented risk management framework subject to regular internal and external review. Key processes and internal controls are subject to review by ASX's Internal Audit unit, which is itself subject to periodic external review (Key Consideration 6). ASX utilises formal and informal consultation processes to ensure that the design and decisions of Austraclear reflect the interests of participants and other stakeholders. Austraclear has also established an Advisory Committee that provides a standing forum for user feedback on the design and ongoing development of services (Key Consideration 7).

Principle 3. Framework for the comprehensive management of risks

Rating: Broadly observed

ASX maintains an Enterprise Risk Management Policy that sets out its framework for managing the full range of strategic, legal, financial and operational risks faced by Austraclear. This high-level framework is supported by more granular policies (currently being refreshed) and a governance structure to oversee Austraclear's risk management activities (Key Consideration 1). Austraclear's risk management framework does not place financial obligations on participants, but provides incentives to participants, such as additional operational requirements for collateral managers, to control the risks that they bring to the SSF (Key Consideration 2). As part of its risk management framework, Austraclear reviews risks associated with interdependencies with other entities on an ongoing basis, and in relation to new initiatives, applying appropriate tools to manage these risks (Key Consideration 3). Austraclear has prepared a basic recovery plan on the basis of its existing powers and intends to enhance this plan in line with forthcoming CPSS-IOSCO guidance on recovery planning (Key Consideration 4).

Principle 4. Credit risk

Rating: Not applicable

Austraclear does not extend credit to participants or provide a settlement guarantee. Accordingly, Austraclear does not assume credit risk as principal. Austraclear's use of a DvP settlement mechanism ensures that participants do not face credit risks arising from Austraclear's settlement processes.

Principle 5. Collateral

Rating: Not applicable

Since Austraclear does not assume credit risk as principal (see Principle 4), it does not collect collateral from participants. **Principle 6. Margin**

Rating: Not applicable

Principle 6 not relevant to securities settlement facilities. Principle 7. Liquidity risk

Rating: Observed

Austraclear settlements are conducted in real time on a DvP Model 1 basis, allowing participants to manage their liquidity risk exposures to bilateral counterparties (Key Consideration 1). Austraclear does not assume liquidity risk as principal through its settlement process (Key Considerations 2, 3, 5, 6, 7, 8, 9, 10).

Principle 8. Settlement finality

Rating: Observed

Austraclear defines the point at which settlement is final in its Regulations, and finality is ensured by its approval under Part 2 of the PSNA. The finality of interbank obligations arising from its settlements is protected by the approval of RITS under the same legislation (Key Consideration 1). Final settlement occurs on a DvP (or equivalent simultaneous exchange of assets) Model 1 basis in real time (Key Consideration 2). Austraclear defines clear cut-off times for the cancellation of payment or transfer instructions (Key Consideration 3).

Principle 9. Money settlements

Rating: Observed

Austraclear conducts its AUD money settlements across the ESAs of Participating Banks at the Bank, via RITS (Key Consideration 1). Participating Banks that effect money settlements on their own behalf or on behalf of other participants must be prudentially regulated and meet Austraclear's participation requirements (Key Consideration 3). In July 2014 Austraclear began offering a foreign currency settlement service, initially supporting the settlement of payments in Chinese renminbi across the books of the Bank of China (Sydney branch) (Key Considerations 2, 3). Austraclear's Regulations and legal agreement with Bank of China state that payments through this service settle with finality in real time (Key Consideration 5).

Principle 10. Physical deliveries

Rating: Not applicable

Austraclear does not settle obligations requiring physical delivery.

Principle 11. Central securities depositories

Rating: Observed

Austraclear acts as central securities depository for the securities that it settles. Austraclear employs a range of controls to ensure the integrity of these securities. These controls are subject to annual audit. Austraclear's Regulations and Procedures identify the interests held by participants in each type of security held within Austraclear, identify how these interests can be transferred within the facility, and provide that participants' securities would not be subject to claims by creditors in the event that Austraclear entered external administration (Key Consideration 1).

