

ASX CHESS Project

Technical Committee

5 February 2025



Acknowledging Country

ASX acknowledges the Traditional Owners of Country throughout Australia. We pay our respects to Elders past and present.

Artwork by Lee Ann Hall, *My country My People*

Housekeeping

Troubleshooting

- > Please mute yourself when not speaking
- > Please use the 'raise hand' feature on MS Teams if you would like to ask a question
- > Please introduce yourself when talking for the benefit of all members
- > Meeting is being recorded for the purposes of capturing decision and actions
- > Dial in details (audio only):
 - +61 2 7208 4607
 - Phone Conference ID: 246 649 137#
- > Presentation materials were distributed before the meeting and will be published on the website.

Important Information

Competition Law Reminder

Committee members are reminded to have regard to their obligations under competition law. In particular, please note that the Competition and Consumer Act prohibits a corporation from engaging with one or more persons in a concerted practice that has the purpose, effect or likely effect of substantially lessening competition.

Agenda

01 Welcome, Open Actions & Feedback

02 Project Status

03 Implementation and Transition Update

04 Optional versus Mandatory Functionality

05 Rules and Procedure Changes

06 Other Project Updates

07 Pulse Survey Results

08 Forward Engagement for 2025

01

Welcome, Open Actions & Feedback

For discussion

01 – Open Actions

February 2025

| # | Action | Raised | Update | Status |
|----|--|------------------|--|------------------|
| 01 | ASX to follow up member query regarding ability for AWS hosted sites to connect into the AWS environment without needing to leave and re-enter | TC August 2024 | <ul style="list-style-type: none">ASX is assessing the technical and commercial components and plans to engage with the industry to validate the demand | Propose to close |
| 02 | ASX to consider further industry engagement at the ESPPSC on participant viewpoints on payment channels | TC November 2024 | <ul style="list-style-type: none">ESPPSC members have been requested to invite a Participant member as an observer to the ESPPSC meetings | Propose to close |
| 03 | ASX to provide thematic analysis on the responses to the consultation paper for the Release 2 implementation approach | TC December 2024 | <ul style="list-style-type: none">Thematic summary on implementation industry responses has been provided in agenda item 3. Refer to slide 20 | Propose to close |
| 04 | ASX to provide a schedule on when the CHES project scope objectives that require further engagement will be taken back to the Technical Committee and Business Committee in 2025 | TC December 2024 | <ul style="list-style-type: none">Scope objectives that require further engagement are proposed to be addressed in the relevant Business Design Working Group session. Refer to slide 38 | Propose to close |

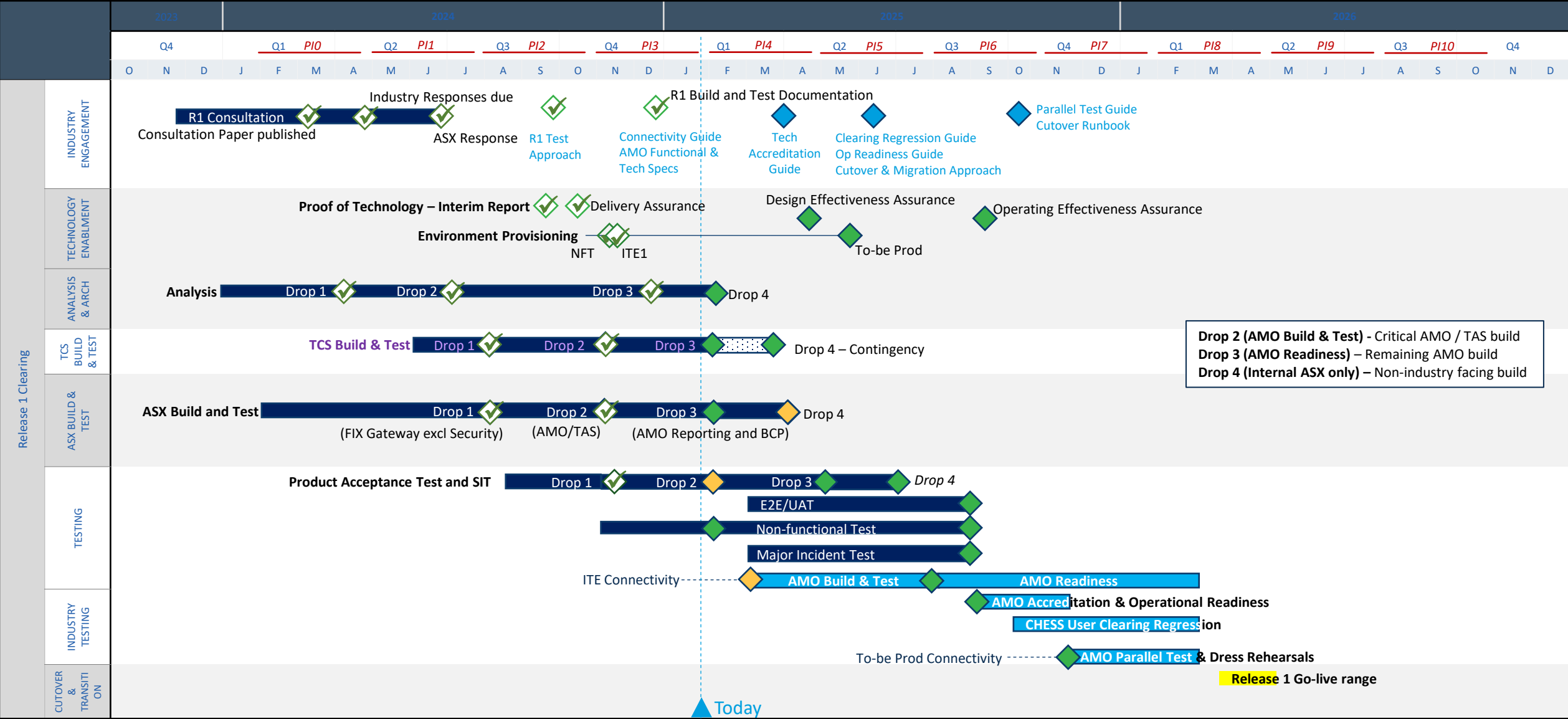
02

Project Status

02 – Updated Release 1 Indicative Project Timeline – February 2025

High level overview of the indicative timeline

Key | Industry ASX / Vendor Status



02 – Project Status

Whilst the Project is tracking amber due to the delays in testing and in finalising the Data and Reporting integrated plan, opening of the Release 1 Industry Test Environment (ITE) in late-February 2025 for commencement of the AMO Build and Test phase is on track.

> ITE Open update

- Testing has significantly progressed and is now 83% complete. Testing for AMO Build and Test functionality is planned to be completed by early-February 2025
- Implementation readiness for ITE Open is progressing to plan. A number of key milestones have been completed, including all scope being delivered for AMO Build and Test, completion of security and penetration testing, and publication of the Connectivity Guide in late-December 2025
- An operating model is in place to support ITE open and Stage 2 cloud controls are in place.
- Performance testing on the processing of 80,000 trade messages through the FIX gateway has commenced with 6 cycles completed.

