

Assessment of ASX Clearing and Settlement Facilities

24 September 2025

© Reserve Bank of Australia 2025

For the full copyright and disclaimer provisions that apply to this publication,
see <https://www.rba.gov.au/copyright>.

ISSN 2201-1226 (Online)

Contents

Executive Summary	3
1. Overview of Ratings, Recommendations and Areas of Supervisory Focus	5
2. Developments	8
Appendix A: Summary of Progress 2024/25	20

Executive Summary

The Reserve Bank of Australia (RBA) has carried out its annual assessment of the ASX clearing and settlement (CS) facilities over the period 1 July 2024 to 30 June 2025. The assessment covers the four licensed CS facilities in the ASX Group (ASX): two central counterparties (CCPs) – ASX Clear and ASX Clear (Futures); and two securities settlement facilities (SSFs) – ASX Settlement and Austraclear. The RBA has assessed the CS facilities' compliance with applicable Financial Stability Standards (FSS), as well as the CS facilities' general obligation to do all other things necessary to reduce systemic risk.

ASX remains under close regulatory scrutiny due to ongoing concerns about its operational resilience, governance and ability to manage critical infrastructure amid competing priorities. ASX has made some progress, for instance, in moving towards the Release 1 delivery target for the CHESS Replacement program. However, recent incidents and resource constraints continue to raise serious questions about ASX's capacity to deliver the level of resilience required for a provider of critical market infrastructure.

The ASX CS facilities *observe* or *broadly observe* many of the FSS. There are five FSS for which some or all ASX CS facilities were rated as either *partly observed* or *not observed*: Operational Risk, Framework for Comprehensive Management of Risks, Governance, Credit Risk and Settlement Finality.

On 20 December 2024, a memory allocation issue led to the CHESS batch failing to settle (the December CHESS incident). This incident reinforced concerns about risk management at ASX and underscored that there is still substantial work to be done. In response to some of the issues identified, the RBA downgraded the rating for operational risk for ASX Clear and ASX Settlement to *not observed*. In this assessment, the RBA has also downgraded the rating for ASX Settlement against the Settlement Finality Standard to *partly observed*.

ASX's initial response to the recommendations from the out-of-cycle assessment fell well short of RBA expectations. This raised further questions as to whether interaction between the ASX executive and boards is effective and whether board scrutiny and challenge is being appropriately reflected in actions taken by the executive. Effective operational risk management is essential. ASX must move quickly towards best practice, at all levels, for an operator of critical market infrastructure.

The ASX CCPs' ratings against the Credit Risk Standard have been downgraded to *partly observed*. The RBA was disappointed by the number of issues identified with ASX's financial risk models over the assessment period. The RBA expects ASX to prioritise improving its model validation and control testing frameworks, particularly its data and reporting controls.

It is a high priority that ASX remediate immediate issues related to the resilience of the current CHESS and safely deliver the CHESS Replacement project. However, the RBA also expects ASX to rapidly develop its broader risk management approach to ensure the resilience of all CS facilities. This will likely require both an evolution of ASX's governance and risk management frameworks and steps to manage the evolving risk environment in areas such as vendor management, legacy technology systems and cyber resilience. It is crucial that ASX is adequately resourced to deliver on the required change while also ensuring the continuity of its critical services.

1. Overview of Ratings, Recommendations and Areas of Supervisory Focus

The RBA's assessment of the ASX CCPs and SSFs has been undertaken against the RBA's *Financial Stability Standards for Central Counterparties* and *Financial Stability Standards for Securities Settlement Facilities*,¹ as well as the CS facilities' more general obligation to do all other things necessary to reduce systemic risk. The RBA has conducted this assessment in accordance with its *Approach to Supervising and Assessing Clearing and Settlement Facility Licensees*.²

1.1 Ratings

The ratings for the current assessment period are set out in Table 1 below.

Table 1: 2025 Ratings of FSS Observance^(a)

Standard	ASX Clear	ASX Clear (Futures)	ASX Settlement	Austraclear
Legal Basis (CCP/SSF Standard 1)	Observed	Observed	Observed	Observed
Governance (CCP/SSF 2)	Partly observed	Partly observed	Partly observed	Partly observed
Framework for the Comprehensive Management of Risks (CCP/SSF 3)	Partly observed	Partly observed	Partly observed	Partly observed
Credit Risk (CCP/SSF 4)	Partly observed (↓)	Partly observed (↓)	N/A	N/A
Collateral (CCP/SSF 5)	Broadly observed (↓)	Broadly observed (↓)	N/A	N/A
Margin (CCP 6)	Broadly observed	Broadly observed	N/A	N/A
Liquidity Risk (CCP 7, SSF 6)	Broadly observed	Broadly observed	Observed	Observed

1 For the current standards and further information about them, see RBA (2024), '[Clearing and Settlement Facilities: Financial Stability Standards](#)'.

2 See RBA (2023), '[The Reserve Bank's Approach to Supervising and Assessing Clearing and Settlement Facility Licensees](#)', 15 December.

Standard	ASX Clear	ASX Clear (Futures)	ASX Settlement	Austraclear
Settlement Finality (CCP 8, SSF 7)	Observed	Observed	Partly observed (↓)	Broadly observed (↓)
Money Settlements (CCP 9, SSF 8)	Observed	Observed	Observed	Observed
Central Securities Depositories (SSF 9)	N/A	N/A	Observed	Observed
Physical Deliveries (CCP 10)	N/A	Observed	N/A	N/A
Exchange-of-value Settlements/Settlement Systems (CCP 11, SSF 10)	Observed	Observed	Observed	Observed
Participant Default Rules and Procedures (CCP 12, SSF 11)	Observed	Observed	Observed	Observed
Segregation and Portability (CCP 13)	Broadly observed	Broadly observed	N/A	N/A
General Business Risk (CCP 14, SSF 12)	Observed (↑)	Observed (↑)	Observed (↑)	Observed (↑)
Custody and Investment Risks (CCP 15, SSF 13)	Observed	Observed	Observed	Observed
Operational Risk (CCP 16, SSF 14)	Not observed (↓)	Partly observed	Not observed (↓)	Partly observed
Access and Participation Requirements (CCP 17, SSF 15)	Observed	Observed	Observed	Observed
Tiered Participation Arrangements (CCP 18, SSF 16)	Broadly observed	Broadly observed	Observed	Observed
FMI Links (CCP 19, SSF 17)	Observed	Observed	Observed	Observed
Disclosure of Rules, Key Policies and Procedures, and Market Data (CCP 20, SSF 18)	Observed	Observed	Observed	Observed
Regulatory Reporting (CCP 21, SSF 19)	Broadly observed	Broadly observed	Broadly observed	Broadly observed

(a) Arrows in brackets indicate the ratings change from the RBA's 2024 assessment: an up arrow indicates an upgrade and a down arrow indicates a downgrade. 'N/A' means that the RBA has determined that the standard is not applicable, or an equivalent standard does not exist for the type of facility (e.g. for CCP Standard 6: Margin, there is no equivalent SSF Standard). Downgrades to ASX Clear and ASX Settlement on the operational risk standard occurred out-of-cycle in March 2025.

1.2 Recommendations

There are several recommendations arising from the assessment that the RBA requires ASX to prioritise:

- ASX should fully implement the plans to uplift resourcing and contingency arrangements for the existing CHES system, including required upskilling of newly hired engineers and third-party support staff.
- ASX should ensure it has sufficient resources, assurance and reporting to effectively and meaningfully progress its risk transformation plan and risk culture initiatives.
- ASX should improve its model validation and control testing frameworks for financial risk models, in particular its data and reporting controls, to ensure that data processing, and the outputs generated, are of high quality.