Austraclear does not allow overdrafts or debit balances in securities accounts within its system, and maintains paper securities in immobilised form, with other securities dematerialised (Key Considerations 2, 3). Austraclear's Regulations set out its obligations in providing safe keeping of participant assets, and Austraclear employs operational controls and insurance to mitigate custody risk (Key Consideration 4). Participant assets are segregated from Austraclear's own assets, and Austraclear supports the segregation of participant and client assets through optional sub-accounts (Key Consideration 5). Austraclear's provision of ancillary services to issuers is subject to operational risk controls (Key Consideration 6).

Principle 12. Exchange-of-value settlement systems

Rating: Observed

Austraclear eliminates principal risk in settlements involving the transfer of a security in exchange for cash or another security by ensuring that delivery occurs if and only if the associated payment is settled at the same time (Key Consideration 1). For the purchase of securities, Austraclear does this through the use of a DvP Model 1 settlement mechanism, which simultaneously settles linked payment and securities obligations on an item-by-item basis in real time. Collateral substitutions arising from the ASX Collateral service are performed on a delivery-versus-delivery (DvD) basis, whereby linked securities transactions settle simultaneously, including where a chain of substitutions are being performed.

Principle 13. Participant-default rules and procedures

Rating: Observed

Austraclear has powers under its Operating Rules and Procedures to manage a participant default, and has documented procedures setting out how to manage a default, including in respect of special purpose participants that are collateral managers. Powers available to Austraclear include powers to suspend or terminate the participant status of a defaulting participant (Key Considerations 1, 2). Participants are also required to report any default event or expected default to the SSF. Austraclear sets out its default management powers in its Regulations and Procedures (Key Consideration 3). Since Austraclear is not exposed to financial loss in the event of a participant default, its handling of a default situation is largely procedural in nature (Key Consideration 4).

Principle 14. Segregation and portability

Rating: Not applicable

Principle 14 not relevant to securities settlement facilities.

Principle 15. General business risk

Rating: Broadly observed

Austraclear identifies, monitors and manages its general business risks in the context of its overall Enterprise Risk Management Policy (Key Consideration 1). It has access to sufficient funds held at group level to support continued operations as a going concern if it incurs general business losses. These funds are backed by equity and invested in liquid assets. The legal basis of Austraclear's access to funds held at group level has been enhanced through a clause in the ASX Group Support Agreement (Key Considerations 2, 3, 4). Austraclear has developed a basic recovery plan and has commenced work towards enhancing this plan in line with forthcoming CPSS-IOSCO guidance on recovery planning (Key Consideration 3). ASX maintains viable arrangements to raise additional equity for its CS facilities as required (Key Consideration 5).

Principle 16. Custody and investment risks

Rating: Observed

The assets of Austraclear are invested on its own behalf in cash or other high-quality liquid assets, which allow prompt access to its assets when required (Key Considerations 1, 2). Austraclear controls investment risk by limiting its approved counterparties to large Australian banks, and investing predominantly in cash (Key Consideration 4). Austraclear does not use custodian banks for its investments (Key Consideration 3).

Principle 17. Operational risk

Rating: Observed

Austraclear's key operating system is EXIGO.

Austraclear manages its operational risks in the context of its group-wide Enterprise Risk Management Framework. Austraclear considers that it has sufficient well-trained and competent personnel and other resources to operate EXIGO, and has taken steps to ensure that business development work does not risk the availability of these resources for key systems (Key Consideration 1). Responsibility for approving and reviewing operational risk management policy is shared between the ASX Limited and CS Boards, the Audit and Risk Committee and individual departments. The management of each department is responsible for implementing operational risk controls in their respective areas (Key Consideration 2). Austraclear sets clear operational reliability of 99.9 per cent and peak capacity utilisation of 50 per cent, were met during 2013/14 (Key Consideration 3, 4). Austraclear maintains physical and information security policies based on relevant domestic and international standards (Key Consideration 5).

Austraclear also maintains business continuity arrangements that provide a high degree of redundancy and, through the use of dual sites, target the resumption of operations within two hours following disruptive events. These arrangements are regularly tested in real time during live operations. Participants are required to maintain appropriate operational and business continuity arrangements that complement Austraclear's own arrangements, and are appropriate to the nature and scale of their business. Austraclear monitors participants' compliance with these requirements, and broader operational performance, on an ongoing basis (Key Consideration 6).