> Data and Reporting update

- The build for the Data and Reporting steel thread was completed on 13 December 2024. Re-baselining of the Data and Reporting Integrated Plan is still in progress with baselining of critical path integrations and external reports expected to be completed by the mid-February 2025. The delays will not impact commencement of the AMO Build and Test phase.

02 – Project Status

Other key updates:

> Release 1

- Drop 3 Show and Tell was completed on 10 January 2025. Drop 3 is planned to be delivered by the end of January 2025, this is the final functional drop from BaNCS
- Data Migration build is nearing completion with the reconciliation of data in scope for ITE open currently at 97%. The migration build is targeted for completion by the end of February 2025, after which the focus will shift to mock migrations and preparations for dress rehearsals planned for May 2025.

> Release 2

- TCS plans to deliver code for Release 2 in 5 drops. The Project has completed initial design and discovery work (**pre-analysis**), and commenced assessing the business requirements for Drop 1
- Pre-analysis for Drop 2 has commenced mid-January 2025.

02 – Test Summary (AMO Build & Test) as at 23 January 2025

| Testing Status Commentary: | | | | Focus for Next Period: | | | | OVERALL AMO B&T PLANNED VS ACTUAL | | | | | | |
|--|-------------|-------------------|-------|--|------------------|-------------------|-----------------|-----------------------------------|----------------------|----------------------------------|------------|--------|------------|-------|
| <div>AMO Build & Test Readiness<ul style="list-style-type: none">Fix Pack 2.5.0 deployed on 23/0113 AMO B&T defects retested and closedNFT Security test completionRegression ongoing and packs are being stabilisedOngoing reviews of open defects for agreement on any potential impact to AMO B&T</div> | | | | <div>AMO Build & Test Readiness<ul style="list-style-type: none">Progress with Test Execution and defect closures enabled by Fix Pack 2.5.0Continual Regression TestingContinual reviews of any new defectsDraft Test Summary Report and present for Acceptance</div> | | | | | | | | | | |
| Test Levels | | Test Level Status | | | Schedule | | | | Tests | | | | Defects | |
| Drop 1&2 Test Levels for Execution | Last Period | This Period | Trend | Planned Start Date | Planned End Date | Actual Start Date | Actual End Date | Total Planned | De-scoped / Deferred | Planned To Date vs Actual Passed | % Complete | Open | Open S1/S2 | |
| PAT & SIT Execution | A | A | ➡ | 13-Aug-2024 | 31-Jan-2025 | 13-Aug-2024 | | 856* | 56 | 784*/646 | 81% | 41 | 9 | |
| Upstream ST | A | A | ➡ | 17-June-2024 | 31-Jan-2025 | 17-Jun-2024 | | 591* | 26 | 519*/492 | 87% | 11 | 4 | |
| Current Totals | | | | | | | | 1447* | 82 | 1303*/1138 | 83.3% | 52 | 13 | |
| NFT Execution | A | A | ➡ | 16-Dec-2024 | 31-Dec-2024 | 19-Dec-2024 | | 29* | 2 | 27/24 | 89% | 3 | 0 | |
| <div>*Predicted Total Planned = Total Number of Tests Planned for Execution in Drop 1 and Drop 2 (NFT #'s not included)<ul style="list-style-type: none">Planned vs Actual Exec = "As at date" the number of tests planned on successfully executing vs number of actual tests successfully executed</div> | | | | | | | | Defect Severity | | Critical | High | Medium | Low | Total |
| | | | | | | | | Open Defects | | 0 | 15 | 39 | 3 | 57 |

*Predicted Total Planned = Total Number of Tests Planned for Execution in Drop 1 and Drop 2 (NFT #'s not included)

- Planned vs Actual Exec = "As at date" the number of tests planned on successfully executing vs number of actual tests successfully executed
- % Complete = (Actual Execution – De-scoped and Tests Deferred to Drop 2 that include Failed and Blocked) / Total Planned * 100

12 | Technical Committee | 05 February 2025 | Public

02 – Project Risks

February 2025: Risks continue to track as planned and are being actively managed

| Area | Description | Mitigation | Residual Exposure | Status |
|----------|---|--|-------------------|--------|
| Schedule | Delays in finalising the CHES Project Data and Reporting Plan | Update the CHES Project's Data and Reporting Plan in line with the Enterprise Data Platform Delivery Plan Work with internal teams to identify a feasible testing approach given planned timeline Onboard additional resources to reduce design and build timeline | Medium | Open |
| Delivery | Delays in testing may impact AMO Build and Test | Prioritise resourcing and testing activities to minimise potential impact to the critical path for commencement of AMO Build and Test Prioritise delivery of scope and bring forward open defect fixes critical to AMO Build and Test | Medium | Open |
| Schedule | Release 2 timeline may be impacted due to Release 1 delivery priority | Minimise overlap between Release 1 and Release 2 to manage impact on resources required to support both releases Accelerate Release 2 analysis following completion of Release 1 analysis | Medium | Open |
| Schedule | Focus on AMO Build and Test has increased scope for Drop 3 | Continue with the full testing team post completion of Drop 2 testing. Retain availability of key SMEs to support testing for Drop 3 | Medium | Open |

02 – Assurance Plan Progress

Assurance Plan status

- > Assurance activities are tracking to plan
- > As at 15 January 2025, 11 reviews have been completed. One medium and six low rated findings are open
- > Completed reviews are shown in the table on the following slide.

December 2024 Licence Condition Review Report to be published

- > EY's December 2024 Report has been finalised. The review was a continuation of the six-monthly independent expert reviews over the CHES project's assurance activities, under licence conditions imposed by ASIC. The scope of the review was to independently assess the operating effectiveness of the assurance plan and completed assurance activities in the six-month period. The review concluded governance mechanisms over the Assurance Plan and the assurance activities were fit for purpose. No recommendations for improvement were made. The report is anticipated be made public by mid-February 2025.

Annual update of the Assurance Plan

- > The scope of the current Assurance Plan includes Release 1 activities to go live and covered Release 2 activities to December 2024. An annual update process is planned be completed over the coming months with the objective of reviewing that the Assurance Plan for Release 1 remains current and aligned with the project's risk profile and to develop the Assurance Plan for Release 2 following industry consultation and ASX approval processes in late 2024. Updates to the Assurance Plan are planned to be agreed through governance processes.

