

CHESS Replacement: Consultation Paper on Staged Implementation Approach and Implementation of Release 1 (Clearing Services)

Response to Consultation Feedback

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1. Introduction

1.1. Overview and Purpose

On 14 March 2024, ASX released a consultation paper on the proposed staged implementation approach to the new CHESS replacement system and implementation of Release 1. We sought feedback on:

- > the staged approach and timing for replacing CHESS in two separate releases (Releases 1 and 2);
- > the design, scope and schedule for Release 1; and
- > the industry testing approach for Release 1.

The purpose of this paper is to provide a summary of the feedback received in response to the proposals made and questions posed in the consultation paper, and ASX's response to the feedback. This paper also sets out a design, scope and schedule, as well as an industry testing approach and duration for Release 1 which has been informed by the feedback received.

Public consultation on the proposed design, scope and schedule for Release 2 is scheduled for Q3 2024. The consultation on Release 2 will be informed by feedback received through this consultation, as well as ongoing engagement with stakeholders through the CHESS Replacement Technical Committee (**Technical Committee**) and industry working groups.

We remain committed to working with stakeholders to establish a CHESS replacement project timeline and plan that has broad industry support by the end of 2024.

1.2. Submissions Received

Following a six week consultation period, we received a total of 22 written submissions to the consultation paper, including 12 confidential submissions. Submissions were received from a range of stakeholders, including Approved Market Operators (AMOs), Clearing and Settlement (CS) Participants, Settlement Participants, Software Providers, industry bodies and other interested parties. All non-confidential submissions are published on the ASX website. We thank everyone who took the time to respond to the consultation paper.

1.3. Key Themes of the Feedback

Submissions to the consultation indicated overall support for a staged implementation, and for the proposed design, scope and schedule for Release 1. The key themes of the feedback are outlined in Figure 1 below, with more detail on the feedback received, and how we are responding, provided in Section 2 of this paper.

Additional staging of Overall industry General support for **Key Feedback** Release 2 suggested consensus for staged Release 1 design, to further de-risk **Themes** implementation scope and schedule implementation X Minor adjustments to Further clarity sought Release 1 schedule General support for Varied feedback on on go-live readiness activities (to be requested to overall industry industry testing accommodate testing approach duration from AMOs provided in due industry readiness course)

Figure 1: Key Feedback Themes from Consultation



2. ASX's Responses to Feedback from the Consultation Process

This section summarises the feedback received through the consultation process and outlines how we are responding to that feedback.

2.1. Staged Implementation Approach

Feedback

The majority of respondents indicated their support for a staged implementation of the CHESS replacement system, acknowledging that this approach reduces risk to the project. There was also some feedback that implementing Release 2 earlier than 2028 would present challenges for some stakeholders.

Only one respondent (an AMO) did not support the two-stage approach. Its reasons for this predominantly related to the proposed project timeline and its preference for implementing FIX messaging earlier than Q1 2026 (proposed Release 1 go-live). This feedback in relation to implementation of FIX messaging is addressed in more detail in Section 2.2, which also addresses feedback relating to the proposed design, scope and schedule for Release 1.

Several CS Participants, Software Providers and industry bodies noted the substantial scope of Release 2 and associated implementation risk, particularly relative to Release 1. Some respondents suggested splitting Release 2 into multiple releases or smaller sub-stages to further de-risk implementation of the second release. A small number of respondents also asked us to consider bringing forward implementation of all or a subset of low-volume, clearing-specific ISO 20022 messages from Release 2 into Release 1, or introducing an ISO to EIS message translator.

ASX Response

Given the strong support for a staged implementation by the majority of respondents, ASX intends to proceed with its overarching approach to implementing CHESS replacement across two main releases.

Further consideration will be given to the options available to reduce implementation risk in Release 2, including those suggested by respondents.

We are also considering bringing forward the implementation of a subset of ISO 20022 messages from Release 2. We will continue to discuss this potential change with stakeholders bilaterally, as well as in the Technical Committee and the various Technical Committee working groups.

2.2. Release 1 Design, Scope and Schedule

Feedback

Respondents were generally supportive of the proposed design, scope and schedule for Release 1, including the implementation of Release 1 in Q1 2026.

