

Draft Financial Stability Standards for Securities Settlement Facilities: Comparison to CPSS-IOSCO *Principles for Financial Market Infrastructures*

Introduction

This document provides a comparison between the draft *Financial Stability Standards for Securities Settlement Facilities* (SSF Standards), and the *Principles for Financial Market Infrastructures* (the Principles) issued by the Committee for Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO).¹ It is intended to assist readers of the draft SSF Standards in understanding where the Reserve Bank has added to and amended the text of the Principles and associated key considerations, by providing a broad indication of variations and changes between the two primary documents.

Disclaimer: An automated process was used in generating the comparison of the draft SSF Standards against the Principles and associated key considerations. While the Reserve Bank has taken due care in compiling this document, it is possible that the comparison contains errors, omissions and inaccuracies introduced through use of the automated process. This document should therefore be used as an aid only. Readers should refer directly to the text of the draft SSF Standards and the Principles in order to fully understand the requirements of and differences between the two.

Principle Standard 1: Legal basis

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

Key considerations

- 1.1 **A securities settlement facility should be a legal entity (whose primary activity is operating the securities settlement facility) and one which is separate from other entities which may expose it to risks unrelated to those arising from its function as a securities settlement facility.**
- 1.2 The legal basis should provide a high degree of certainty for each material aspect of **an FMI's securities settlement facility's** activities in all relevant jurisdictions.
- 1.3 **An FMI securities settlement facility** should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.
- 1.4 **An FMI securities settlement facility** should be able to articulate the legal basis for its activities to **the Reserve Bank and other** relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.
- 1.5 **An FMI securities settlement facility** should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the **FMI securities settlement facility** under such rules and procedures will not be voided, reversed, or subject to stays, **including in the event that the securities settlement facility enters into external administration or that one or more of its participants or a settlement bank defaults or is suspended.**

¹ The draft SSF Standards are available at: <<http://www.rba.gov.au/payments-system/clearing-settlement/consultations/201208-new-fin-stability-standards/index.html>>. CPSS-IOSCO (2012), *Principles for Financial Market Infrastructures*, CPSS Publications No 101, Bank for International Settlements, April, is available at: <<http://www.bis.org/publ/cpss101.htm>>.

- 1.6 ~~An FMI~~ an FMI securities settlement facility conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflicts of laws across jurisdictions. A securities settlement facility should provide the Reserve Bank with a legal opinion that demonstrates the enforceability of its rules and addresses relevant conflicts of law across the jurisdictions in which it operates. This should be reviewed on a periodic basis or when material changes occur that may have an impact on the opinion, and updated where appropriate.

Principle Standard 2: Governance

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

Key considerations

- 2.1 ~~An FMI~~ an FMI securities settlement facility should have objectives that place a high priority on the safety ~~and efficiency~~ of the ~~FMI~~ securities settlement facility and explicitly support the stability of the financial stability system and other relevant public interest considerations.
- 2.2 ~~An FMI~~ an FMI securities settlement facility should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, the Reserve Bank and other relevant authorities, participants, and, at a more general level, the public.
- 2.3 The roles and responsibilities of ~~an FMI's~~ an FMI's securities settlement facility's board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should regularly review both its overall performance and the performance of its individual board members ~~regularly~~.
- 2.4 The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).
- 2.5 The roles and responsibilities of management should be clearly specified. ~~An FMI's~~ an FMI's securities settlement facility's management should have the appropriate experience, ~~a~~ mix of skills, and ~~the~~ integrity necessary to effectively discharge their responsibilities for the operation and risk management of the ~~FMI~~ securities settlement facility. Compensation arrangements should be structured in such a way as to promote the soundness and effectiveness of risk management.
- 2.6 The board should establish a clear, documented risk-management framework that includes the ~~FMI's~~ securities settlement facility's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements should ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board, including through the maintenance of a separate and independent internal-audit function.
- 2.7 A securities settlement facility's operations, risk-management processes, internal control mechanisms and accounts should be subject to internal audit and periodic external independent expert review. Internal audits should be performed, at a minimum, on an annual basis. The outcome of internal audits and external reviews should be notified to the Reserve Bank and other relevant authorities.
- 2.8 The board should ensure that the ~~FMI's~~ securities settlement facility's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Governance arrangements should provide for consultation and stakeholder engagement through appropriate fora on operational arrangements, risk controls and default-management rules and procedures. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.
- 2.9 A securities settlement facility that is part of a group of companies should take into account any implications of the group structure and activities for its own governance arrangements, including whether it has the necessary level of independence of decision making and management to meet its regulatory obligations as a distinct legal entity, and whether such independence could be compromised by the group structure or by

board members also being members of the board of other entities in the same group. In particular, such a securities settlement facility should consider specific procedures for preventing and managing conflicts of interest, including with respect to intra-group outsourcing arrangements.