02 – Assurance Plan Progress

| Completed Reviews | Date Completed |
|---|----------------|
| December 2024 Licence Condition Review - assessed the operating effectiveness of the assurance plan including governance processes and completed reviews | Dec 24 |
| Release 1 Requirements and Design Process Review - assessed the processes and used to support requirements definition and design for Release 1 | Dec 24 |
| Cloud Platform Part 1 Review - assessed key project management processes relating to AWS cloud delivery | Nov 24 |
| Review of Proof of Technology Activities - assessed key management and governance processes relating to the PoT activities for Release 1 | Nov 24 |
| Project Health Check 1 Review - assessed vendor management, progress measurement and reporting, governance effectiveness, schedule management, and key processes supporting project approval | Nov 24 |
| Industry Consultation Process Review - assessed ASX's engagement approach and processes relating to the industry consultation process for Release 1 and Release 2 including decision governance | Nov 24 |
| Release 1 ASX Industry Test Approach and Planning Review - assessed the quality of ASX's approach and planning for the Release 1 industry test phase, including consideration of industry feedback in developing the approach and plan | Nov 24 |
| ASX Delivery Assurance Inflight Review 1 - Release 1 - assessed adherence of Release 1 mandatory project deliverables to the ASX delivery framework | Oct 24 |
| ASX Test policy and standards assessment for Release 1 - Stage 1 Review - assessed compliance of ASX Release 1 test practises (relating to the project's test strategy and test planning activities) against ASX test policies and international standards | Oct 24 |
| June 2024 Licence Condition Review - assessed the design effectiveness of the assurance plan | Jun 24 |
| Light Health Check - Sentiment survey - gauged internal project stakeholder sentiment on project governance, behaviours and team performance | May 24 |

03

Implementation & Transition Update

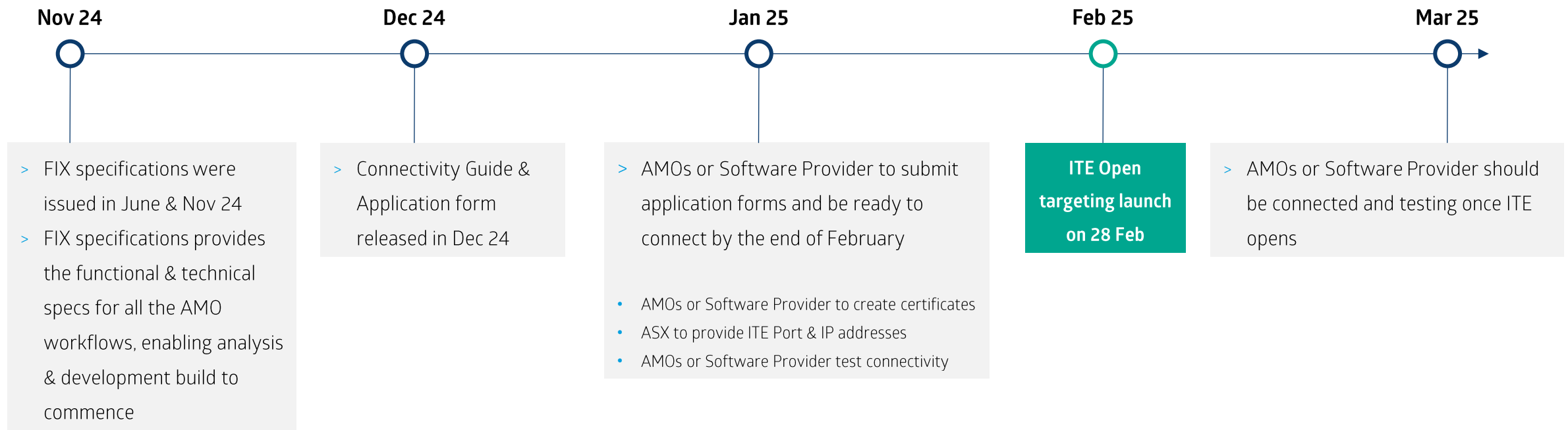
03 – Release 1 Upcoming AMO Build and Test Phase

Opening the Release 1 Industry Test Environment (ITE) marks the commencement of the AMO Build and Test phase

| AMO Build and Test | |
|---|---|
| Between March and June 2025 AMOs and Software Providers can complete their development and undertake testing in the Release 1 Industry Test Environment | |
| Environment | Release 1 Industry Test Environment |
| Data | Production like reference and security data |
| Entry Criteria | AMOs or their Software Provider to ensure that they are appropriately prepared and have internally tested software prior to connecting to the Release 1 ITE |
| Exit Criteria | At the end of the AMO Build and Test phase, it is expected that all AMOs or Software Provider will have completed build associated with the FIX Messaging Interface. (Drop 1/Drop 2) |
| Proposed scenarios monitored | <ul style="list-style-type: none">> Frequency of AMO logins (historical time scale)> Total Trade Capture messages received through FIX gateway> Total Trade Capture Cancellation messages received through FIX gateway> Total Market Data Snapshot messages received through FIX Gateway |

03 – Release 1 ITE Open

Key connectivity steps leading up to ITE open



03– Release 1 Build and Test Forum – Introduction

The purpose of the Release 1 Build and Test Forum is to support AMOs and Software Providers as they complete development and undertake testing when connected to the Release 1 Industry Test Environment

Responsibilities

- > Provide technical support to AMOs and Software Providers during the AMO Build and Test phase
- > Monitor and track progress on Release 1 industry readiness
- > Provide monthly updates to the Technical Committee and Working Groups or as appropriate

Proposed Key Topics

- > ITE connectivity updates
- > FIX specifications updates
- > AMO testing scenarios
- > Reporting on AMO build and test activities
- > Updates to Release 1 AMO documentation (if required)

Key Messages

- > The Forum:
 - is open to AMOs and Software Providers
 - is planned to be up to 1 hour in duration and held on a monthly cadence. Invitations and agenda will be shared closer to commencement.
- > AMO and Software Providers asked to nominate representatives to participate in the forum. Nominated members should have the appropriate skills and business responsibilities to actively contribute



Overall Release 1 Industry readiness tracking, including preparation for Clearing Regression, will continue to be discussed at the I&T WG.

03 – Release 2 Implementation Approach

- > AMOs, Settlement Only participants, Share Registries and Software Providers supported or did not object to the proposed implementation approach
- > The majority of Clearing and Settlement participants supported or did not object to the proposed implementation approach. Five respondents supported staging options and two expressed interest in continuing to explore staging options.
 - Of the five that supported staging options, three supported staging by issuer, one supported staging by function and one supported staging by participant
- > The majority of Industry Associations supported or did not object to the proposed implementation approach. Two expressed interest in continuing to explore staging options.



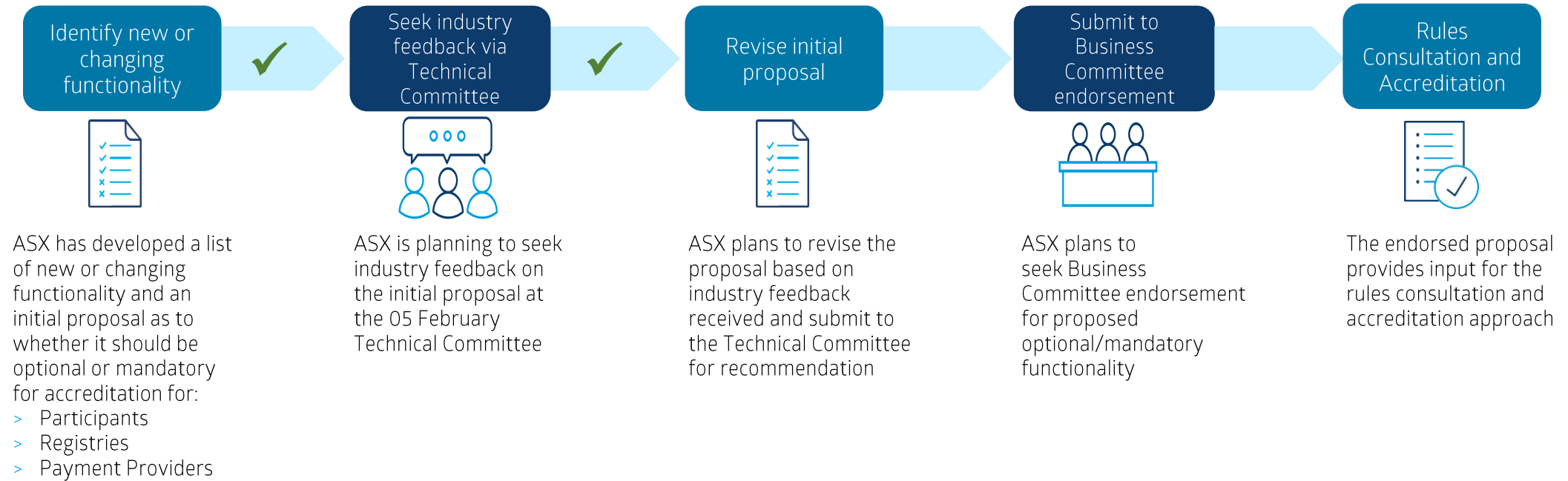
Release 2 implementation risk will be mitigated through comprehensive implementation planning, industry testing and readiness activities. Engagement plans outline how we will continue working with industry to explore further ways to mitigate the overall Release 2 implementation risk profile.