Austraclear manages operational interdependencies with participants, and ASX Clear and ASX Clear (Futures) through its participant monitoring processes and group-wide risk management framework respectively. Its dependencies on service providers and utilities are subject to ongoing monitoring and contingency arrangements where appropriate. Austraclear has introduced clauses in its legal agreements with key outsourcing and critical service providers that impose requirements on those providers equivalent to those under the FSS (which align with the Principles). Additional clauses provide for access to information for the Bank, and notice to the Bank in the case of termination (Key Consideration 7).

Principle 18. Access and participation requirements

Rating: Observed

Austraclear has objective and transparent participation requirements set out in its Regulations and Procedures (Key Consideration 1). These include minimum capital and other financial requirements, as well as the requirement that participants maintain operational arrangements tailored to the specific activities of Austraclear, including additional requirements for special purpose participants that are collateral managers. Austraclear's participation requirements promote the efficient operation of the facility, and do not impose discriminatory or restrictive access constraints such as minimum turnover levels (Key Consideration 2). Austraclear monitors participants' compliance with requirements on an ongoing basis, and has the authority to suspend or terminate participation or take other disciplinary or remedial action in the event of a breach of these requirements (Key Consideration 3).

Principle 19. Tiered participation arrangements

Rating: Observed

In managing the risks associated with tiered arrangements, Austraclear is able to gather basic information on indirect participation (Key Considerations 1, 2). Austraclear does not maintain formal thresholds at which substantial indirect participants are encouraged to seek direct participation, but does actively manage risks posed by indirect participant activity through its relationship with the direct participant (Key Consideration 3). Austraclear is not directly exposed to financial risks arising from tiered participation (Key Consideration 4).

Principle 20. FMI links

Rating: Observed

Austraclear maintains three links to other FMIs:

- ASX Clear, for funds transfers in relation to margin payments
- ASX Clear (Futures), for AUD funds transfers in relation to margin payments, lodgement of AUD-denominated non-cash collateral, and settlement of 90-day bank bill futures
- Clearstream, in relation to Euroentitlements managed in Austraclear.

There are no direct financial risks associated with these links but Austraclear is exposed to operational risks. These are managed in the context of the operational risk management practices of each FMI (Key Consideration 1). The legal basis of each link is supported by finality legislation (Key Consideration 2). Austraclear's link with Clearstream does not involve the extension of credit, provisional transfers of securities or the use of custodians (Key Considerations 3, 4, 6).

Principle 21. Efficiency and effectiveness

Rating: Observed

Austraclear meets the needs of its participants and the markets it serves by: providing an appropriate range of registry, central securities depository and settlement services; maintaining a flexible participation structure; and by establishing the Austraclear Advisory Committee, comprised of user representatives, to provide input on the design, operation and future development of Austraclear (Key Consideration 1, see also Principle 2). Austraclear's goals and objectives are determined by the ASX Limited Board (for group-level strategic direction and business priorities) and the Austraclear Board (for goals and objectives specific to the settlement service). Austraclear measures the effectiveness of its services via participant and user feedback. Austraclear performance reports are presented to ASX management on a monthly basis. Matters covered in these reports include operational performance, settlement failures, incident management and participant complaints.

Principle 22. Communication procedures and standards

Rating: Observed

The Austraclear System supports the internationally accepted SWIFT Message Protocol. Participants can also access Austraclear via the internet or a secure private network (Key Consideration 1).

Principle 23. Disclosure of rules, key procedures, and market data

Rating: Observed

Austraclear fully discloses its Regulations and Procedures to participants, and publicly discloses its rules, fees and a range of additional relevant information on its risk management procedures (Key Consideration 1). This includes information regarding the general descriptions of system design and the roles and obligations of Austraclear and its participants (Key Consideration 2). Austraclear provides new participants with comprehensive documentation, and verifies their understanding of their responsibilities as participants; existing participants are also provided with education on their obligations where required (Key Consideration 3). A full breakdown of the various fees ASX Clear charges, including available discount and incentive schemes, is published on the ASX website (Key Consideration 4). ASX has published its response to the CPSS-IOSCO Disclosure Framework and plans to periodically update and enhance this document where appropriate (Key Consideration 5). During 2013/14, ASX redesigned its website, providing links to information that is subject to disclosure requirements from a central location.