Only one respondent (an AMO) was not supportive of the proposed Release 1 timeline. This respondent is of the view that the Release 1 timeline should be brought forward to enable earlier access to FIX messaging for the AMOs.

Some respondents requested adjustments to the proposed schedule for Release 1 as part of their feedback.

One respondent requested that the proposed Release 1 timeline be adjusted to allow sufficient time for governance processes after the final Implementation Dress Rehearsal and prior to go-live.

Industry bodies representing CS Participants and Software Providers raised concerns about proposed key test phases for Release 1 being scheduled during December 2025 to January 2026, noting that the concerns related to the timing of testing over the holiday period and the availability of testing resources at that time, rather than the proposed length of time allocated to testing.



ASX Response

We have assessed the possibility of bringing forward the proposed Release 1 schedule to enable earlier access to FIX messaging for AMOs. While the importance of access to FIX messaging for AMOs is recognised, we do not propose to bring forward the implementation of the FIX messaging interface on the basis that such prioritisation would delay the implementation of the new Clearing Service component of the CHESS replacement system and the resulting trade scalability improvement, which is considered a priority for the broader industry.

In relation to the feedback regarding allowing sufficient time to accommodate governance processes for CHESS Users and the CS facilities for go-live, the proposed Release 1 schedule has been adjusted so that industry readiness can be completed by early February 2026, and Release 1 go-live can be scheduled in mid-March to end-April 2026. The Release 1 go-live date will be set with industry stakeholders as part of finalising the Release 1 Cutover and Migration Approach, targeted for publication in Q2 2025. The above adjustment to the proposed Release 1 schedule will mean a minor reduction in time allocated to the AMO Accreditation and Operational Readiness phase to avoid overlap with the commencement of AMO parallel testing. In addition, the proposed Release 1 schedule has been adjusted so that clearing regression testing can commence in October 2025, rather than November 2025 as previously proposed. This ensures three full months (excluding the holiday period) are available to conduct clearing regression testing. Similarly, ASX will work with AMOs to ensure Dress Rehearsals and Parallel Testing avoids the holiday period.

The changes to the proposed schedule for Release 1 are outlined in Section 3 of this paper.

2.3. Industry Testing Approach

Feedback

The submissions to consultation indicated general support for the overall approach to industry testing.

A number of respondents sought further details on the timing, design and likely impact of the test approach, including clearing regression scenarios, information for settlement only participants, CHESS test environment details, provision of test scripts, parallel test information, entry and exit criteria, and attestation expectations.

Some respondents indicated their expectation that ASX would coordinate all industry testing. This was in response to a statement in the consultation paper indicating that CS Participants would need to coordinate clearing regression testing with their relevant AMO.

There was also some support for clearing regression testing to be made mandatory.

One respondent (an AMO) raised concerns regarding the need for AMOs to conduct parallel testing. It was of the view that the parallel test phase places loads on AMOs for tests that could mostly be achieved by ASX.

ASX Response

As indicated in the consultation paper, we will provide a suite of Release 1 documentation to support industry testing. In response to the feedback seeking further details on industry testing, an updated table of Release 1 industry test documentation and timings is provided in Section 3.3 of this paper. ASX is in the process of developing specific aspects of the industry testing approach with impacted stakeholders, and expects to publish the CHESS Replacement Release 1 Industry Test Approach in Q3 2024, which will provide further detail on the matters respondents have sought further information on, including:

- > the scope and approach to all Release 1 industry test phases;
- > information on the test data, tooling and environment used for each test phase;
- > allocation of responsibilities and coordination between ASX, AMOs, Software Providers and CS Participants;
- > the industry testing timeline, including when environments will be available;



- > entry and exit criteria for each test phase;
- > key activities and expected test outcomes for each test phase;
- > attestation requirements;
- > whether test phases are mandatory or not and the expected level of participation from relevant stakeholders; and
- > a documentation release plan providing an overview and timing of all Release 1 Industry Testing deliverables.

In our monthly industry working group meetings, we continue to discuss with impacted stakeholders the details required to enable stakeholders to prepare for industry testing.

In relation to feedback regarding the coordination of industry test activity, we confirm that ASX will coordinate all industry test activity. Clearing participants will be required to perform clearing regression testing to provide the industry with greater confidence in the successful implementation of Release 1. The Release 1 Clearing Regression Test Guide, which is expected to be published Q2 2025, will provide the minimum ASX-required test scenarios for clearing regression testing.