04

Optional vs Mandatory Functionality

04 – Optional or Mandatory Functionality – Proposed Process

Proposed process to determine whether functionality for the CHES project will be optional or mandatory



04 – Proposed Principles of Evaluation

ASX has evaluated the optional or mandatory nature of new functionality by applying the following proposed principles

1. **Accreditation is mandatory** on:
 - a) Mandatory or conditional information to be populated in existing mandatory messages
 - b) Optional information that impact or trigger a production workflow, including related additional messages
 - c) Workflows that can be triggered by a counterparty and can't be prevented
 - d) New core-clearing and settlement functionality
2. **Accreditation is not required** to demonstrate the use of new informational or optional fields
3. **Accreditation is optional** on fully optional workflows that can be disabled in CHES.



The initial proposal is based on current message construct used for documented workflows. ASX is seeking for feedback on the initial proposal by 12 March 2025.

04 – Initial proposal on the Optional or Mandatory Nature of New Functionality

Core clearing and settlement functionality (1 of 2)

| Ref. | Feature for Accreditation | C&S Participant Accreditation | Settlement Only Participant Accreditation | Payment Provider Accreditation | Registry Accreditation | Proposed Implementation |
|------|---|--|---|--------------------------------|------------------------|-------------------------|
| 1.1 | Registration details & investor information | | | | | |
| | > Standardised registration details | | | | | |
| | > Additional data: email, mobile | | | | | |
| | > Additional data: tax information: stored (e.g. ABN, ACN, FATCA) | Mandatory – 1a | Mandatory – 1a | N/A | Mandatory – 1c | At go-live |
| 1.2 | > Additional data: Bank details | | | | | |
| | > Foreign ownership | | | | | |
| 1.4 | Issuer sponsored improvements | Mandatory – 1a | Mandatory – 1a | N/A | Mandatory – 1a | At go-live |
| 1.5 | ETF creations & redemptions | Mandatory – 1a (as applicable) | Mandatory – 1a (as applicable) | N/A | Mandatory – 1a | At go-live |
| 2.6 | Settlement improvements – participant group | Mandatory – 1a (Account Participants only) | N/A | N/A | N/A | At go-live |
| 3.6 | Corporate actions – bank account information (for takeovers) | Mandatory – 1a | Mandatory – 1a | N/A | Mandatory – 1a | At go-live |
| 3.8 | Corporate actions – sub-register state | Mandatory – 1a | Mandatory – 1a | N/A | Mandatory – 1a | At go-live |
| 4.1 | Changes to netting process - continuous netting | Mandatory – 1a | N/A | N/A | N/A | At go-live |

04 – Initial proposal on the Optional or Mandatory Nature of New Functionality

Core clearing and settlement functionality (2 of 2)

| Ref | Feature for Accreditation | C&S Participant Accreditation | Settlement Only Participant Accreditation | Payment Provider Accreditation | Registry Accreditation | Proposed Implementation |
|-----|--|--|---|--------------------------------|------------------------|---|
| 4.2 | Changes to settlement process | Mandatory – 1a | Mandatory – 1a | N/A | N/A | At go-live |
| 5.2 | House/client segregation | Position accounts are mandatory – 1a | N/A | N/A | N/A | At go-live or post go-live |
| | | Segregation of client positions are optional | | | | |
| 5.4 | Cum entitlement balance simplification | Mandatory – 1a | Mandatory – 1a | N/A | Mandatory – 1a | At go-live |
| - | Portfolio transfers (new) | Mandatory – 1c | Mandatory – 1c | N/A | N/A | At go-live |
| 2.3 | Standing instructions – payment limits (new) | N/A | N/A | Mandatory – 1d | N/A | At go-live |
| 2.8 | Payments – non-batch (new) | N/A | N/A | Mandatory – 1d | N/A | At go-live |
| 4.5 | Non batch DvP bilateral settlement (new) | Mandatory – 1d | Mandatory – 1d | N/A | N/A | Build & test phase, go-live shortly after |

04 – Initial proposal on the Optional or Mandatory Nature of New Functionality

Functionality to enhance existing workflows

| Ref | Feature for Accreditation | C&S Participant Accreditation | Settlement Only Participant Accreditation | Payment Provider Accreditation | Registry Accreditation | Proposed Implementation |
|------|---|-------------------------------|---|--------------------------------|------------------------|--|
| 2.1 | Bilateral matching improvements - hold/release | Mandatory – 1b | Mandatory –1c | N/A | N/A | At go-live – explore opportunities to mitigate any risk on Day 1 |
| 2.2 | Bilateral matching improvements - additional matching criteria | Field dependent - 1a and 2 | Field dependent - 1a and 2 | N/A | N/A | At go-live |
| 3.1 | Electronic dividend claims – diary adjustment improvements | Mandatory – 1a | Mandatory – 1a | N/A | N/A | At go-live |
| 3.5 | Electronic notification of payment advice - securities | Mandatory – 1a | Mandatory – 1a | N/A | Mandatory – 1a | At go-live |
| 3.7 | Corporate actions – holding adjustments (additional reason codes) | Mandatory – 1a | Mandatory – 1a | Mandatory – 1a | Mandatory – 1a | At go-live |
| 3.10 | Bid offeror automation | N/A | N/A | N/A | Mandatory – 1a | At go-live |
| 4.3 | Linking bilateral settlements | Mandatory – 1b | Mandatory – 1b | N/A | N/A | At go-live – explore opportunities to mitigate any risk on Day 1 |
| 4.4 | Settlement lock for CHESS holdings | Mandatory – 1a (TBD) | Optional | N/A | N/A | At go-live – explore opportunities to mitigate any risk on Day 1 |