Over the next year, the RBA will also be particularly focused on ASX's governance, its approach to operational resilience across the CS facilities and progress against its cyber strategy.

2. Developments

The ASX Group remains under heightened regulatory scrutiny due to its central role in Australia's financial markets and ongoing concerns regarding its ability to deliver stable, secure and resilient critical infrastructure. Previous assessments highlighted concerns in relation to governance, operational risk and risk culture.

ASX has made some progress – for example, in moving towards the CHES Replacement Release 1 delivery target of April 2026 – but persistent challenges remain. ASX continues to carry a heavy project load and key resources are simultaneously supporting the CHES Replacement, maintaining legacy systems and contributing to broader uplift programs. The regulators remain concerned about the Group's capacity to manage these competing priorities effectively.

The December CHES incident also exposed serious deficiencies in ASX's incident response capabilities, governance and accountability. During the incident, ASX was slow to recognise the potential seriousness of the issue, lacked clear leadership during the response period and failed to deploy adequate resources to address the issue. Subsequent developments, discussed in this assessment, demonstrate further weaknesses in risk management, communication with regulators and internal prioritisation. Although ASX has announced structural changes and a shift in its operating model to improve efficiency, questions remain around its ability to sustain critical operations.

This assessment reviews ASX's observance of the FSS, including ASX's plans to address the systemic issues outlined above, the effectiveness of its remediation efforts to date, and its readiness to meet threats to its critical operations if and when they arise.

2.1 Operational resilience

The importance of effective management of operational risk is increasingly recognised, against a backdrop of rapid technological innovation, ageing legacy systems, more frequent periods of market volatility and increased cyber threats. In this context and given the serious operational concerns raised by the December CHES incident, the RBA has maintained a rating of *not observed* for ASX Clear and ASX Settlement and *partly observed* for ASX Clear (Futures) and Austraclear for the Operational Risk Standard. ASX has made progress in some areas of operational risk management during the assessment period, but significant work is still required for it to meet expectations for an operator of critical market infrastructure. This includes work to remediate issues related to current CHES. More broadly, the RBA expects ASX to demonstrate across all key systems how it meets FSS requirements that systems are highly reliable and adequate business continuity arrangements are in place.

2.1.1 CHESS

December 2024 CHESS incident

This incident was the result of a virtual memory capacity limit on the number of settlement participants involved in a CHESS settlement batch. It was triggered by the resignation of a settlement participant. When ASX removed this participant from the CHESS system, the memory allocation for settlement participants was substantially reduced. This was due to a calculation error in the code, which used outdated logic to count the total number of participants. The incident reinforced concerns about ASX's risk management framework, approach to change management, and governance arrangements, expressed in the 2024 assessment.³ Two pressing concerns that arose during the incident were an insufficient level of resourcing to identify and resolve the issue and a lack of recognised and tested contingency arrangements for failure at each stage of the CHESS settlement process.

Following the incident, the RBA downgraded ASX Clear and ASX Settlement to *not observed* on the Operational Risk Standard and made recommendations related to resourcing and contingency arrangements for the current CHESS system.⁴ These included recommendations that specified information be provided to the RBA by 30 April 2025. The information provided in response to those recommendations was inadequate, as discussed further below. Of particular concern was ASX's assertion that resourcing of the CHESS technical teams was sufficient for business-as-usual (BAU) and planned change activities, and only stretched in the event of a multiday incident. A key requirement of the FSS is that providers of critical financial market infrastructure are appropriately resourced to ensure that all key systems are operated securely and reliably *in all circumstances*.⁵ Currently, the RBA is concerned that key subject matter experts are over utilised, given concurrent demands to support the current CHESS system and deliver the CHESS Replacement project. Employee surveys indicate that staff engagement and morale are low, including in the teams responsible for supporting and replacing CHESS. The RBA is concerned that it may be difficult to improve these conditions and deliver committed outcomes if key staff are stretched.

In accordance with further information requests from the RBA, ASX ultimately provided a plan to improve its contingency arrangements. The RBA expects this plan to be implemented in a diligent and timely manner. ASX is also expanding its third-party support arrangements for CHESS and finalised a statement of work for these arrangements in early September 2025.

April 2025 HIN issue

Concerns about the current CHESS system were underscored by another issue that surfaced during the April 2025 period of market volatility associated with US tariff announcements. High trading volumes on 7 April, alongside a change in a participant's systems, led to the possibility that ASX could hit capacity

3 See RBA (2024), '[Assessment of ASX Clearing and Settlement Facilities](#)', September.

4 See RBA (2025), '[Out-of-cycle Assessment of ASX Clear Pty Ltd and ASX Settlement Pty Ltd: Operational Risk Standard](#)', March.

5 See CCP Standard 16.4 and SSF Standard 14.4.

constraints related to the number of unique holder identification numbers (HINs) in a CHES settlement batch. As a result, there was a risk that trades executed on 7 April could fail to settle two days later. The underlying problem was very similar to the issue that caused the December CHES incident, which was also a 'global section' memory limit.

ASX's handling of this issue reinforced long-held concerns about its approach to managing operational risk. In particular, ASX had known about the capacity limits problem since the end of January 2025. It was therefore known that there was a risk that settlement might be disrupted if the capacity limits were exceeded. Despite this knowledge, remediation was not considered until trade volumes reached a level that posed a significant, immediate risk of exceeding the capacity limit. ASX also conceded that it could have communicated better with the regulators about the issue; the existence of the problem was only reported to the RBA the day before the potential impact on settlement.

ASX has been investigating other potential capacity limits in CHES as part of its broader response to the December incident. This includes an IBM-led technical review of CHES, which ASIC directed ASX to complete as part of the joint regulator response to the incident.

Recommendation: By June 2026, ASX should demonstrate how it has enhanced resourcing for current CHES, to ensure it can reliably access and utilise well-trained and competent personnel, as well as technical and other resources. This should include required upskilling of newly hired engineers and third-party support staff.

Recommendation: By June 2026, ASX should demonstrate how it has improved contingency arrangements for current CHES, designed to enable resumption of operations within two hours following a disruptive event.

CHES Replacement project

The CHES Replacement project is critical to ASX's long-term management of operational risk. Its successful delivery will allow ASX to move away from the current CHES system, which is aged and increasingly difficult to maintain. Delivering this project is, however, complex and itself involves significant operational challenges. One key interdependency is that some ASX staff who support current CHES are also involved in change activities related to CHES Replacement. Accordingly, ASX needs to carefully manage resourcing across business-as-usual and change activities to ensure that the current CHES system is appropriately maintained and CHES Replacement is delivered in a safe and timely manner.

ASX assesses that the project is broadly on track and the RBA does not currently have major concerns about its status. That said, there have been some testing delays in recent months, driven by a higher-than-expected number of code defects. These defects could delay Release 1, which focuses on the clearing component of CHES, if they are not remediated over the coming months. Release 1 is currently scheduled to go live in April 2026. As the date for Release 1 approaches, the RBA and ASIC will be monitoring the project closely to ensure ASX has sufficient planning, cutover and rollback strategies in place. The outcome of Release 1 will provide insights about the capability of ASX and its vendor Tata Consultancy Services (TCS) to deliver Release 2, which is a more complex undertaking. Release 2,

elements of which remain in the planning phase, will replace the CHES settlement and registry functions and is expected to go live in 2029. As the system design is finalised, the RBA expects ASX to embed sufficient resilience and contingency arrangements to ensure that ASX can continue to provide critical services during an extended operational incident.