PrincipleStandard 3: Framework for the comprehensive management of risks

An-FMIA securities settlement facility should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.

Key considerations

- 3.1** An-FMIA securities settlement facility should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI:securities settlement facility. This risk-management frameworks should be subject to periodic review.
- 3.2** A securities settlement facility should ensure that financial and other obligations imposed on participants under its risk-management framework are proportional to the scale and nature of individual participants' activities.
- 3.3** An-FMIA securities settlement facility should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI:securities settlement facility.
- 3.4** An-FMIA securities settlement facility should regularly review the material risks it bears from and poses to other entities (such as other FMIs, money settlement agents;settlement banks, liquidity providers, and service providers) as a result of interdependencies, and develop appropriate risk-management tools to address these risks.
- 3.5** An-FMIA securities settlement facility should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An-FMIA securities settlement facility should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an-FMIA securities settlement facility should also provide relevant authorities with the information needed for purposes of resolution planning.

PrincipleStandard 4: Credit risk [Key considerations 4, 5 and 6 not incorporated]

An-FMIA securities settlement facility should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. An-FMIA securities settlement facility should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.

Key considerations

- 4.1** An-FMIA securities settlement facility should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposures may arise from current exposures, potential future exposures, or both.
- 4.2** An-FMIA securities settlement facility should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-management tools to control these risks. To assist in this process, a securities settlement facility should ensure it has mechanisms in place to calculate exposures to participants in real time, and to receive and review timely and accurate information on participants' credit standing.

- 4.3 A securities settlement facility should have the authority to impose activity restrictions or additional credit risk controls on a participant in situations where the securities settlement facility determines that the participant's credit standing may be in doubt.
- 4.4 A payment system or SSSA securities settlement facility should cover its current and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources (see Principle SSF Standard 5 on collateral). In the case of a DNS payment system or DNS SSS securities settlement facility in which there is no settlement guarantee, but where its participants face credit exposures arising from its payment, clearing, and settlement processes, such an FMI the facility should maintain, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.
- 4.5 An FMIA securities settlement facility should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI securities settlement facility. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMIA securities settlement facility may borrow from liquidity providers. These rules and procedures should also indicate the FMI's securities settlement facility's process to replenish any financial resources that the FMI securities settlement facility may employ during a stress event, so that the FMI securities settlement facility can continue to operate in a safe and sound manner.

Principle Standard 5: Collateral

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

Key considerations

- 5.1 An FMIA securities settlement facility should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.
- 5.2 In determining its collateral policies, a securities settlement facility should take into consideration the broad effect of these policies on the market. As part of this, a securities settlement facility should consider allowing the use of collateral commonly accepted in the relevant jurisdictions in which it operates.
- 5.3 An FMIA securities settlement facility should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.
- 5.4 In order to reduce the need for procyclical adjustments, an FMIA securities settlement facility should establish stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the extent practicable and prudent.
- 5.5 An FMIA securities settlement facility should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.
- 5.6 An FMIA securities settlement facility that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.
- 5.7 An FMIA securities settlement facility should use a collateral management system that is well-designed and operationally flexible.

[Principle 6 not directly relevant to SSFs]

Principle Standard 6: Liquidity risk [Key Consideration 4 not incorporated]

An FMIA securities settlement facility should effectively measure, monitor, and manage its liquidity risk. An FMIA securities settlement facility should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the

participant and its affiliates that would generate the largest aggregate liquidity obligation for the FM securities settlement facility in extreme but plausible market conditions.