04 – Initial proposal on the Optional or Mandatory Nature of New Functionality

Functionality for additional services or reporting

| Ref | Feature for Accreditation | C&S Participant Accreditation | Settlement Only Participant Accreditation | Payment Provider Accreditation | Registry Accreditation | Proposed Implementation |
|-----|---|-------------------------------|---|--------------------------------|------------------------|-----------------------------------|
| - | UI | Optional | Optional | Optional | Optional | At go-live |
| 1.1 | Registration details and investor information - Additional data: tax information: pass through (e.g. TFN) | Optional | Optional | N/A | Mandatory – 1c | At go-live |
| 1.3 | SRN enquiry & validation | Optional | Optional | N/A | Mandatory – 1a | At go-live |
| 1.6 | Continuous holding balance API | Optional | Optional | N/A | Optional | At go-live |
| 1.7 | Registry HIN validation – enquire for IPOs/cancelled HINs | N/A | N/A | N/A | TBD | At go-live |
| 3.2 | Corporate action election and acceptance processing > Rights/SPPs > DRP/BSP | Optional | Optional | N/A | Optional | Build & test, then phased go-live |
| 3.3 | | | | | | |
| 5.3 | Interoperability | N/A | N/A | N/A | N/A | ASX internal |
| 2.4 | Preliminary payment notifications | Optional | Optional | Optional | N/A | TBD |
| 4.1 | Changes to netting process - optional NNDP report | Optional | N/A | N/A | N/A | At go-live |
| 3.5 | Electronic notification of payment advice - cash | N/A | N/A | N/A | N/A | Post go-live |

05

Rules and Procedure Changes

05 – Proposed Approach and Drafting Principles

- > Legal arrangements to reflect the CHES project's technical build
- > Aim to minimise changes to existing Rules and Procedures
- > Plan to consult on all Rules and Procedures changes relevant for Release 1 at the same time and, likewise, all Rules and Procedures changes relevant to Release 2 will be consulted on at the same time (vs. last project where Rule changes were consulted on in 3 tranches for one release)
- > Use material consulted on in previous iteration of the Project, where relevant and appropriate.

05 – CHESS Project Rules and Procedures Consultation – Release 1

Scope: Proposed changes to ASX Clear Operating Rules and Procedures; and ASX (Trade) Operating Rules Procedures (Rules and Procedures)

Changes to the Rules and Procedures

- > The implementation of a new FIX Gateway and FIX messaging for AMOs
- > Decommissioning some existing CHESS functionality, including the ability for Clearing Participants to remove trades from novation and set-off, and exclude trades from set-off, in certain circumstances



No changes are proposed to be made to the ASX Clear Operating Rules or Procedures relating to core clearing functionality (including registration, novation, netting and risk-management)

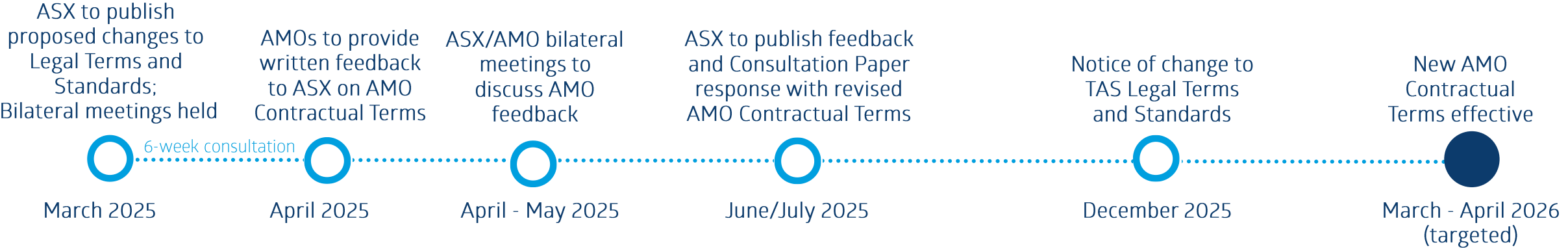
05 – Proposed Timeline for Rules and Procedure Changes

ALL DATES ARE
INDICATIVE AND
SUBJECT TO CHANGE



05 – Proposed Timeline for TAS and Product Services Legal Terms and Operational and Technical Standards

ALL DATES ARE
INDICATIVE AND
SUBJECT TO CHANGE



06

Other Project Updates

06a

Participant Identification – Use of BICs

06a - Participant Identifications – Update on the use of BICs

Background

- > UIC's are planned to be used in the CHES project's solution to identify Participants
- > ISO 20022 message schemas are designed to ensure future interoperability requirements are considered and a global identification standard can be leveraged
- > Business Identifier Code (BIC) is defined by ISO 9362 standard and is used for addressing messages, routing business transactions and identifying business parties. Swift manages the allocation of BIC's
- > Participants have provided the following feedback in various working groups:
 - International custodians have a manual process to translate a BIC to a UIC in order to send a request onto CHES
 - Manual process is time consuming and error prone – each Participant is required to maintain their own lists/mappings
 - A centralised mapping document being maintained for UIC to BIC mapping will alleviate the overhead for Participants.

Proposal subject to further solution analysis and planning activities

- > Mapping of UIC to BIC list can be created, relying on the information ASX receives from Participants
- > Consideration to be made regarding the necessary rules changes to ensure Participants provide information on a timely basis to ASX and on ASX's obligation to maintain an accurate up-to-date document for Participants to utilise in their Business As Usual processing
 - As BICs are not an ASX identification, ASX is not responsible for the accuracy of the information, or any adverse outcomes as a result of using the BIC
- > Either a static document which would be referenced from ASX's website or a machine-readable file which could be downloaded and consumed by the Participants systems
- > Subject to further solution analysis and planning.

06b

Scope Objectives Update

06b – Scope Objectives Update

Broad consensus was received from the Business Committee to endorse the proposed next steps of the CHES project's scope objectives as presented in the 03 December Technical Committee meeting

- > The proposed next steps of the CHES project's scope objectives are categorised under the following:
 - 24 scope objectives are planned to progress to detailed design and specifications with industry
 - 6 scope objectives require further engagement before proceeding to detailed design
 - 3 scope objectives are not planned to be brought forward at this stage
- > The scope objectives that require further engagement are planned to be taken forward via the relevant BDWG session outlined in the 2025/26 Business Design Working Group forward engagement plan on the next slide.