2.1.2 Aged assets

The December CHES incident and the April HIN issue highlighted the disruption that can result from poor management of legacy technology. Continued focus on identifying aged assets and proactively implementing steps for remediation is needed. ASX is in the process of uplifting its systems and capabilities to manage aged assets, while continuing to remediate outstanding issues. During this assessment period, ASX has implemented mandatory policies for monitoring and managing the lifecycle of hardware and software assets and conducting an annual System Operational Risk Assessment (SORA) for Tier 1 and 2 systems. The RBA will be looking for evidence over the next assessment period that the overall software and hardware lifecycle is being managed appropriately.

ASX has made consistent progress over the assessment period to remediate high-severity issues included in the Technology Issues Remediation Roadmap (TIRR). While this progress is welcome, the RBA expects progress to continue in the next assessment period. This should include remediation of outstanding issues on the TIRR.⁶ ASX should also clearly articulate its strategy and governance framework for escalating issues identified in future SORA assessments and asset lifecycle monitoring.

Recommendation (New): ASX should continue to place high priority on remediating ageing technology assets, including:

- continued implementation of new frameworks and processes for asset lifecycle management
- measurable progress in remediating outstanding high and medium severity technology issues. Progress reports should be provided to the RBA on a quarterly basis.

2.1.3 Strengthening operational resilience across all critical services

The Operational Risk Standard requires CCPs and SSFs to ensure systems are designed with a high degree of security and operational reliability. This includes business continuity arrangements that enable a timely recovery of operations and fulfilment of obligations by the end of the day, including in the event of a wide-scale or major disruption. The December CHES incident and ASX's response to the RBA's out-of-cycle recommendation on contingency arrangements demonstrated that ASX does not have contingency arrangements for some stages of the CHES settlement process. The RBA is concerned that there may be similar gaps for other CS facilities. A particular concern is that ASX's approach to resilience is currently mostly concerned with external or system-wide sources of disruption.

⁶ The TIRR includes high-severity issues and medium-severity issues that were previously rated high severity. Issues can be downgraded to medium or low severity if remediation activity has progressed sufficiently, for example, via a system upgrade or a short-term fix ahead of a longer term solution.

Resilience planning should also consider issues that arise within ASX's own systems or processes. Since the end of the assessment period, ASX has commenced work, as part of the 'business resilience' stream of its 'Accelerate' program, that aims to provide it with a better understanding of gaps in the resilience of critical systems. The RBA expects ASX ultimately to move towards adopting a more comprehensive framework for business continuity and contingency planning across all CS facilities, in line with international best practice.

Recommendation: By June 2026, ASX is to complete an end-to-end review of its business continuity and contingency arrangements for ASX Clear, ASX Clear (Futures), ASX Settlement and Austraclear, and develop a plan to prioritise remediation of any gaps identified.

2.1.4 Cyber resilience

During the assessment period, the RBA and ASIC indicated the need for ASX to improve its cyber strategy and workplan, to ensure ASX is well placed to manage emerging risks. ASX has developed a more comprehensive roadmap for improving cyber resilience and enhanced reporting against this roadmap to the ASX boards. ASX has also conducted preliminary work to enable industry-wide cyber resilience tests. These tests should help stakeholders prepare for emerging ecosystem risks and develop their ability to respond to extreme but plausible scenarios.⁷

2.1.5 Settlement finality

The FSS state that a 'securities settlement facility should complete final settlement no later than the end of the value date'. In the December CHESS incident, ASX Settlement failed to settle obligations on the value date. This led to liquidity pressures for some participants that were relying on the CHESS batch settlement proceeding. ASX's lack of contingency arrangements for each step of the batch settlement process contributed to this failure. The RBA has downgraded the rating of ASX Settlement for the Settlement Finality Standard to *partly observed*.

The RBA has also considered the adequacy of similar contingency arrangements for Austraclear's settlement processes. While Austraclear has a range of contingency processes, the RBA considers that more comprehensive contingency arrangements would improve confidence that settlement will occur no later than the value date. A third-party review also identified additional gaps in ASX's Business Impact Analysis and Business Continuity Plans relating to complete system and technical outages at Austraclear. The RBA has downgraded the rating of Austraclear against the Settlement Finality Standard to *broadly observed* and expects ASX to review its contingency arrangements for Austraclear, as part of addressing the recommendation outlined in section 2.1.3.

⁷ A more detailed assessment of ASX's cyber resilience has been communicated confidentially to ASX.

2.2 Framework for comprehensive management of risks

The RBA's view is that work to date to uplift ASX's risk management framework and culture has not been progressing quickly enough for ASX to move sustainably towards best practice. Accordingly, the RBA has maintained the rating of *partly observed* for the Framework for Comprehensive Management of Risks Standard across the four facilities.

There have, however, been some encouraging developments more recently. Under the direction of the newly appointed Chief Risk Officer, ASX is planning a significant and comprehensive risk transformation, which will be delivered over a multi-year horizon as part of the Accelerate program. A related stream of Accelerate is focused on broader cultural change. The full risk transformation plan has not been finalised, but the RBA has seen an early project plan. The gap between ASX's current risk management framework and the aspiration outlined in the project plan is substantial and achieving the target state will likely require sustained investment over multiple years. The RBA's preliminary view, based on currently available information, is that the Accelerate program could provide impetus for the foundational changes required at ASX; however, this will be contingent on appropriate resourcing and effective execution. The RBA will be monitoring ASX's delivery of its risk and culture transformation plans closely and will be looking for evidence of material and tangible progress towards its target state in the next assessment period.

Recommendation: ASX should produce and implement a plan to ensure appropriate reporting on the progress of the risk transformation plan. This should include regular reporting to ASX boards, detailed quarterly status updates to regulators and regular public disclosures.

Recommendation: ASX should ensure that resourcing allocated to its risk transformation plan and target operating model are sufficient to support the uplift required to meet expectations under CCP and SSF Standard 2.6.

2.2.1 Risk culture

ASX's 2025 annual staff survey showed reduced performance across the majority of risk culture metrics compared with 2024 scores. ASX continues to underperform other major financial institutions across all risk culture metrics, with a significant gap in relation to the themes of 'risk capabilities' and 'risk governance and controls'. Areas of weakness identified in previous risk culture reviews have not been fully addressed. The RBA is concerned by the slow progress and will be looking for meaningful improvement, including through the implementation of ASX's planned risk culture initiatives under the Accelerate program.

The RBA is also concerned that ASX has failed to appreciate the seriousness of recent shortcomings in risk management. This was evident in some aspects of ASX's handling of the December CHESS incident. For example, despite failing to settle by the end-of-day on Friday 20 December, ASX's crisis management team did not meet until the afternoon of Saturday 21 December. Further, a post-incident

review noted that the information provided to ASX Settlement participants was vague, did not convey the severity of the incident and to some participants implied that it was likely to be resolved on the day.

Recommendation: ASX should:

- continue to have a strong focus on risk culture as part of its Accelerate program and outline detailed milestones in relation to risk culture, including clear actions to generate the required behavioural change across the organisation, especially from leaders
- allocate adequate funding to risk culture initiatives
- measure its progress via specific risk culture metrics, as well as improved risk management outcomes.

2.2.2 Information systems and controls

As part of ASX's risk transformation plan, ASX has identified that current systems for capturing risk data are inadequate and disparate and that an improvement is required to drive effective reporting and decision-making. ASX has also observed incomplete and insufficient monitoring of risks and controls across critical end-to-end business processes. One notable concern is that ASX's operational risk and issues system – which is central to capturing risk and controls data – has been observed to be inconsistently used by ASX staff. Additionally, due to lack of investment and prioritisation, the system has had known functionality gaps for multiple years.