Key considerations

- 6.1** An FMIA securities settlement facility should have a robust framework to manage its liquidity risks from its participants, commercial bank money settlement agents~~settlement banks~~, nostro agents, custodian ~~banks~~, liquidity providers, and other entities.
- 6.2** An FMIA securities settlement facility should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.
- 6.3** ~~A payment system or SSSA securities settlement facility, including one employing a DNS mechanism,~~ should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.
- 6.4** For the purpose of meeting its minimum liquid resource requirement, ~~an FMIA securities settlement facility's~~ qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If ~~an FMIA securities settlement facility~~ has access to routine credit at the central bank of issue, the FM securities settlement facility may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.
- 6.5** An FMIA securities settlement facility may supplement its qualifying liquid resources with other forms of liquid resources. If the FM securities settlement facility does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if ~~an FMIA securities settlement facility~~ does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMIA securities settlement facility should not assume the availability of emergency central bank credit as a part of its liquidity plan.
- 6.6** An FMIA securities settlement facility should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FM securities settlement facility or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMIA securities settlement facility should regularly test its procedures for accessing its liquid resources at a liquidity provider.
- 6.7** An FMIA securities settlement facility with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.
- 6.8** An FMIA securities settlement facility should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMIA securities settlement facility should have clear procedures to report the results of its stress tests to appropriate decision makers at the FM securities settlement facility and to use these results to evaluate the adequacy of, and adjust, its liquidity risk-management framework. In conducting stress testing, ~~an FMIA securities settlement facility~~ should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time

horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI securities settlement facility, include all entities that might pose material liquidity risks to the FMI securities settlement facility (such as commercial bank money settlement agents settlement banks, nostro agents, custodian banks custodians, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI securities settlement facility should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.

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

Principle 8 Standard 7: Settlement finality

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

Key considerations

- 7.1** An FMI's A securities settlement facility's rules and procedures should clearly define the point at which settlement is final.
- 7.2** An FMI securities settlement facility should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSSA securities settlement facility should consider adopting RTGS or multiple-batch processing during the settlement day.
- 7.3** An FMI securities settlement facility should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.

Principle 9 Standard 8: Money settlements

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

Key considerations

- 8.1** An FMI securities settlement facility should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.
- 8.2** If central bank money is not used, an FMI securities settlement facility should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.
- 8.3** If an FMI's a securities settlement facility settles in commercial bank money, or its participants effect settlements using commercial settlement banks, it should monitor, manage, and limit ~~its~~ credit and liquidity risks arising from the commercial bank money settlement agents and commercial settlement banks. In particular, an FMI securities settlement facility should establish and monitor adherence to strict criteria for commercial banks that play an integral role in the settlement process, its settlement banks that take taking account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI securities settlement facility should also monitor and manage the concentration of its and its participants' credit and liquidity exposures to ~~its~~ commercial bank money settlement agents and commercial settlement banks.

- 8.4** ~~If an FMI~~If a securities settlement facility conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.
- 8.5** ~~An FMI's~~A securities settlement facility's legal agreements with any commercial bank money settlement agents, and participants' agreements with commercial settlement banks, should state clearly when transfers on the books of the relevant commercial bank~~individual settlement banks~~ are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the ~~FMI~~securities settlement facility and its participants to manage credit and liquidity risks.

[Principle 10 not directly relevant to SSFs]

Principle 11Standard 9: Central securities depositories

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

Key considerations

- 9.1** ~~A CSD~~A securities settlement facility operating a central securities depository should have appropriate rules, procedures, and controls, including robust accounting practices, to safeguard the rights of securities issuers and holders, prevent the unauthorised creation or deletion of securities, and conduct periodic and at least daily reconciliation of securities issues it maintains. These rules and procedures should:
- (a) identify the type of title or interest held by participants for particular securities, to the extent such title or interest is recognised by the facility's rules and procedures;
 - (b) clearly identify the way in which the transfer of (or any other forms of dealing with) securities and related payments can be effected through the facility; and
 - (c) ensure that, to the extent permissible by law, the creditors of the operator of the securities settlement facility have no claim over securities or other assets held, deposited or registered by participants in the facility.
- 9.2** ~~A CSD~~A securities settlement facility operating a central securities depository should prohibit overdrafts and debit balances in securities accounts.
- 9.3** ~~A CSD~~A securities settlement facility operating a central securities depository should maintain securities in an immobilised or dematerialised form for their transfer by book entry. Where appropriate, a ~~CSD~~securities settlement facility operating a central securities depository should provide incentives to immobilise or dematerialise securities.
- 9.4** ~~A CSD~~A securities settlement facility operating a central securities depository should protect assets against custody risk through appropriate rules and procedures consistent with its legal framework.
- 9.5** ~~A CSD~~A securities settlement facility operating a central securities depository should employ a robust system that ensures segregation between ~~the CSD's~~its own assets and the securities of its participants, and segregation among the securities of participants. Where supported by the legal framework, ~~the CSD~~a securities settlement facility operating a central securities depository should also support operationally the segregation of securities belonging to a participant's customers on the participant's books and facilitate the transfer of customer holdings.
- 9.6** ~~A CSD~~A securities settlement facility operating a central securities depository should identify, measure, monitor, and manage its risks from other activities that it may perform; additional tools may be necessary in order to address these risks.