Principle 24. Disclosure of market data by trade repositories

Rating: Not applicable

Principle 24 not relevant to securities settlement facilities.

3.2 Recommendations

Where a CS facility has been assessed to observe a Principle, ASIC and the Bank nevertheless expect ASX to work towards continual strengthening of its observance of the Principle. ASX recognises this and has governance arrangements in place to motivate and encourage continuous improvement. Tables 6 to 9 include some recommendations encouraging such improvement in some specific areas. These are not exhaustive, and ASX is encouraged to continue to seek further improvements to its observance of the Principles.

Where a facility has been assessed to broadly observe a Principle, ASIC and the Bank will have sought evidence that a plan is in place to address the identified issue of concern within a clear, defined and reasonable timeframe, and that it would not be reasonably practicable for the facility to take such actions immediately in order to fully observe the Principle. Tables 6 to 9 also include recommendations that identify the steps required by ASX to address the relevant issues of concern and fully observe the applicable Principle.

Principle	Rating	Recommendations
3. Framework for the comprehensive management of risks	Broadly observed	In order to fully observe Principle 3, ASX Clear should implement plans to enhance its recovery plan consistent with forthcoming CPSS-IOSCO guidance on recovery planning.
4. Credit risk	Broadly observed	In order to fully observe Principle 4, ASX Clear should implement mechanisms consistent with forthcoming CPSS-IOSCO guidance on recovery planning that would fully address any uncovered credit losses and replenish financial resources following a participant default.
		ASX Clear should also complete the full validation of its capital stress test model by external experts and consider further enhancements to its reverse stress testing approach that take into account the impact of systematic shocks across multiple products. ASX Clear is encouraged to continually refine and enhance its reverse stress testing methodology and its integration into existing risk management processes.
6. Margin	Broadly observed	In order to fully observe Principle 6, ASX Clear should complete the full validation of its SPAN margin model and Derivatives Pricing System by external experts, and carry out plans for these external experts to perform a full validation of the Cash Market Margining model within the next two years.
		ASX Clear is encouraged to continually refine and enhance its margin backtesting and sensitivity analysis methodologies and their integration into existing risk management processes.
7. Liquidity risk	Broadly observed	In order to fully observe Principle 7, ASX Clear should implement mechanisms consistent with forthcoming CPSS-IOSCO guidance on recovery planning that would fully address any uncovered liquidity shortfall related to derivatives transactions following a participant default.
		ASX Clear should also complete the full validation of its liquidity stress test model by external experts, and enhance its sensitivity analysis approach to allow it to systematically examine the effect of underlying assumptions. This should include assumptions on the porting of client derivatives positions and the degree to which timely settlement can be achieved without the use of offsetting transaction arrangements.
9. Money settlements	Observed	ASX Clear is encouraged to work with ASX Settlement to introduce a framework to formally engage Payment Providers on changes to settlement processes in response to regulatory or market-driven change.
14. Segregation and portability	Broadly observed	In order to fully observe Principle 14, ASX Clear should complete implementation of enhanced client protection arrangements for cash equities that provide materially equivalent protection to house/client omnibus account segregation.