During the assessment period, shortcomings in data and reporting controls were a contributing factor to several issues identified in financial risk models. The ASX CCPs play a critical role in credit intermediation in the financial system and are expected to reliably and capably manage a range of financial risks. Insufficient controls supporting ASX's financial risk management are an issue of concern that could become serious if not addressed promptly. This is consistent with a rating of *partly observed* for the Framework for Comprehensive Management of Risks Standard.

These shortcomings are described further in section 2.4.2.

2.3 Governance

The RBA has concluded that the ASX facilities continues to *partly observe* the Governance Standard.

ASX's governance has remained a key area of concern for the RBA since it was assessed as a special topic in the 2021 assessment.⁸ The RBA has observed that improvements made by ASX to its governance arrangements in subsequent cycles have been beneficial. For example, enhancements to ASX's internal audit function have resulted in effective independent challenge from internal audit and constructive responses to findings by the executives.

Notwithstanding these improvements, the RBA remains concerned about some aspects of ASX governance. Some of these concerns are illustrated by the process for responding to the RBA's out-of-

8 See RBA (2021), '[Special Topics – Governance and Risk Management Framework](#)', September.

cycle assessment of 31 March, which sought initial responses from ASX by 30 April. These responses, prepared by ASX management and reviewed by the ASX boards were inadequate. Specifically, the responses did not contain details expressly stipulated in the RBA's out-of-cycle assessment. The RBA has reviewed the minutes of the relevant ASX board meetings and conducted discussions with ASX directors and management. These confirm that the ASX boards had indicated that further details should be included in the response to the RBA's out-of-cycle assessment. However, this did not occur. The RBA considers this to be a highly concerning failure of governance. It is a fundamental requirement of good governance that executives comply with the direction of the boards and that the boards take all necessary measures to ensure that this is done.

2.3.1 Risk strategy

The Governance Standard provides that it is the overall responsibility of a board to ensure that a CS facility's risks are managed in a way that is consistent with the CS facility's business strategy and risk tolerance policy. ASX has been out of risk appetite across established risk categories since 2020; it devised a strategy in 2022 for returning to an acceptable risk level, but progress has been slow.

In June 2025, ASX's internal audit function completed a review of ASX's strategy to address a heightened level of risk. This review found that there is a need for a more cohesive approach to bring ASX back within its risk appetite. Shortcomings in risk governance processes were also identified. Further, it was observed that existing risk reporting to ASX's management and boards does not clearly connect risks outside of the Group's risk appetite with existing or planned remediation. This makes it difficult to ensure that heightened risks are being appropriately remediated.

The internal audit review also found that ASX should further formalise its risk governance to ensure effective implementation and operationalisation of ASX's risk appetite statement. This would include the adoption of consistent criteria for determining whether the Group is within or outside risk tolerance. As noted in the 2024 assessment, the RBA considers that ASX's risk appetite statement should expressly emphasise the safety of CS facilities.

A separate, external review of ASX's risk management frameworks found that ASX's risk management tends to be reactive and informed by external, rather than internal benchmarks. For instance, changes to the frameworks tend to be prompted by external triggers such as regulatory actions rather than being internally driven. It was also found that risk management does not yet appear sufficiently embedded in ASX's strategy. The RBA expects ASX boards to ensure that risk management is considered holistically as part of ASX's overall business strategy.

Recommendation: ASX boards should obtain independent assurance, through an internal audit, that gaps relating to ASX's risk appetite statement and return-to-risk appetite strategy have been addressed in a way that enables the boards to:

- take a holistic view of ASX's risks
- embed risk management as part of ASX's overall business strategy.

2.3.2 Board reporting

The RBA has previously expressed concerns about the length of ASX board papers as well as the excessive technical detail contained in them. These issues were also raised in an external review of ASX's board function, which ASX commissioned in response to a recommendation in the RBA's 2023 assessment.⁹ Lengthy and excessively detailed board papers are less likely to assist the board to identify and focus on the key issues. ASX has implemented processes and guidelines that seek to address these longstanding concerns. A survey of board directors indicates that these changes have resulted in improvements to board papers; however, additional areas for improvement were identified. Further, the RBA is concerned that the boards have been receiving reporting that paints an overly positive picture of key areas of risk, reflecting deficiencies in ASX's risk culture. ASX should continue to improve its board reporting, including through seeking and addressing feedback from board directors.

In June 2025, ASX's internal audit function also conducted a review of board key risk indicators (KRIs). Board KRIs are metrics reported to ASX boards specifying whether areas of risk are within or outside risk tolerance and help facilitate appropriate consideration of risks in decision-making. The review found that board KRIs lack clear ownership and that subject matter experts were not actively engaged in the annual review of the metrics. The composition of many of the KRIs was found to be complex, subjective and limited for measuring key risks. The completeness and accuracy of the KRIs were not consistently reviewed and there are no defined mechanisms for continuous monitoring of KRIs. One consequence of these deficiencies is that board KRIs may not correctly reflect real risk and therefore may not provide an accurate measure of whether the Group is operating within or outside risk appetite. Relatedly, risk-based criteria that inform executive remuneration may not be providing sufficient incentives to promote sound risk management. One of these criteria is related to the number of KRIs that are within ASX's risk appetite.

Recommendation: ASX boards should obtain independent assurance, through an internal audit, that the gaps around board KRIs have been addressed.

2.4 Financial risk management

Over the past few years, ASX has improved its financial risk management in some areas, partly in response to previous RBA recommendations. ASX has increased the size of its clearing risk team and introduced more robust model review processes.

However, further improvement is still required. During the assessment period, the RBA was disappointed by several issues relating to ASX's stress test and margin models, as set out below. While some of these were identified through improved model review processes, this was not always the case. Given the central role that ASX's CCPs play in the Australian financial system, it is crucial that they manage their financial risks in a mature and reliable way. ASX should prioritise the improvement of their financial risk management to the level expected of critical financial market infrastructure.

⁹ RBA (2023), '[Assessment of ASX Clearing and Settlement Facilities](#)', October.

2.4.1 Progress against outstanding RBA recommendations

ASX made progress against several RBA recommendations related to financial risk management:

- Credit risk: ASX completed an upgrade of its credit stress test model for ASX Clear to improve the comprehensiveness of stress test scenarios. ASX also introduced new scenarios to monitor and mitigate specific wrong way risk at ASX Clear.
- Liquidity risk: ASX upgraded its liquidity stress testing model for ASX Clear. The changes improve ASX Clear's modelling of liquidity obligations throughout the cash settlement cycle. ASX is expecting to progress similar work for ASX Clear (Futures) in the coming assessment period.
- Margin procyclicality: ASX finalised its procyclicality framework to mitigate destabilising increases in margin during periods of heightened market volatility.
- Overnight variation margin: ASX explored a long-term overnight variation margin strategy for ASX Clear (Futures) involving the use of the New Payments Platform. However, some impediments beyond ASX's control mean that this is unlikely to be prioritised by industry in the near future. As an alternative, ASX will consider expanding the available collateral options for margin payments as part of an upgrade of its collateral management system.

2.4.2 Issues identified during the assessment period

In October 2024, ASX reported to the RBA that it had erroneously omitted implied volatility data for a product in its credit stress test calculations for ASX Clear.¹⁰ As a result, some exposures were underestimated. In three instances, ASX failed to identify that ASX Clear's stress test exposures, if correctly calculated, would have exceeded the size of its pre-funded resources. A solution to resolve the issue was introduced in October 2024 and tactical control improvements were subsequently introduced to avoid a similar issue re-occurring. While the exceedances were all less than five per cent of ASX Clear's prefunded resources, these issues demonstrated that ASX was not monitoring and mitigating credit risks with the high degree of accuracy that is expected of a CCP.