06b – Business Design Working Group – Indicative 2025 / 26 Plan

| # | Session | Topic(s) | Invitees | Proposed Date | Action |
|----|---|---|-----------------|------------------|---|
| 13 | <u>Release 2 Drop 1 Deep Dive</u> | Deep dive into Release 2 Drop 1 detailed business design. | All | 6 February 2025 | Pre-work circulated early-Dec. Feedback requested by 23/01. |
| 14 | Registries Focus Group | Registries focus group on specific registry topics. | Registries only | 13 March 2025 | Planned |
| 15 | <u>Release 2 Drop 2 Deep Dive</u> | Deep dive into Release 2 Drop 2 detailed business design (<u>including Transaction Basis Deep Dive</u>) | All | 3 April 2025 | Planned |
| 16 | <i>Placeholder</i> | <i>Session to be confirmed</i> | <i>TBD</i> | 8 May 2025 | Planned |
| 17 | Payment Provider Focus Group | Payment provider focus group on planned changes to payment authorisation processes. | All | 5 June 2025 | Planned |
| 18 | <u>Release 2 Drop 3 Deep Dive</u> | Deep dive into Release 2 Drop 3 detailed business design. | All | 10 July 2025 | Planned |
| 19 | <i>Placeholder</i> | <i>Session to be confirmed</i> | <i>TBD</i> | 7 August 2025 | Planned |
| 20 | Payment Channels Deep Dive | Industry focus group on the real-time payment channel | All | 4 September 2025 | Planned |
| 21 | <u>Release 2 Drop 4 Deep Dive</u> | Deep dive into Release 2 Drop 4 changes and business design | All | 9 October 2025 | Planned |
| 22 | New Corporate Action Services Focus Group | Industry focus group on new corporate action services | All | 6 November 2025 | Planned |
| 23 | <i>Placeholder</i> | <i>Session to be confirmed</i> | <i>TBD</i> | 4 December 2025 | Planned |
| 24 | <u>Release 2 Drop 5 Deep Dive</u> | Deep dive into Release 2 Drop 5 changes and business design | All | January 2026 | Planned |

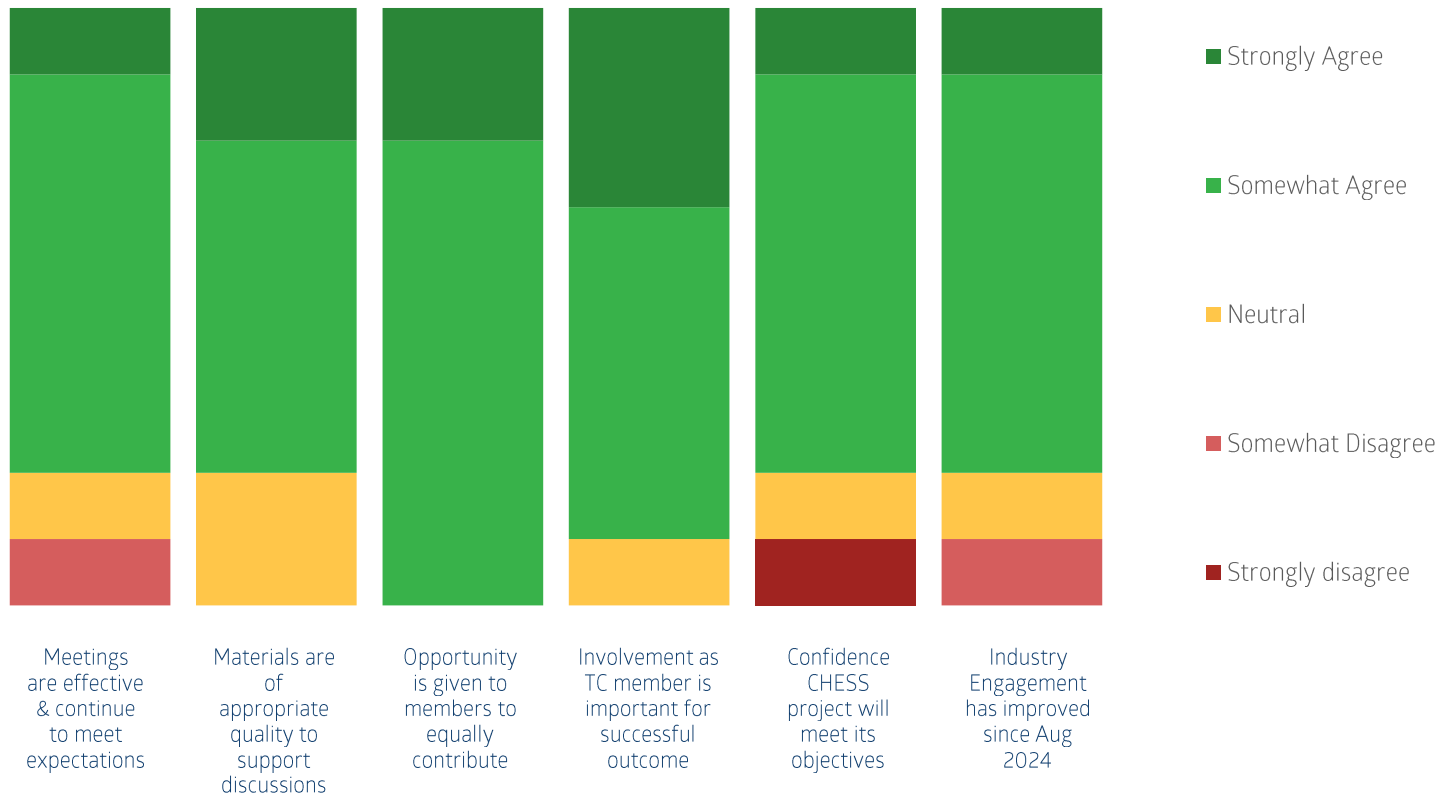
Note: indicative order, subject to change based on industry inputs and further planning. Multiple sessions may be required per topic.