The AMO Parallel Test phase is a key step in mitigating risk and bolstering confidence in both the new system and its integration with external systems using Production data on to-be Production infrastructure. We will work with AMOs so that the testing they are required to conduct is proportionate to their volumes. We also encourage CS Participants to participate in the AMO Parallel Test phase to validate downstream EIS messages generated as a result of AMO trade registration and price reporting.

2.4. Industry Testing Duration

Feedback

Feedback varied in response to the proposed duration allocated for the AMO test phases.

Responses from AMOs to the consultation paper included:

- > support for the proposed industry testing timelines, noting internal constraints on bringing AMO parallel testing forward by more than four months;
- > indication that 12 months would be required to build and test once the final specifications have been published, and that the proposed AMO Build and Test phase duration of three months could be challenging with vendor scheduling; and
- a request to significantly shorten the timeframe for testing and implementation and a suggestion that individual AMOs be enabled to go live on the CHESS replacement platform as soon as they are ready, in contrast to AMOs going live together at the same time.

CS Participants and Software Providers were broadly comfortable with the proposed duration for the clearing regression testing phase, as long as they were provided the requisite testing documentation at least six months in advance of commencing testing, to support preparation.

ASX Response

On the basis that most of the AMOs that responded to this consultation have indicated that the testing duration should not be reduced, we do not propose to materially change the overall testing duration, except as outlined above in Section 2.2 of this paper. To provide AMOs adequate time to engage their vendors, commence their build and prepare for implementation, ASX published the CHESS Replacement FIX Specification on 12 June 2024.

In response to the feedback that AMO testing and go-live be staged, ASX considers that such an approach would significantly increase complexity and risk associated with the cutover process. Staging cutover would mean that clearing in both current CHESS and the CHESS replacement system would need to be enabled until the last AMO is cutover. This means trades that would usually be netted to a single position would be processed via different channels/systems. This creates technical complexity, increases risk and may cause



delays to delivery of the CHESS replacement system. For this reason, it is intended that all AMOs will transition to the new system at the same time.

To support stakeholder preparation for clearing regression testing, we will seek to provide documentation related to regression testing approximately six months prior to the testing phase commencing (rather than the three months proposed in the consultation paper).

2.5. Go-Live Readiness

Feedback

Feedback from AMOs in relation to go-live readiness largely related to clarifying and seeking further detail on the proposed readiness activities. As this phase has limited impact on the broader market, most of the other respondents did not comment on this topic in their submissions.

AMO feedback included:

- > a recommendation that there be a minimum of three Implementation Dress Rehearsals (IDRs) over multiple weekends;
- > a request for further details, including clarity in relation to the expectations on AMOs regarding reconciliations, exception breaks and the content of migration reports planned to be shared with AMOs as part of IDRs and go-live; and
- > the need for clear and transparent communication and rapid resolution of any issues or bugs discovered by ASX, clear and frequent status updates on each AMO's readiness, and the ability to test complex scenarios related to disaster recovery and failures at any time with ASX.

A number of respondents raised concerns about the complexities associated with including deferred settlement trades within the scope of migration for cutover, and recommended that this be included in the scope of regression testing.

ASX Response

ASX confirms that three IDRs are planned as part of Release 1. We will continue to engage with AMOs through industry working groups to understand and provide clarity on details required for cutover and rehearsal. Cutover documentation is planned for publication in the first half of 2025, and will include communication protocols, validations, responsibilities and roles expected, rollback procedures, details of customer migration reports to be provided, and verification tasks in the plan. Please refer to section 3.3 below for more information on cutover documentation.

We intend to provide reporting on readiness and contingency planning, and propose to engage directly with AMOs to understand the disaster and failure scenarios they want to test.

ASX has further considered its approach to deferred settlement trades, in the event there are deferred settlement trades spanning the go-live date. Two options have been considered: either a split handling of deferred settlement trades separately in CHESS and the replacement clearing service, or migration of any deferred settlement trades to the replacement clearing service on the go-live date. Initial analysis indicates significant technical complexity with the trade migration approach. We will further analyse the potential impact of the split handling approach to both existing CHESS and Clearing Participants and present our recommendation to the Implementation and Transition Working Group.