ASX subsequently conducted a review of data controls supporting its stress testing. The review identified that improvements in controls are required to manage data calculation risk. ASX has engaged a third party to provide support in improving its data and reporting control frameworks. The RBA expects that ASX's improvement in data and reporting controls should be considered holistically across all financial risk models, and the enterprise more broadly, where relevant.

Recommendation: ASX should comprehensively improve data and reporting controls for its financial risk models to ensure that data processing, and the outputs generated, are of high quality.

¹⁰ ASX conducts daily stress tests to ensure it has sufficient pre-funded resources to manage the potential financial exposure from the default of one or two clearing participants in extreme but plausible conditions.

In July 2025, following a participant query, ASX identified that stress test outputs for 30-day interbank cash rate futures contracts were incorrectly signed for some scenarios.¹¹ A fix was implemented in August to address the immediate issue. While these products account for less than one per cent of margin collected at ASX Clear (Futures), the error did affect the calculation of margin obligations for some clearing participants throughout the entire assessment period.

Additionally, as part of model validation processes, ASX identified and remediated several inaccuracies in margin calculations over the assessment period. In one instance, ASX identified that there were material calculation errors for the size of overnight margin calls for a subset of participants over an eight-month period. In addition to fixing the immediate issue, ASX has introduced additional controls and improved change management procedures.

While the RBA acknowledges that some of the issues above were identified because of improved model review processes, this was not always the case. In addition to directly remediating the issues identified, ASX should ensure that any further improvements to its model validation and controls testing frameworks are identified and implemented.

Recommendation: In response to the financial risk model issues identified in the 2025 assessment, ASX should take a holistic approach to identifying and implementing any necessary improvements to its model validation and control testing frameworks. By March 2026, ASX should have completed identifying the necessary improvements and commenced implementation. Once ASX has completed implementing these improvements, ASX's internal audit function or a suitably qualified independent third party should conduct a review.

2.4.3 Impacts on FSS ratings

The RBA has reassessed the ASX CCPs' compliance against several FSS given the developments above.

The errors identified in ASX's credit stress tests is an issue of concern that could become serious if not addressed promptly. Accordingly, the RBA has downgraded the ASX CCPs' compliance against the Credit Risk Standard to *partly observed*. The RBA considers credit risk to be a particularly important aspect of a CCP's risk management and expects ASX to place a high priority on remediating the outstanding issue and progressing recommendations related to credit risk.

The developments above also raise concerns about the compliance of ASX's financial models with other regulatory requirements set out in the FSS.¹² Accordingly, the RBA has maintained a rating of *broadly observed* in relation to the Margin and Liquidity Standards. In addition to remediating other outstanding RBA recommendations, the RBA expects ASX to make substantive progress against the recommendations in this assessment before these standards can be rated as *observed*.

The ASX CCPs' rating for the Collateral Standard has been downgraded to *broadly observed*. A CCP is expected to apply prudent haircuts to the value of the collateral to achieve a high degree of confidence

11 In other words, when the output was intended to be positive, it was negative and vice versa.

12 For example, CCP Standards 5.3, 6.2, 6.3, 6.6, 7.2, 7.3, 7.6 and 7.8.

that the liquidation value of the collateral will be at least equal to the obligation that the collateral secures in extreme but plausible market conditions.¹³ ASX's review of data controls, in response to the stress testing issue described above, identified shortcomings in controls that apply to collateral models at both CCPs. These will need to be remediated before this rating can return to *observed*.

2.5 Other updates

2.5.1 Regulatory reporting

During the assessment period, ASX reviewed its regulatory reporting processes and improved reporting for major inflight projects, including ClearStar and CHES. However, there were several regulatory reporting breaches over the assessment period. ASX Settlement was found not to be preparing audited annual accounts. There were also delays in reporting the entry by Austraclear participants into external administration. Similar issues relating to regulatory reporting were identified by ASX's internal audit function. ASX was found to have insufficient processes for ad hoc regulatory reporting and limited central oversight of its reporting submissions.

The RBA considers that the shortcomings in ASX's reporting processes are an issue of concern and has maintained the rating of *broadly observed* for all ASX CS facilities for the Regulatory Reporting Standard.

Recommendation: ASX should remediate all issues identified in its 2024 internal audit report on regulatory reporting and consistently demonstrate timely, complete and accurate regulatory reporting by June 2026.

2.5.2 General business risk

The RBA has upgraded the rating of all ASX CS facilities to *observed* for the General Business Risk Standard. In the 2024 assessment, the RBA found that ASX did not have a viable wind-down plan for its CS facilities. During the assessment period, ASX developed a wind-down plan outlining key wind-down strategies and the measures needed for implementation. ASX expect to make further refinements to the plan.

Work is currently underway at an international level to consider more detailed guidance for how financial market infrastructures should manage general business risks.¹⁴ The RBA expects ASX to incorporate any additional guidance into its wind-down plan and interpretation of the General Business Risk Standard within a reasonable timeframe after it is released.

¹³ See RBA (2012), '[Financial Stability Standards for Central Counterparties – Standard 5: Collateral – Guidance](#)', December.

¹⁴ In 2023, CPMI-IOSCO indicated that it intended to undertake additional work to consider and consult on further guidance on non-default losses. See CPMI-IOSCO (2023), '[Cover Note to the CPMI-IOSCO "Report on Central Counterparty Practices to Address Non-default Losses"](#)', 23 August.

Appendix A: Summary of Progress 2024/25

The tables below summarise actions taken by the ASX CS facilities during the 12 months to June 2025 (the assessment period) to address recommendations identified in the RBA's 2024 *Assessment of ASX Clearing and Settlement Facilities*, as well as outstanding recommendations from previous years. Table A.1 summarises all open recommendations as of 30 June 2025, including a summary of progress against the outstanding recommendations. Table A.2 provides a summary of recommendations that have been closed or superseded during the assessment period.

Table A.1: Summary of All Open Recommendations at 30 June 2025

Reference ^(a)	Recommendation	Standard	Facility	Update	Timeframe
2022-8	Legal basis: PSNA. ASX Settlement should apply for approvals as an approved RTGS system and as a multilateral netting arrangement under the <i>Payment Systems and Netting Act 1998</i> (PSNA), or in the case of the multilateral netting approval provide the RBA with legal analysis demonstrating why its existing approval remains valid once changes to the ASX Settlement operating rules required to support the introduction of the CHES replacement have been made.	CCP/SSF 1	ASX Settlement	This recommendation is linked to work on the CHES Replacement. Progress is to be reviewed once the work on the second release of the CHES Replacement Program (settlement and sub-register replacement) has progressed.	
2025-8	Governance: Risk strategy. ASX boards should obtain independent assurance, through an internal audit, that gaps relating to ASX's risk appetite statement and return-to-risk appetite strategy have been addressed in a way that enables the boards to: <ul style="list-style-type: none"> take a holistic view of ASX's risks embed risk management as part of ASX's overall business strategy. 	CCP/SSF 2	All	New recommendation.	30 June 2026
2025-9	Governance: Board reporting. ASX boards should obtain independent assurance, through an internal audit, that the gaps around board KRIs have been addressed.	CCP/SSF 2	All	New recommendation.	30 April 2026