Table 6: ASX Clear Recommendations

Principle	Rating	Recommendations
15. General business risk	Broadly observed	In order to fully observe Principle 15, ASX Clear should carry out plans to enhance its recovery plan in line with forthcoming CPSS-IOSCO guidance, and ensure that the capital it holds under Key Consideration 2 continues to be sufficient to fund the enhanced plan. As ASX Clear further develops its recovery plan, it should also review and integrate its recapitalisation processes with its broader recovery planning arrangements.
16. Custody and investment risks	Broadly observed	In order to fully observe Principle 16, ASX Clear should implement plans to further reduce the concentration of unsecured exposures to the large domestic banks under the ASXCC treasury investment policy. The Bank has opened a dialogue with ASX on the detail of its expectations for the credit and liquidity risk profile of ASXCC's investment portfolio, as well as the time frame over which these expectations should be met.
operational arrangements in light of the proposed establishment of resolution regime for FMIs in Australia. In particular, ASX Clear wil		In order to continue to observe Principle 17, ASX Clear will need to review its operational arrangements in light of the proposed establishment of a special resolution regime for FMIs in Australia. In particular, ASX Clear will need to ensure that its operations are organised in such a way as to facilitate effective crisis management actions under that regime once finalised.
22. Communication procedures and standards	Observed	ASX Clear is encouraged to implement proposals to move to internationally accepted messaging standards as part of a future renewal of the CHESS system.

Principle	Rating	Recommendations
3. Framework for the comprehensive management of risks	Broadly observed	In order to fully observe Principle 3, ASX Clear (Futures) should implement plans to enhance its recovery plan consistent with forthcoming CPSS-IOSCO guidance on recovery planning.
4. Credit risk	Broadly observed	In order to fully observe Principle 4, ASX Clear (Futures) should implement mechanisms consistent with forthcoming CPSS-IOSCO guidance on recovery planning that would fully address any uncovered credit losses and replenish financial resources following a participant default.
		ASX Clear (Futures) should also complete the full validation of its capital stress test model by external experts. ASX Clear (Futures) is encouraged to continually refine and enhance its reverse stress testing methodology and its integration into existing risk management processes.
6. Margin	Broadly observed	In order to fully observe Principle 6, ASX Clear (Futures) should complete the full validation of its SPAN and OTC IRS Historic VaR margin models by external experts.
		ASX Clear (Futures) is encouraged to carry out plans to further enhance its margin backtesting and sensitivity analysis to test coverage of actual static participant portfolios on a daily and periodic basis. ASX Clear (Futures) is also encouraged to continually refine and enhance its margin backtesting and sensitivity analysis methodologies and their integration into existing risk management processes.
7. Liquidity risk	Broadly observed	In order to fully observe Principle 7, ASX Clear (Futures) should implement mechanisms consistent with forthcoming CPSS-IOSCO guidance on recovery planning that would fully address any uncovered liquidity shortfall following a participant default. ASX Clear (Futures) should also complete the full validation of its liquidity stress test model by external experts.
		ASX Clear (Futures) is encouraged to continually refine and enhance its liquidity reverse stress testing methodology and its integration into existing risk management processes.
14. Segregation and portability	Observed ¹⁶	ASX Clear (Futures) should carry out plans to implement enhanced client segregation arrangements that support the lodgement of excess client collateral in order to meet requirements of the corresponding CCP Standard 13.
15. General business risk	Broadly observed	In order to fully observe Principle 15, ASX Clear (Futures) should carry out plans to enhance its recovery plan in line with forthcoming CPSS-IOSCO guidance, and ensure that the capital it holds under Key Consideration 2 continues to be sufficient to fund the enhanced plan. As ASX Clear (Futures) further develops its recovery plan, it should also review and integrate its recapitalisation processes with its broader recovery planning arrangements.
16. Custody and investment risks	Broadly observed	In order to fully observe Principle 16, ASX Clear (Futures) should implement plans to further reduce the concentration of unsecured exposures to the large domestic banks under the ASXCC treasury investment policy. The Bank has opened a dialogue with ASX on the detail of its expectations for the credit and liquidity risk profile of ASXCC's investment portfolio, as well as the time frame over which these expectations should be met.
17. Operational risk	Observed	In order to continue to observe Principle 17, ASX Clear (Futures) will need to review its operational arrangements in light of the proposed establishment of a special resolution regime for FMIs in Australia. In particular, ASX Clear (Futures) will need to ensure that its operations are organised in such a way as to facilitate effective crisis management actions under that regime once finalised.

Table 7: ASX Clear (Futures) Recommendations

¹⁶ As noted in Table 3, the Bank has assessed that ASX Clear (Futures) broadly observes the corresponding CCP Standard 13.