Principle 12Standard 10: Exchange-of-value settlement systems

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

Key consideration

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

10.2 Where individual trade values are large, a securities settlement facility that is an exchange-of-value settlement system should eliminate principal risk by providing for contemporaneous real-time gross settlement of linked obligations. However, where trade values are small, a securities settlement facility that is an exchange-of-value settlement system may alternatively provide for contemporaneous settlement of linked obligations in a multilateral net batch. Only where trade values are small, and where operational requirements necessitate, may linked obligations settle non-contemporaneously.

Principle 13 Standard 11: Participant-default rules and procedures

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

Key considerations

11.1 An FMI if a securities settlement facility should have default rules and procedures that enable the FMI if a securities settlement facility to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default. A securities settlement facility should ensure that financial and other obligations created for non-defaulting participants in the event of a participant default are proportional to the scale and nature of individual participants' activities.

11.2 An FMI if a securities settlement facility should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules. This requires that the securities settlement facility should:

- (a) require its participants to inform it immediately if they:
 - (i) become subject to, or aware of the likelihood of external administration, or have reasonable grounds for suspecting that they will become subject to external administration; or
 - (ii) have breached, or are likely to breach, a risk-control requirement of the securities settlement facility.
- (b) allow for the cancellation or suspension of a participant or a provider of cash settlement assets from the securities settlement facility:
 - (i) if the participant or provider of cash settlement assets is in external administration; or
 - (ii) if there is a reasonable suspicion that the participant or provider of cash settlement assets may become subject to external administration; and
- (c) allow participant users of a cash settlement provider which becomes subject to external administration, or which is reasonably likely to become subject to external administration, to quickly nominate a new commercial settlement bank.

11.3 An FMI if a securities settlement system should publicly disclose key aspects of its default rules and procedures. Where a securities settlement facility settles via a multilateral net batch, arrangements for dealing with any unsettled trades of a defaulting participant that are not guaranteed by a central counterparty, such as reconstituting the multilateral net batch excluding the settlement obligations of the defaulting participant, should be clear to all participants and should be capable of being executed in a timely manner.

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

11.5 ~~A securities settlement facility should demonstrate that its default-management procedures take appropriate account of interests in relevant jurisdictions, and in particular any implications for pricing, liquidity and stability in relevant financial markets.~~

[Principle 14 not directly relevant to SSFs]

Principle 15 Standard 12: General business risk

~~An FMI's securities settlement facility~~ should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Key considerations

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

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

12.3 ~~An FMI's securities settlement facility~~ should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, ~~an FMI's securities settlement facility~~ should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under ~~the financial resources principles: SSF Standards 4 and 6~~. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.

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

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

Principle 16 Standard 13: Custody and investment risks

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

Key considerations

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

- 13.2 An FMI's securities settlement facility should have prompt access to its assets and the assets provided by participants, when required.
- 13.3 An FMI's securities settlement facility should evaluate and understand its exposures to its custodian banks/custodians, taking into account the full scope of its relationships with each.
- 13.4 An FMI's securities settlement facility's investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.

Principle 17/Standard 14: Operational risk [Key considerations 4 and 5 incorporated into Standard 14.3]

An FMI's securities settlement facility should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's securities settlement facility's obligations, including in the event of a wide-scale or major disruption.

Key considerations

Identifying and managing operational risk

- 14.1 An FMI's securities settlement facility should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.
- 14.2 An FMI's securities settlement facility's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's securities settlement facility's operational risk-management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.
- 14.3 An FMI's securities settlement facility should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives. These policies include, but are not limited to, having: exacting targets for system availability; scalable capacity adequate to handle increasing stress volumes; and comprehensive physical information security policies that address all potential vulnerabilities and threats.
- 14.4 A securities settlement facility should ensure that it can reliably access and utilise well-trained and competent personnel, as well as technical and other resources. These arrangements should be designed to ensure that all key systems are operated securely and reliably, including in circumstances where a related body becomes subject to external administration.
- 14.5 An FMI's securities settlement facility should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. A securities settlement facility should inform the Reserve Bank of any critical dependencies on utilities or service providers. In addition, an FMI's securities settlement facility should identify, monitor, and manage the risks its operations might pose to its participants and other FMIs. Where a securities settlement facility operates in multiple jurisdictions, managing these risks may require it to provide adequate operational support to participants during the market hours of each relevant jurisdiction.
- 14.6 A participant of a securities settlement facility should have complementary business-continuity arrangements that are appropriate to the nature and size of the business undertaken by that participant. The securities settlement facility's rules and procedures should clearly specify operational requirements for participants.