Reference ^(a)	Recommendation	Standard	Facility	Update	Timeframe
2023-4	Governance: Stakeholder engagement. The ASX boards should continue their emphasis on stakeholder management. ASX should continue to actively consult stakeholders on the detailed design, project timeline, testing and implementation for the CHES replacement and ClearStar.	CCP/SSF 2	All	ASX continues to engage with stakeholders of the CHES Replacement project on the solution design and the project and implementation timeline through the industry Business Committee, Technical Committee, and related working groups. ASX has run a number of consultations on both phases of CHES Replacement. ASX has launched a website for the ClearStar program, conducted formal consultations on the ETD Futures Clearing and Trade Accept replacement projects, and established a ClearStar Program Committee.	December 2029
2025-5	Framework for the comprehensive management of risks: Risk transformation plan. ASX should produce and implement appropriate reporting on the progress of the transformation plan. This should include regular reporting to ASX boards, detailed quarterly status updates to regulators and regular public disclosures.	CCP/SSF 3	All	New recommendation.	30 June 2026
2025-6	Framework for the comprehensive management of risks: Risk transformation plan. ASX should ensure that resourcing allocated to its risk transformation plan and target operating model are sufficient to support the uplift required to meet expectations under the CCP and SSF Standard 2.6.	CCP/SSF 3	All	New recommendation.	30 June 2026

Reference ^(a)	Recommendation	Standard	Facility	Update	Timeframe
2025-7	<p>Framework for the comprehensive management of risks: Risk culture. ASX should:</p> <ul style="list-style-type: none"> continue to have a strong focus on risk culture as part of its Accelerate program and outline detailed milestones in relation to risk culture, including clear actions to generate the required behavioural change across the organisation, especially from leaders allocate adequate funding to risk culture initiatives evidence its progress via specific risk culture metrics, as well as improved risk management outcomes. 	CCP/SSF 3	All	New recommendation. Replaces 2024-1.	
2025-10	Data and reporting controls: ASX should comprehensively improve data and reporting controls for its financial risk models to ensure that data processing, and the outputs generated, are of high quality.	CCP 3,4,5,6,7	Both CCPs	New recommendation.	To be determined
2025-11	Model validation and control testing: In response to the financial risk model issues identified in the 2025 assessment, ASX should take a holistic approach to identifying and implementing any necessary improvements to its model validation and control testing frameworks. By March 2026, ASX should have completed identifying the necessary improvements and commenced implementation. Once ASX has completed implementing these improvements, ASX's internal audit function or a suitably qualified independent third party should conduct a review.	CCP 3,4,5,6,7	Both CCPs	New recommendation.	To be determined

Reference ^(a)	Recommendation	Standard	Facility	Update	Timeframe
2023-10	Credit risk: Outstanding margin in stress tests. ASX should account for outstanding margin payments in its stress test calculations.	CCP 4	Both CCPs	Timeframe updated. During the assessment period, ASX developed methodologies to account for outstanding margin payments in its stress test calculations. Due to additional complexities, ASX now expects to finalise and implement the changes at ASX Clear (Futures) by September 2025 and ASX Clear by June 2026.	30 June 2026
2018-1a	CCP Resilience Guidance. The ASX CCPs should enhance the comprehensiveness of stress testing to ensure risks are appropriately identified, captured and stressed.	CCP 4, 7	Both CCPs	Timeframe updated. During the assessment period, ASX upgraded their credit and liquidity stress tests for ASX Clear. ASX expects to enhance their credit and liquidity stress tests for ASX Clear (Futures) over the coming assessment periods. ASX previously expected to complete the recommendation by June 2026, but it has been delayed due to flow-on effects from other dependencies.	Expected completion by June 2027
2023-13	Margin: ASX Clear intraday margin. ASX Clear should enhance its capacity to monitor the build-up of current exposures to participants and to make intraday margin calls to participants.	CCP 6	ASX Clear	During the assessment period, ASX commenced quantitative work on a new margin model for cash market products. However, the work is behind schedule. ASX will continue this work in the coming assessment periods.	Indicative timing is prior to June 2029
2024-3	Segregation and portability. By 30 June 2026, ASX should incorporate client porting into its default management fire drills.	CCP 13	Both CCPs	Recommendation updated. During the assessment period, ASX completed a benchmarking exercise of its client portability arrangements against other CCPs. This found that ASX faces similar porting challenges to peer CCPs but ASX lagged in the frequency of its client portability fire drills. ASX intends to include client portability in its default management fire drills in the next assessment period.	30 June 2026

Reference ^(a)	Recommendation	Standard	Facility	Update	Timeframe
2024-6	<p>Operational risk: Implement PPPM recommendations. By 30 June 2026, ASX should complete and sustainably implement the recommendations from the PPPM Reports. ASX should prioritise those regarding:</p> <ul style="list-style-type: none"> the useability of the PPPM framework documents project resource forecasting, forecasting capacity/demand planning and portfolio management functions clarifying roles and decision-making responsibilities stage-gate reviews. 	CCP 16 SSF 14	All	<p>During the assessment period, ASX implemented a range of improvements to its project and program delivery stemming from the PPPM reports. This has included updating and simplifying frameworks, introducing a new stage-gate review process and implementing a PPM tool.</p> <p>ASX has engaged an external expert to evaluate the effectiveness of its new frameworks and processes in the next assessment period. The RBA will continue to monitor ASX's implementation of its new PPPM frameworks and their application to its suite of projects.</p>	30 June 2026
2024-10	Operational risk: Fourth party vendor management risks. By 31 December 2026, ASX should have developed and implemented formal frameworks to monitor and manage fourth party and concentration risks for vendors servicing the CS facilities. This should include identification of fourth-party single points of failure.	CCP 16 SSF 14	All	ASX expects to develop and implement formal frameworks to monitor and manage fourth-party and concentration risks for vendors servicing the CS facilities in the next assessment period. In reviewing the response to this recommendation, the RBA will also assess the ongoing implementation of ASX's new supplier frameworks.	31 December 2026
2025-1	Operational risk: Operational resilience. By June 2026, ASX should demonstrate how it has enhanced resourcing for current CHESS, to ensure it can reliably access and utilise well-trained and competent personnel, as well as technical and other resources. This should include required upskilling of newly hired engineers and third-party support staff.	CCP 16 SSF 14	ASX Clear ASX Settlement	<p>Update of March 2025 out-of-cycle recommendation on resourcing and third-party support arrangements for current CHESS.</p> <p>ASX's initial response to the out-of-cycle recommendation was insufficient. ASX has subsequently outlined a clearer plan to enhance resourcing and third-party support arrangements for current CHESS. The RBA is closely monitoring progress against this plan.</p>	30 June 2026
2025-2	Operational risk: Operational resilience. By June 2026, ASX should demonstrate how it has improved contingency arrangements for current CHESS, designed to enable resumption of operations within two hours following a disruptive event.	CCP 16 SSF 14	ASX Clear ASX Settlement	<p>Update of March 2025 out-of-cycle recommendation on contingency arrangements for CHESS.</p> <p>ASX's initial response to the out-of-cycle recommendation was insufficient. ASX has subsequently provided a clearer plan to improve contingency arrangements for current CHESS. The RBA is closely monitoring progress against this plan.</p>	30 June 2026