07

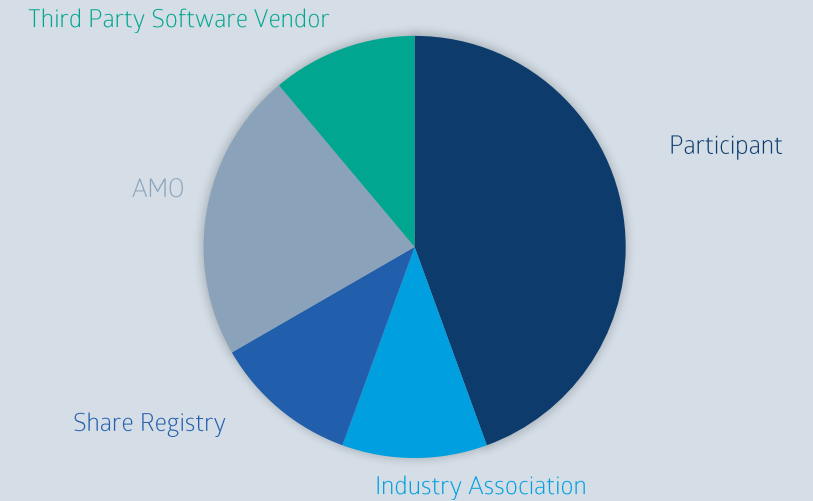
Pulse Survey Results

07 – Pulse Survey Results – Technical Committee

TC Engagement Effectiveness Survey Results – H2 2024



Participants by Cohort

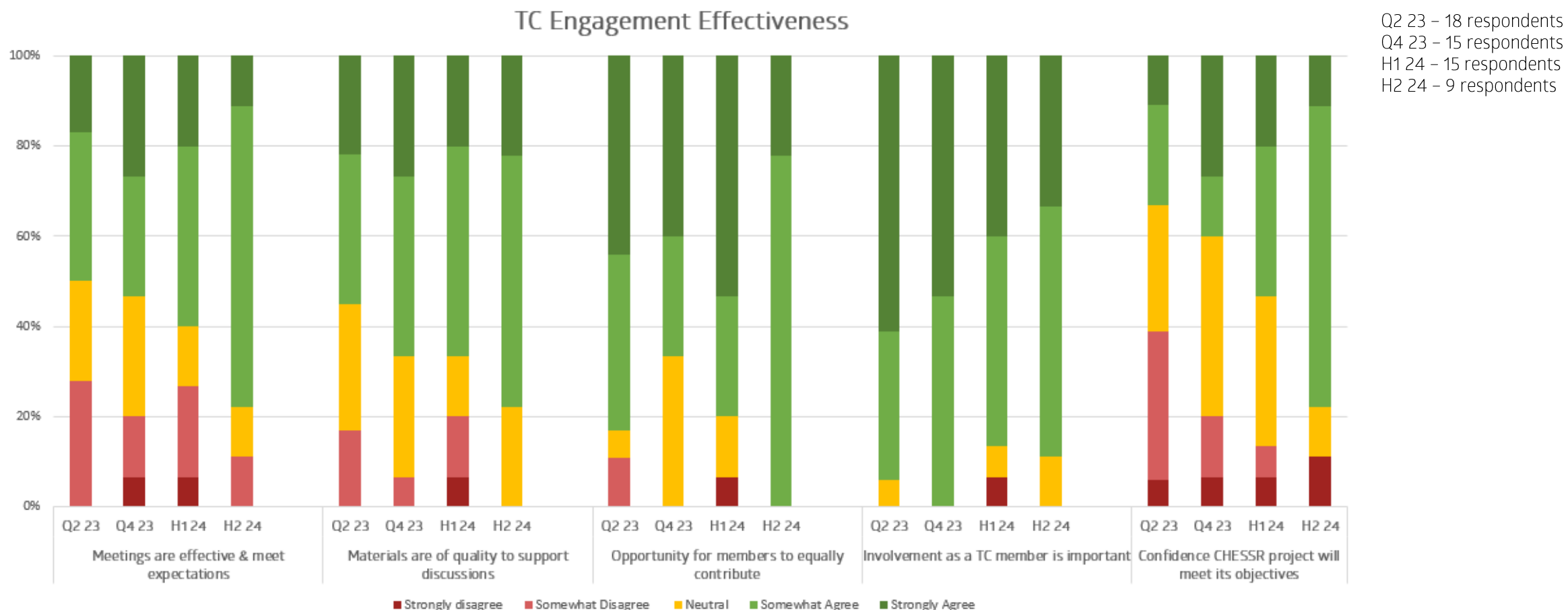


Insights

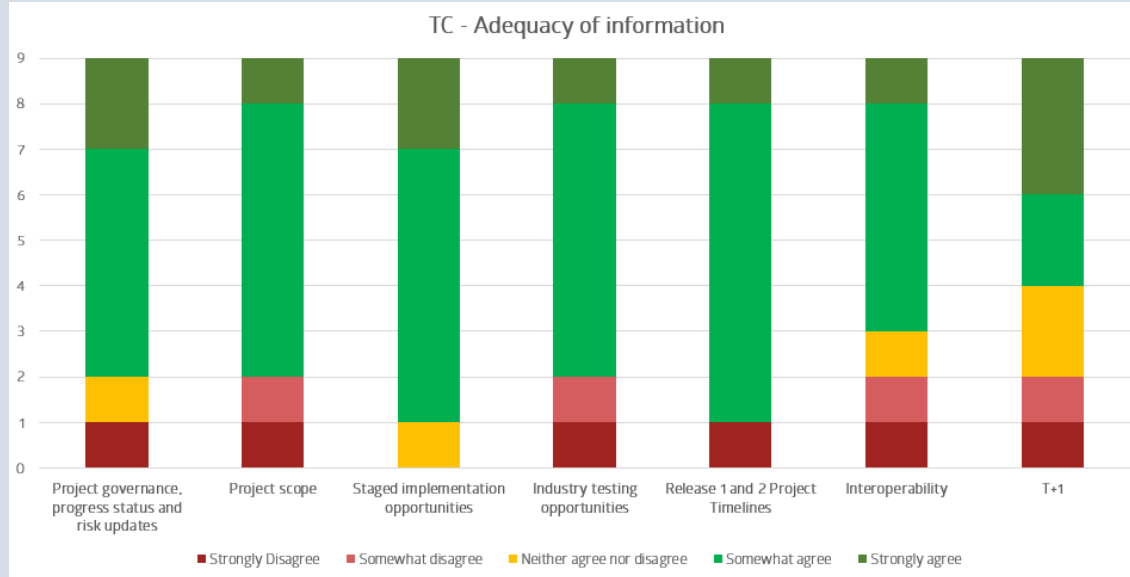
- > 9 respondents representing a cross section of stakeholders.
- > Overall net positive view of the Technical Committee
- > Key focus areas:
 - Project confidence and continued industry engagement

07 – Pulse Survey Results – Technical Committee

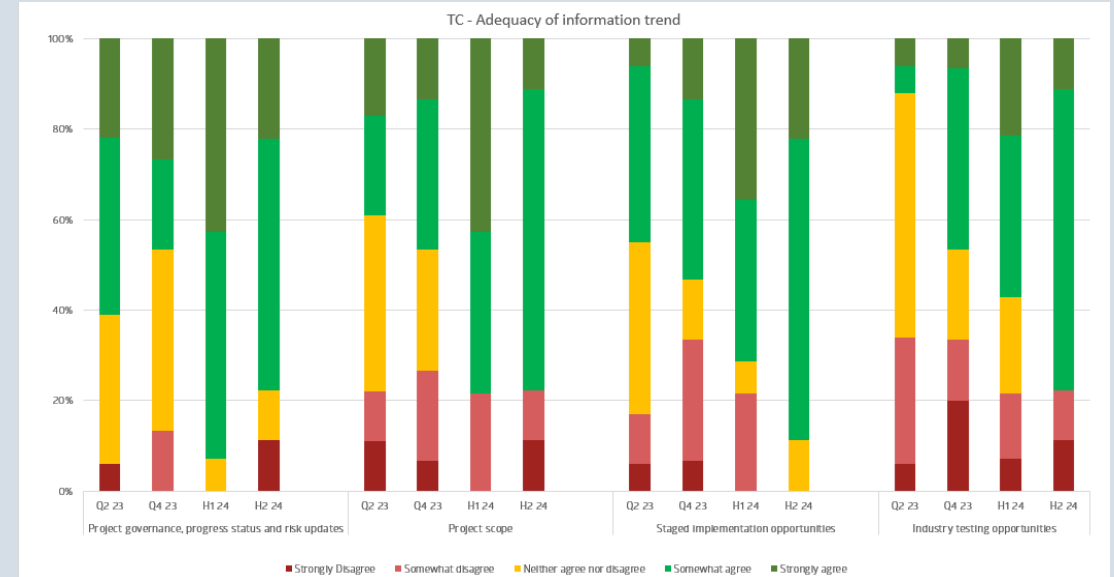
- > Sentiment to the Technical Committee has continued to improve
- > One respondent strongly disagreed with their confidence that the CHESR Project will meet its objectives and meeting effectiveness