3. Design, Scope and Schedule for Release 1

3.1. Design and Scope for Release 1

Having considered the strong industry support for the proposed design and scope of Release 1, we do not propose to make material changes to the Release 1 design and scope proposals as set out in the consultation paper.



3.2. Schedule for Release 1

As noted in Section 2.2 of this paper, we have made some adjustments to proposed industry testing timeframes for Release 1 in response to the consultation feedback received. These are summarised in Table 1 below.

Table 1: Release 1 Industry Test Phases

Industry Test Phase and Purpose	Proposed Timing (in Consultation Paper)	Targeted Timing (Post Consultation)	
AMO Build and Test provides AMOs' Software Providers a phase to complete their development and undertake testing.	End Feb 2025 – Jun 2025	End Feb 2025 – Jun 2025	
AMO Readiness provides the opportunity to complete further testing including optional performance testing and an optional simulated network outage in preparation for AMO accreditation.	Jul 2025 – Mar 2026	Jul 2025 – Feb 2026	
AMO Accreditation (technical accreditation) is a mandatory industry test phase where AMOs' Software Providers will need to demonstrate their software's ability to connect and interact with the CHESS replacement system.	Sep 2025 – Nov	Sep 2025 – Early Nov 2025	
AMO Operational Readiness is a mandatory industry test phase where AMOs will need to demonstrate that their organisation meets the operational requirements for their business.	⁻ 2025		
Clearing Regression provides Clearing Participants with the ability to perform internal testing and validation of all downstream EIS messages received that result from trade registration services.	Nov 2025 – Mar 2026	Oct 2025 – Feb 2026	
AMO Parallel Test provides the opportunity to reconcile an AMO's production feed of trade registrations to current CHESS against its feed of trade registrations on to-be Production infrastructure.	Nov 2025 – Mar 2026	Nov 2025 – Feb 2026	

^{*} AMOs' Software Providers include both those developing in-house systems as well as external vendors.

This has resulted in corresponding changes to the proposed overall Release 1 timeline, as set out in Figures 2 and 3 below.

As outlined in section 2.2, the targeted Release 1 go-live will now occur between mid-March to end-April 2026. The go-live date will be determined as part of finalising the Release 1 Cutover and Migration Approach.



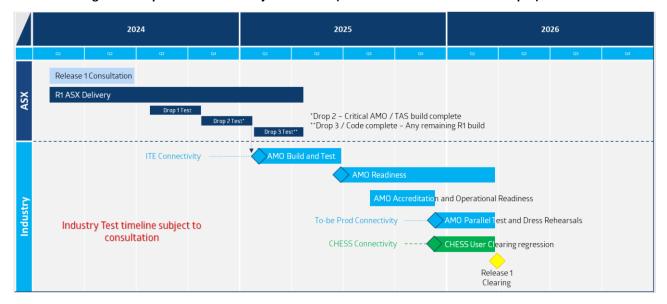
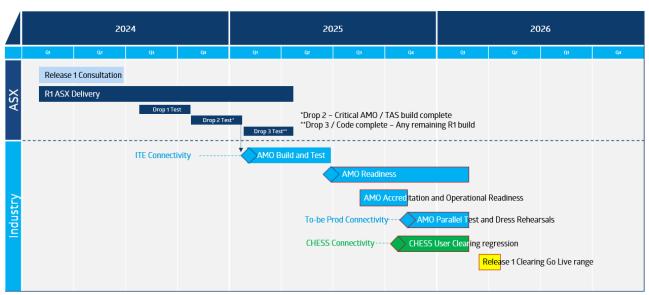


Figure 2: Proposed Release 1 Project Timeline (Published in the Consultation Paper)

Figure 3: Release 1 Project Timeline (Post Consultation)*



^{*} This timeline may be subject to change due to a range of factors as implementation progresses.

3.3. Industry Testing Documentation

An updated table of Release 1 industry testing documentation can be found in Table 2 below. This table addresses respondents' requests for additional clarity in relation to the forthcoming industry test documentation.