Table 8: ASX Settlement Recommendations

Principle	Rating	Recommendations
3. Framework for the comprehensive management of risks	Broadly observed	In order to fully observe Principle 3, ASX Settlement should implement plans to enhance its recovery plan consistent with forthcoming CPSS-IOSCO guidance on recovery planning.
9. Money settlements	Observed	ASX Settlement is encouraged to work with ASX Clear to introduce a framework to formally engage Payment Providers on changes to settlement processes in response to regulatory or market-driven change.
15. General business risk	Broadly observed	In order to fully observe Principle 15, ASX Settlement should carry out plans to enhance its recovery plan in line with forthcoming CPSS-IOSCO guidance, and ensure that the capital it holds under Key Consideration 2 continues to be sufficient to fund the enhanced plan. As ASX Settlement further develops its recovery plan, it should also review and integrate its recapitalisation processes with its broader recovery planning arrangements.
17. Operational risk	Observed	In order to continue to observe Principle 17, ASX Settlement will need to review its operational arrangements in light of the proposed establishment of a special resolution regime for FMIs in Australia. In particular, ASX Settlement will need to ensure that its operations are organised in such a way as to facilitate effective crisis management actions under that regime once finalised.
22. Communication procedures and standards	Observed	ASX Settlement is encouraged to implement proposals to move to internationally accepted messaging standards as part of a future renewal of the CHESS system.

Table 9: Austraclear Recommendations

Principle	Rating	Recommendations
3. Framework for the comprehensive management of risks	Broadly observed	In order to fully observe Principle 3, Austraclear should implement plans to enhance its recovery plan consistent with forthcoming CPSS-IOSCO guidance on recovery planning.
15. General business risk	Broadly observed	In order to fully observe Principle 15, Austraclear should carry out plans to enhance its recovery plan in line with forthcoming CPSS-IOSCO guidance, and ensure that the capital it holds under Key Consideration 2 continues to be sufficient to fund the enhanced plan. As Austraclear further develops its recovery plan, it should also review and integrate its recapitalisation processes with its broader recovery planning arrangements.
17. Operational risk	Observed	In order to continue to observe Principle 17, Austraclear will need to review its operational arrangements in light of the proposed establishment of a special resolution regime for FMIs in Australia. In particular, Austraclear will need to ensure that its operations are organised in such a way as to facilitate effective crisis management actions under that regime once finalised.

Appendix A: Details Supporting Assessment of Clearing and Settlement Facilities

This Appendix sets out detailed evidence relevant to each Key Consideration supporting ASIC's and the Bank's assessment of how well the four licensed CS facilities in the ASX Group – the two CCPs, ASX Clear and ASX Clear (Futures); and the two SSFs, ASX Settlement and Austraclear – observed the requirements of the Principles as at 30 June 2014. In their assessment, ASIC and the Bank have applied the rating system described in Section 3.

Part 7.3 of the Corporations Act divides responsibility for the oversight of CS facilities between ASIC and the Bank. Consistent with this division of responsibilities, ASIC and the Bank have agreed on the appropriate division of oversight responsibilities for each of the Principles between the two regulators, as set out in Table A1. This allocation of responsibilities was reflected in the process of completing the Assessment.

Table AT. Anocation of Responsibilities for Principles		
Principle	Responsible authority	
1. Legal basis		
2. Governance		
11. Central securities depositories		
13. Participant default rules and procedures		
14. Segregation and portability		
15. General business risk	loint rosponsibility of ASIC	
16. Custody and investment risks	Joint responsibility of ASIC and the Reserve Bank	
17. Operational risk		
18. Access and participation requirements		
19. Tiered participation arrangements		
20. Financial market infrastructure links		
23. Disclosure of rules, key procedures and market data		

Table A1: Allocation of Responsibilities for Principles

 Framework for the comprehensive management of risks 		
4. Credit risk		
5. Collateral		
6. Margin		
7. Liquidity risk	Reserve Bank	
8. Settlement finality		
9. Money settlements		
10. Physical deliveries		
12. Exchange-of-value settlement systems		
21. Efficiency and effectiveness		
22. Communication procedures and standards	ASIC	
24. Disclosure of market data by trade repositories	Not applicable to CCPs or SSFs	