Reference ^(a)	Recommendation	Standard	Facility	Update	Timeframe
2025-4	Operational risk: Strengthening operational resilience across all critical services. By June 2026, ASX is to complete an end-to-end review of its business continuity and contingency arrangements for ASX Clear, ASX Clear (Futures), ASX Settlement, Austraclear, and develop a plan to prioritise remediation of any gaps identified.	CCP 16 SSF 14	All	New recommendation.	30 June 2026
2025-3	Operational risk: Ageing assets. ASX should continue to place high priority on remediating ageing technology assets, including: <ul style="list-style-type: none"> continued implementation of new frameworks and processes for asset lifecycle management; measurable progress in remediating outstanding high and medium severity technology issues. Progress reports should be provided to the RBA on a quarterly basis. 	CCP 16 SSF 14	All	New recommendation. Replaces 2024-4 and 2024-5.	30 June 2026
2020-8	Operational risk: Risk management systems. The ASX CCPs should implement plans to ensure that their core systems have the functionality to fully support their risk management approach, including by migrating processes currently operated on non-core systems to core systems.	CCP 16	Both CCPs	The derivatives component of this work will be completed as part of the Clearstar program. The cash component will be addressed under recommendation 2023-13. This work will also be supported by ASX's data platform project. The RBA will be seeking an update on the status of this work in the next assessment period.	Expected completion by June 2029
2023-21	Operational risk: CHESS – Upgrades to comply with the FSS. ASX should identify any upgrades that are required for CHESS to comply with the FSS and communicate its plans to consult stakeholders and implement these changes in a safe and timely way. ASX is to consult stakeholders in relation to any material changes to the current CHESS and publish key details and timelines for all upgrades to CHESS.	CCP 16 SSF 14	ASX Clear ASX Settlement	Timeframe updated. ASX has progressed items on the current CHESS Roadmap and produced a public report on the Roadmap, which will be shared with industry in July 2025. The RBA expects that upgrades to current CHESS will be ongoing until it is replaced.	31 December 2029

Reference ^(a)	Recommendation	Standard	Facility	Update	Timeframe
2020-5	Operational risk: CHES – Capacity and system replacement. ASX should implement the new clearing and settlement system for cash market transactions as soon as this can be safely achieved by ASX and users of CHES. In the short term, ASX should complete work underway to increase the joint capacity of the current CHES and CORE systems.	CCP 16 SSF 14	ASX Clear ASX Settlement	<p>The first release of CHES Replacement (scheduled for April 2026) is expected to address the capacity issues in the current trade registration process in CHES. A proof of Technology (PoT) exercise was conducted to test the capacity of the new clearing solution. This demonstrated that the new system would be able to meet a peak volume of 15 million trades in a day.</p> <p>For current CHES, ASX completed stress tests in the previous assessment period and implemented a fix for a breakpoint identified at a peak of 15 million trades per day.</p>	
2020-6	Operational risk: CHES – IBM Review. ASX should ensure that the findings and lessons learned from the IBM Review of the Trade Refresh project are applied to the CHES Replacement Program.	CCP 16 SSF 14	All	<p>Timeframe updated.</p> <p>ASX has now implemented all 59 IBM Review recommendations. An independent expert (EY) has confirmed all recommendations are fully closed.</p> <p>EY has been performing spot checks to assess the continued adherence to these recommendations. Tranche 1 of these spot checks was completed in March 2024. During the assessment period, Tranche 2 of spot checking was completed by an ASX internal review team and validated by an independent observer.</p> <p>Lessons learned from the IBM Review have been built into the CHES Replacement project with the remaining two action items having defined milestones tied to the delivery of CHES Replacement. ASX's CHES Replacement Assurance plan will track these actions to closure.</p>	31 July 2026

Reference ^(a)	Recommendation	Standard	Facility	Update	Timeframe
2022-6	<p>Operational risk: CHESS – CHESS replacement go-live. ASX should prepare for cutover, migration and go-live of the CHESS replacement system, including by:</p> <ul style="list-style-type: none"> • having comprehensive and effective contingency plans in place for dealing with an issue on the go-live weekend or subsequent to go-live • successful execution of migration dress rehearsals • effective arrangements for go-live decision-making, including ASX's compliance with relevant 2021 License Conditions. 	CCP 16 SSF 14	ASX Clear ASX Settlement	<p>CHESS Replacement will be implemented in two releases. The first release (clearing) is expected to go live in April 2026, and the second release (settlement and sub-registry) in 2029.</p> <p>ASX has designed an assurance program to assist with risk management and decision-making at key milestones across both releases.</p> <p>During the assessment period, ASX has published a number of documents on the first release. These include its Cutover Approach, AMO User Technical Documentation, AMO Readiness – Release Notes, and its Response to Consultation on Release 1 (Clearing Services).</p> <p>In July 2025, ASX commenced the AMO Readiness phase for the first release, which provides a production-like test environment for AMOs and vendors.</p>	
2024-11	Tiered participation arrangements: Tiered participation policies. By 31 December 2026, ASX should address the identified gaps in its tiered participation policies to effectively identify, monitor and manage risks that arise from tiered participation arrangements.	CCP 18 SSF 16	All	<p>Recommendation updated.</p> <p>During the assessment period, ASX developed tiered participation policies for each CCP and SSF. ASX identified gaps in its framework as a part of this process, including the lack of a formal periodic review of clearing participants' client risk management frameworks. ASX plans to address these gaps in 2026.</p>	31 December 2026
2025-12	Regulatory reporting. ASX should remediate all issues identified in its 2024 internal audit report on regulatory reporting and consistently demonstrate timely, complete and accurate regulatory reporting by June 2026.	CCP 21 SSF 19	All	New recommendation.	30 June 2026

(a) Reference indicates the year a recommendation was raised and the order in which it appears in the assessment. Recommendations have been grouped by standard and topic.

Table A.2: Previous Recommendations Closed or Superseded

Reference ^(a)	Previous recommendation	Standard	Facility	Progress and outcome
2021-18	Framework for the comprehensive management of risks: Risks to and from other entities. ASX should establish a process to periodically conduct systematic assessments of the range of potential risks other entities may pose to its CS facilities and the risks ASX CS facilities could potentially pose to other entities.	CCP/SSF 3	All	<p>Outcome: Closed</p> <p>ASX completed an initial assessment of risks posed to and from other entities in the 2024 assessment period. The RBA requested more information, including on individual ASX entity risk profiles. ASX was granted an extension to June 2025.</p> <p>ASX has provided its final assessment and identified a number of areas for future work, which will be addressed through its risk transformation plan. ASX will annually review its risk profiles and present them to the board.</p>
2024-1	Framework for the comprehensive management of risks: Risk culture. In the 2025 assessment period, ASX should continue implementing its plan to improve risk culture. ASX should also implement the recommendations of the external review of this plan, which include defining a target state and ensuring consistent risk communication and leadership.	CCP/SSF 3	All	<p>Outcome: Replaced by 2025-7.</p> <p>ASX has included further work on risk culture as part of its Accelerate program. A new recommendation has been made in relation to this work.</p>
2024-2	Framework for the comprehensive management of risks: Methodology of return to risk appetite strategy. By 30 June 2025, ASX should obtain an independent review (conducted by either its Internal Audit or an external expert) of its strategy to address its heightened level of risk. This should include consideration of its KRIs. The review should also consider whether its strategy is responsive to evolving risks.	CCP/SSF 3	All	<p>Outcome: Closed.</p> <p>During the 2025 assessment period, internal audit conducted a review into 'Board Key Risk Indicators (KRI) Management and Return to Risk Appetite'. ASX intends to address these findings through its Risk Transformation Plan.</p> <p>The RBA has made two new recommendations related to these findings: 2025-8 and 2025-9.</p>
2023-9	Credit risk: Specific wrong way risk. ASX should introduce additional stress test scenarios to monitor and mitigate specific wrong way risks at ASX Clear by 31 December 2024.	CCP 4	ASX Clear	<p>Outcome: Closed.</p> <p>During the assessment period, ASX implemented additional stress test scenarios to monitor and mitigate specific wrong way risks at ASX Clear.</p>