Table 2: Release 1 Industry Test Documentation*

Document	Purpose of Document	Audience	Targeted Publication Date
CHESS Replacement Release 1 Industry Test Approach	Describe the detailed industry test approach and expected activities of each involved party, as well as timing, entry and exit criteria and expected test outcomes etc. of all Release 1 industry test phases.	AMOs and their Software Providers, CS Participants	Q3 2024
Functional and Technical Specifications for AMOs	Provide a detailed specification of all FIX messages, including message structures, rules, message flow diagrams etc. Market-relevant specifications will be published in iterations as ASX analyses and completes designs for each drop.	AMOs and their Software Providers	Between Q3 and Q4 2024
Release 1 Connectivity Guide	Detail the technical connectivity requirements to connect to the CHESS replacement system, including connectivity method(s), network details and security details.	AMOs and their Software Providers	Q4 2024
Release 1 Clearing Regression Test Guide	Detail the minimum ASX-recommended Clearing Regression test scenarios, key activities and expectations regarding conduct and expected results including entry and exit criteria.	Clearing Participants	Q2 2025
Release 1 Technical Accreditation Guide	Provide detail on the CHESS replacement Technical Accreditation phase, expectations regarding conduct and expected results including the accreditation process, connectivity and message scenarios.	AMOs and their Software Providers	Q1 2025
Release 1 Cutover and Migration Approach	Detail the cutover and migration approach, key activities, responsibilities including all verifications and validations required by ASX and the market, and milestones across the cutover and dress rehearsal windows.	AMOs and their Software Providers, CS Participants	Q2 2025
Release 1 Guide to Operational Readiness Phase	Detail the Operational Readiness scenarios including mandatory success criteria.	AMOs	Q2 2025
Release 1 Guide to AMO Parallel Test	Provide detail on the Parallel Test phase, key activities and expectations, and expected results including entry and exit criteria.	AMOs and their Software Providers, CS Participants	Q3 2025
Cutover Runbook	Provide AMOs with key tasks and milestones, with an outline of detailed steps including planned timing. The runbook will be used in dress rehearsals and refined as required ahead of the final go-live event. Note that the cutover runbook will also include the steps required to rollback.	AMOs and CS Participants	Q3 2025

^{*} Details relating to Release 1 industry test documentation will continue to be refined and communicated to industry as Release 1 progresses.



4. Other Matters for Further Consultation

4.1. Release 1 Rule Amendments

To implement Release 1 of the CHESS replacement system, changes to the Trade Acceptance Service (**TAS**) and Product Services legal documentation, and ASX Clear Operating Rules and ASX Settlement Operating Rules (the **Operating Rules**) will be required. The revised TAS and Product Services legal documentation and Operating Rules will apply in the same way to all AMOs, including ASX Limited.

We propose to consult with AMOs on the draft changes to the TAS and Product Services legal documentation in the first half of 2025, with proposed amendments to the draft Operating Rules being consulted on shortly thereafter. An indicative timeline for consulting on the TAS and Product Services legal terms is set out below in Figure 4.



Figure 4: Indicative TAS Consultation Timeline for Release 1 (Post Consultation)

4.2. T+1 Settlement

ASX has consulted separately on the possibility of transitioning to a T+1 settlement cycle in Australia. This consultation concluded on 18 June 2024. Responses to the T+1 consultation will inform the consultation on T+1 settlement in the context of CHESS replacement, as part of public consultation on the design, scope and timeline of Release 2. Accordingly, while ASX acknowledges the feedback received in response to this consultation paper on the timing for implementing T+1, this feedback will be considered further during the consultation on Release 2.

4.3. Interoperability

In response to the consultation paper, two AMOs provided feedback on the scope for interoperability. ASX is currently developing its proposed approach to provide the technical foundations for interoperability in the CHESS replacement system and will consider the feedback received carefully. ASX will consult on its proposal for interoperability with industry as part of its public consultation on Release 2.

4.4. Next Steps

While we have set out a plan on how we intend to deliver Release 1, we will continue to engage with stakeholder working groups that report to the Technical Committee on aspects of testing, cutover and go-live which may need to be further refined over time, as they are subject to further industry discussion and/or future industry progress. We also expect to publish a consultation paper on the proposed design, scope and schedule for Release 2 in Q3 2024.

Your feedback continues to be a critical input into the project and the development of a project plan for CHESS replacement, which we continue to aim to deliver by the end of 2024.