Business-continuity arrangements

- 14.7 ~~An FMI~~ securities settlement facility should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. ~~The~~ Business-continuity arrangements should provide appropriate redundancy of critical systems and appropriate mitigants for data loss. The business-continuity plan should be designed to enable the ~~FMI~~ securities settlement facility to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The ~~FMI~~ securities settlement facility should regularly test these arrangements.
- 14.8 A securities settlement facility should consider making contingency testing compulsory for the largest participants to ensure they are operationally reliable and have in place tested contingency arrangements to deal with a range of operational stress scenarios that may include operational failure of, or impaired access to, the securities settlement facility.

Outsourcing

- 14.9 A securities settlement facility that relies upon or outsources some of its operations to a related body, another FMI or a third-party service provider (for example, data processing and information systems management) should ensure that those operations meet the resilience, security and operational-performance requirements of these SSF Standards and equivalent requirements of any other jurisdictions in which it operates.
- 14.10 A securities settlement facility should consult with the Reserve Bank prior to entering into an outsourcing arrangement for critical functions. Any such arrangement should provide rights of access to the Reserve Bank to obtain sufficient information regarding the outsourcing provider's operation of the outsourced function.
- 14.11 A securities settlement facility should organise its operations, including any outsourcing arrangements, in such a way as to ensure continuity of service in a crisis and to facilitate effective crisis-management actions by the Reserve Bank or other relevant authorities. These arrangements should be commensurate with the nature and scale of the securities settlement facility's operations.

Principle 18 Standard 15: Access and participation requirements

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

Key considerations

- 15.1 ~~An FMI~~ securities settlement facility should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.
- 15.2 ~~An FMI's~~ A securities settlement facility's participation requirements should be justified in terms of the safety ~~and efficiency~~ of the ~~FMI~~ securities settlement facility and the markets it serves, be tailored to and commensurate with the ~~FMI's~~ securities settlement facility's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk-control standards, ~~an FMI~~ securities settlement facility should endeavour to set requirements that have the least-restrictive impact on access that circumstances permit.
- 15.3 ~~An FMI~~ securities settlement facility should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.

Principle 19 Standard 16: Tiered participation arrangements

~~An FMI~~ securities settlement facility should identify, monitor, and manage the material risks to the ~~FMI~~ securities settlement facility arising from tiered participation arrangements.

Key considerations

- 16.1 ~~An FMI~~ an FMI securities settlement facility should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the ~~FMI~~securities settlement facility arising from such tiered participation arrangements.
- 16.2 ~~An FMI~~ an FMI securities settlement facility should identify material dependencies between direct and indirect participants that might affect the ~~FMI~~securities settlement facility.
- 16.3 ~~An FMI~~ an FMI securities settlement facility should identify indirect participants responsible for a significant proportion of transactions processed by the ~~FMI~~securities settlement facility and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the ~~FMI~~securities settlement facility in order to manage the risks arising from these transactions.
- 16.4 ~~An FMI~~ an FMI securities settlement facility should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.

Principle 20 Standard 17: FMI links [Key considerations 5, 7, 8, and 9 not incorporated]

~~An FMI~~ an FMI securities settlement facility that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.

Key considerations

- 17.1 Before entering into a link arrangement, and on an ongoing basis once the link is established, ~~an FMI~~ an FMI securities settlement facility should identify, monitor, and manage all potential sources of risk arising from the link arrangement. Link arrangements should be designed such that ~~each FMI~~ the securities settlement facility is able to ~~observe the other principles in this report~~ comply with these SSF Standards.
- 17.2 A link should have a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the securities settlement facility and other FMIs involved in the link.
- 17.3 Where relevant to its operations in Australia, a securities settlement facility should consult with the Reserve Bank prior to entering into a link arrangement with another FMI.
- 17.4 ~~Linked CSDs~~ A securities settlement facility operating a central securities depository that links to another central securities depository should measure, monitor, and manage the credit and liquidity risks arising from ~~each other~~ such links. Any credit ~~extensions between CSDs~~ extended to the linked central securities depository should be covered fully with high-quality collateral and be subject to limits.
- 17.5 Provisional transfers of securities between ~~linked CSDs~~ a securities settlement facility operating a central securities depository and another central securities depository should be prohibited or, at a minimum, the retransfer of provisionally transferred securities should be prohibited prior to the transfer becoming final.
- 17.6 ~~An investor CSD~~ A securities settlement facility operating an investor central securities depository that uses an intermediary to operate a link with an issuer ~~CSD~~ central securities depository should measure, monitor, and manage the additional risks (including custody, credit, legal, and operational risks) arising from the use of the intermediary.