Reference ^(a)	Previous recommendation	Standard	Facility	Progress and outcome
2020-1	Margin. Consistent with the CCP Resilience Guidance, by 31 December 2024, the ASX CCPs should develop a systematic framework to avoid destabilising increases in margin and other financial risk requirements during periods of heightened market volatility. This framework should include an appropriate methodology for measuring the degree of procyclicality in the CCPs' risk models and should consider the potential effect of expert judgement on procyclicality when determining margin and other financial risk requirements.	CCP 6	Both CCPs	Outcome: Closed. During the assessment period, ASX completed work to improve its procyclicality framework. This follows work in previous assessment periods to implement floors in its margin models, implement a margin forward guidance framework, and develop a methodology for measuring procyclicality.
2023-12	Margin: Overnight variation margin. ASX Clear (Futures) should develop a long-term strategy for its overnight margin operations by December 2024.	CCP 6	ASX Clear (Futures)	Outcome: Closed. In December 2024 ASX presented a long-term strategy with a focus on using NPP PayTo to collect overnight variation margin in AUD. However, a number of impediments mean that this is unlikely to be prioritised by industry in the near future. ASX will consider expanding collateral options for overnight margin payments as part of the ClearStar program.
2023-15	Operational risk: Evergreen strategy. ASX should develop and begin implementing a long-term strategy to proactively identify ageing assets and remediate the risks before they materialise.	CCP 16 SSF 14	All	Outcome: Closed ASX delivered its Long-Term Technology Sustainability Strategy in the previous assessment period. ASX has demonstrated that it is implementing this strategy via progress on other recommendations related to aged assets (e.g. 2024-4 and 2024-5).
2023-17	Operational risk: CHES – Independent review recommendations. ASX should implement the 45 recommendations from the independent review of CHES replacement, conducted by Accenture. ASX should also ensure that any relevant steps are taken to apply lessons learnt from the external review more holistically across the enterprise.	CCP 16 SSF14	ASX Clear ASX Settlement	Outcome: Closed In this assessment period, ASX had four outstanding actions to complete from the independent review of CHES replacement. Two of the remaining actions were completed as part of the CHES Replacement project. The other two actions required further evidence of implementation; ASX has obtained independent assurance that these actions have been completed.

Reference ^(a)	Previous recommendation	Standard	Facility	Progress and outcome
2023-24	Operational risk: CHES – Backup plan. ASX should clearly communicate to regulators what their backup plan will be in the event that the replacement system is not delivered before supportability of the current CHES is severely compromised. The risks around the backup plan should be appropriately identified, assessed and monitored, with appropriate controls put in place to mitigate these risks. This communication to the regulators on the backup plan should be at the same time as communication on the solution selection decision. ASX should also clearly communicate to stakeholders what their backup plan will be if the selected CHES replacement solution is unable to be implemented. This communication to stakeholders should be well in advance of the current CHES being severely compromised to ensure stakeholders have sufficient and appropriate notice to test and implement the backup plan in a safe manner.	CCP 16 SSF 14	ASX Clear ASX Settlement	Outcome: Closed ASX has provided an updated CHES Replacement contingency plan. ASX has added detail to the plan, identified key risks and potential mitigants, and implemented a new framework to guide management should CHES Replacement fail. The plan is supported by ASX's commitment to maintain the current CHES system to at least 2032.
2023-26	Operational risk: CHES – Implementation timeline. ASX should publish on its website its project and implementation timeline with dates for key milestones. This plan should have a new and credible go-live date for CHES replacement.	CCP 16 SSF 14	ASX Clear ASX Settlement	Outcome: Closed In June 2024, ASX completed industry consultation on the first release of CHES Replacement. In November 2024, ASX completed industry consultation on the second release of CHES Replacement. As part of both consultations, ASX published a project and implementation timeline with key milestones. ASX has communicated that go-live for the first release is targeted for between mid-March and end-April 2026. For the second release, ASX has a go-live window of between April and December 2029. It will provide industry with 12 months' notice of its target go-live date as the second release approaches.

Reference ^(a)	Previous recommendation	Standard	Facility	Progress and outcome
2024-4	<p>Operational risk: Aged asset reporting. Throughout the 2025 assessment period, ASX should continue to place high priority on remediating ageing technology assets and ensure that major technology remediation activities progress to scheduled timelines. As part of this, ASX should continue to assess whether its short-term controls remain sufficient and appropriate. ASX should also ensure it has sufficient resources and capabilities to support the health of critical systems and remediation activities. ASX should provide regular reporting to the boards that clearly shows:</p> <ul style="list-style-type: none"> • progress against its Technology Issues Remediation Roadmap • a holistic view of the health of all critical systems, and the expected impact of planned remediation activities on the risk attributes of critical systems. 	CCP 16 SSF 14	All	<p>Outcome: Replaced by 2025-3.</p> <p>Throughout the assessment period, ASX has made progress against issues on the Technology Issues Remediation Roadmap. At the end of June 2025, four high-severity issues remain outstanding. ASX provided regular progress reporting to its boards throughout the year. ASX's System Operational Risk Assessment provides a holistic view of the health of its critical systems. This recommendation has been updated to reflect the RBA's expectations that ASX make ongoing progress to improve its asset lifecycle management processes and remediate outstanding issues.</p>
2024-5	<p>Operational risk: Asset-lifecycle management framework. By 30 June 2025, ASX should ensure that it has an appropriate framework or policy for asset lifecycle management that mandates the proactive upgrade or replacement of technology assets before they reach end-of-life. As part of this, ASX should explicitly outline responsibilities around asset lifecycle management and ensure that the tools used to track technology assets are fit for purpose.</p>	CCP 16 SSF 14	All	<p>Outcome: Replaced by 2025-3.</p> <p>During the assessment period, ASX developed an asset lifecycle management framework, including separate IT Software Asset Management (SAM) and IT Hardware Asset Management (HAM) policies. Both policies clearly outline responsibilities for asset lifecycle management. ASX has implemented asset lifecycle monitoring via a ServiceNow tool. The RBA will continue to monitor ASX's implementation of these new frameworks and tools over the coming year.</p>

Reference ^(a)	Previous recommendation	Standard	Facility	Progress and outcome
2024-7	Operational risk: Simplify vendor management risk policies. By 28 February 2025, ASX should simplify and streamline its frameworks and policies relating to the management of vendor risks. The frameworks and policies should ensure that requirements and responsibilities are clear, unambiguous and consistent.	CCP 16 SSF 14	All	Outcome: Closed During the assessment period, ASX condensed existing artefacts into a new Supplier Lifecycle Policy and the related Supplier Lifecycle Standard, which applies across all ASX business units and all supplier arrangements. The new policy provides a clear and consistent definition of responsibilities for accountable roles at ASX.
2024-8	Operational risk: Mandating vendor management practices. By 28 February 2025, the following should be made clearly mandatory for all key vendors supporting the CS facilities: <ul style="list-style-type: none"> • vendor risk assessments • implementation of consistent enterprise processes for monitoring vendor performance • contingency plans for when a vendor ceases to provide services. 	CCP 16 SSF 14	All	Outcome: Closed During the 2025 assessment period, ASX implemented a new Supplier Lifecycle Policy and Supplier Lifecycle Standard. Through a criticality assessment that is mandatory for all vendor relationships under the standard, the new framework provides a process for ensuring that critical vendors are clearly identified and categorised. The standard sets mandatory requirements for these vendors to be subject to: (i) vendor risk assessment; (ii) vendor performance monitoring; and (iii) contingency plans if a vendor ceases to provide services.
2024-9	Operational risk: Uplift vendor management capabilities. By 30 June 2025, ASX should improve its organisation-wide capabilities for vendor management. ASX should identify the skills and training required for staff with vendor management responsibilities and develop a plan for putting these skills and training in place.	CCP 16 SSF 14	All	Outcome: Closed During the assessment period, ASX established an approach to continuously improve vendor management capabilities and ensure consistency across the organisation. This includes supporting guidance, training and continued support by a central procurement team with subject matter expertise.

(a) Reference indicates year the recommendation was first raised and the order in which the recommendation appears in the assessment.