[Principle 21 not directly relevant to financial stability]

[Principle 22 not directly relevant to financial stability]

Principle 23 Standard 18: Disclosure of rules, key policies and procedures, and market data [Key consideration 4 not incorporated]

~~An FMI~~ an FMI securities settlement facility should have clear and comprehensive rules, policies and procedures and should provide sufficient information and data to enable participants to have an accurate understanding of the risks, ~~fees, and other material costs~~ they incur by participating in the ~~FMI~~ securities settlement facility. All relevant rules and key policies and procedures should be publicly disclosed.

Key considerations

- 18.1 An FMIA securities settlement facility should adopt clear and comprehensive rules, policies and procedures that are fully disclosed to participants. Relevant rules and key policies and procedures should also be publicly disclosed (including specific requirements relating to SSF Standards 1.4, 2.2, 11.3, 13.4, 15.2 and 15.3).
- 18.2 An FMIA securities settlement facility should disclose clear descriptions of the system's design and operations, as well as the FMI's securities settlement facility's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI securities settlement facility (see SSF Standards 2.8 and 8.5).
- 18.3 An FMIA securities settlement facility should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's securities settlement facility's rules, policies and procedures and the risks they face from participating in the FMI securities settlement facility.
- 18.4 An FMIA securities settlement facility should complete regularly and disclose publicly responses to the CPSS-IOSCO *Disclosure Framework for Financial Market Infrastructures*. An FMIA securities settlement facility also should, at a minimum, disclose basic data on transaction volumes risk and values activity data, as directed by the Reserve Bank from time to time.

[Principle 24 not directly relevant to SSFs]

Standard 19: Regulatory reporting

A securities settlement facility should inform the Reserve Bank in a timely manner of any events or changes to its operations or circumstances that may materially impact its management of risks or ability to continue operations. A securities settlement facility should also regularly provide information to the Reserve Bank regarding its financial position and risk controls on a timely basis.

- 19.1. A securities settlement facility should inform the Reserve Bank as soon as reasonably practicable if:
- a) it breaches, or has reason to believe that it will breach:
 - (i) an SSF Standard; or
 - (ii) its broader legislative obligation to do, to the extent that it is reasonably practicable to do so, all things necessary to reduce systemic risk;
 - b) it becomes subject to external administration, or has reasonable grounds for suspecting that it will become subject to external administration;
 - c) a related body to the securities settlement facility becomes subject to external administration, or if the securities settlement facility has reasonable grounds for suspecting that a related body will become subject to external administration;
 - d) a participant becomes subject to external administration, or if the securities settlement facility has reasonable grounds for suspecting that a participant will become subject to external administration;
 - e) a participant fails to meet its obligations under the securities settlement facility's risk-control requirements or has its participation suspended or cancelled because of a failure to meet the securities settlement facility's risk-control requirements;
 - f) it fails to enforce any of its own risk-control requirements;
 - g) it plans to make significant changes to its risk-control requirements or its rules, policies and procedures;
 - h) it or a service it relies on from a third party or outsourced provider experiences a significant operational disruption, including providing the conclusions of its post-incident review;
 - i) any internal audits or independent external expert reviews are undertaken of its operations, risk-management processes or internal control mechanisms;
 - j) its operations or risk controls are affected, or are likely to be affected, by distress in financial markets;
 - k) it has critical dependencies on utilities or service providers, including providing a description of the dependency and an update if the nature of this relationship changes;

- l) it proposes to grant a security interest over its assets (other than a lien, right of retention or statutory charge that arises in the ordinary course of business);
- m) it proposes to incur or permit to subsist any loans from participants or members unless such loans are subordinated to the claims of all other creditors of the securities settlement facility; or
- n) any other matter arises which has or is likely to have a significant impact on its risk-control arrangements (see also SSF Standards 1.6, 14.10 and 17.3).

19.2. A securities settlement facility should also provide to the Reserve Bank, on a timely basis:

- a) audited annual accounts;
- b) management accounts on a regular basis, and at least quarterly;
- c) risk-management reports on a regular basis, and at least quarterly;
- d) periodic activity, risk and operational data, as agreed with the Reserve Bank; and
- e) any other information as specified by the Reserve Bank from time to time.