07 – Pulse Survey Results – Technical Committee



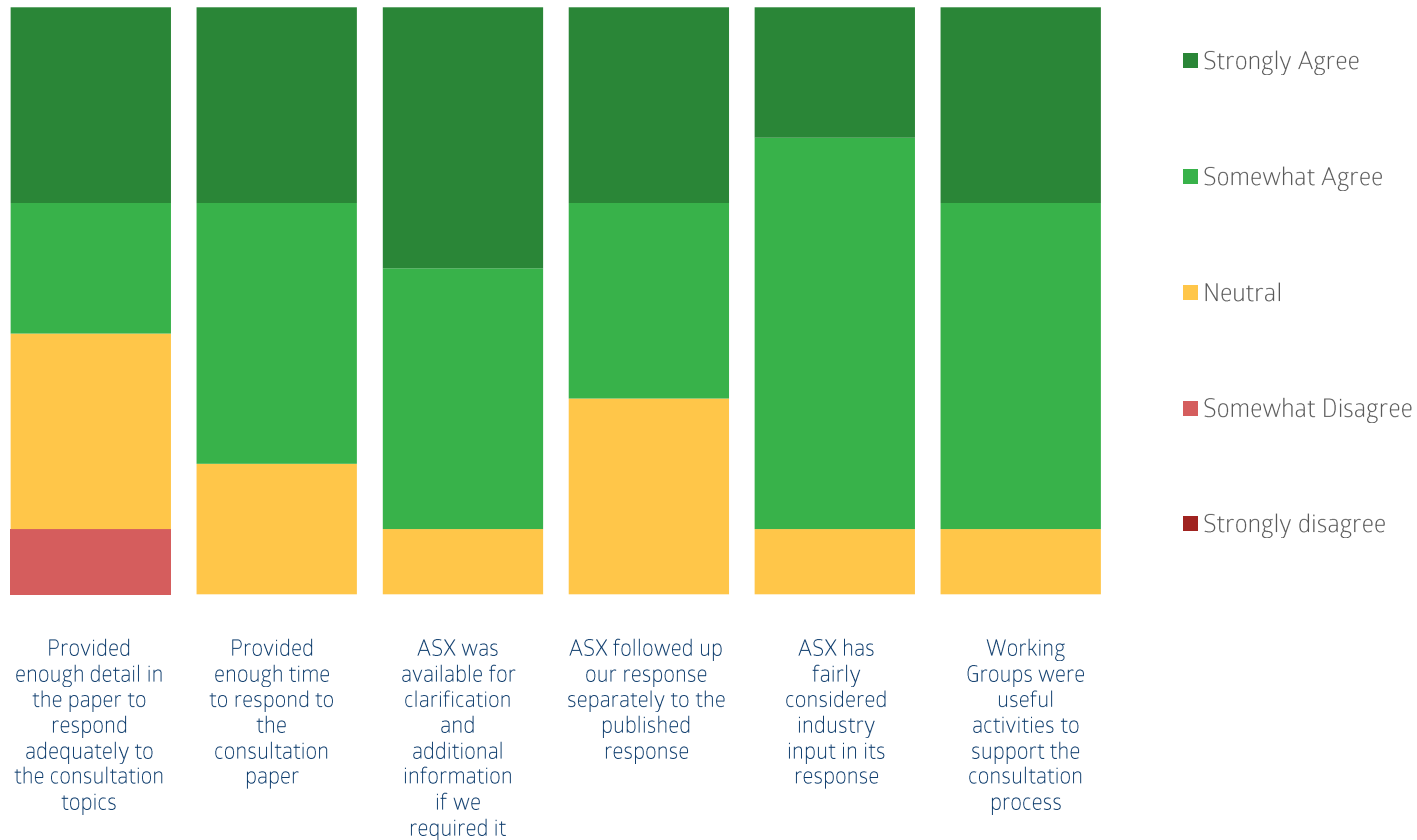
- > 9 respondents
- > Overall sentiment to the quality of TC information is neutral to positive
- > Key focus areas:
 - Industry testing opportunities
 - Project scope



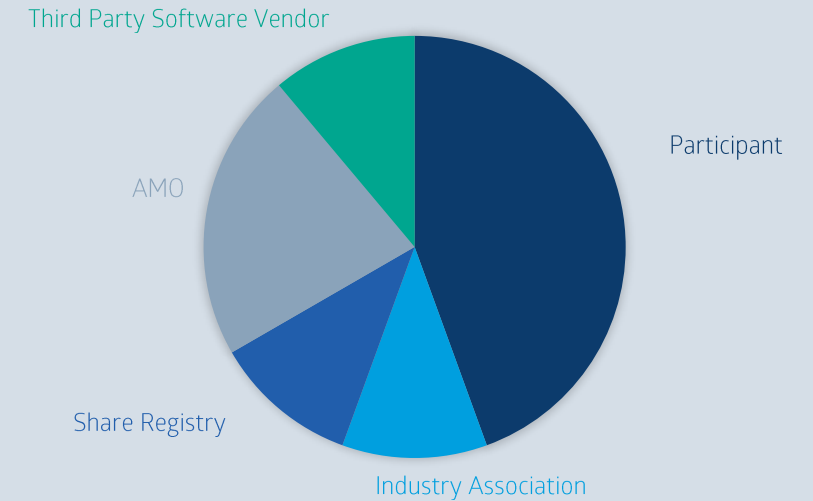
- > Q2 23 - 18 respondents, Q4 23 - 15 respondents, H1 24 - 14 respondents, H2 24 - 9 respondents
- > Improvements to the adequacy of information provided for staged implementation and industry testing opportunities. Industry testing opportunities remains an area of focus.
- > General sentiment to the quality of information continues to improve

07 – Pulse Survey Results – Consultation Paper 2 for Release 2

Consultation Paper for Release 2 Survey Results – H2 2024



Participants by Cohort



Insights

- > 9 respondents
- > Overall sentiment for Consultation Paper 2 is positive
- > One respondent somewhat disagreed that enough detail was provided to adequately respond to consultation topics.

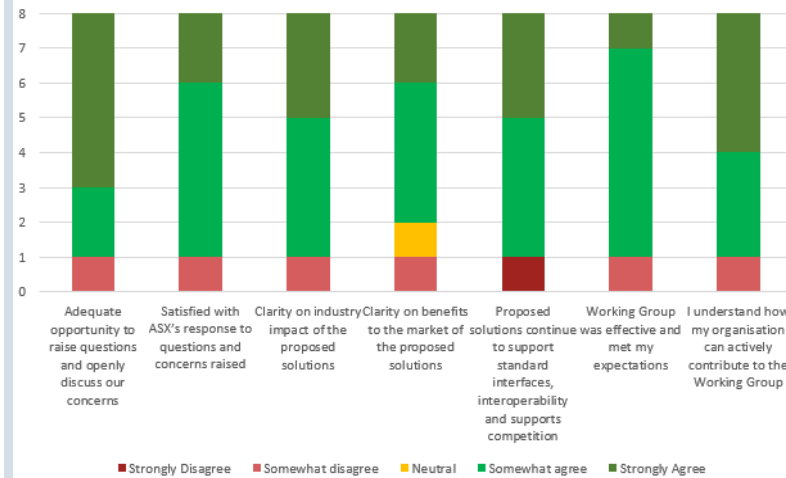
07 – Pulse Survey Results - Working Groups

AMO Working Group



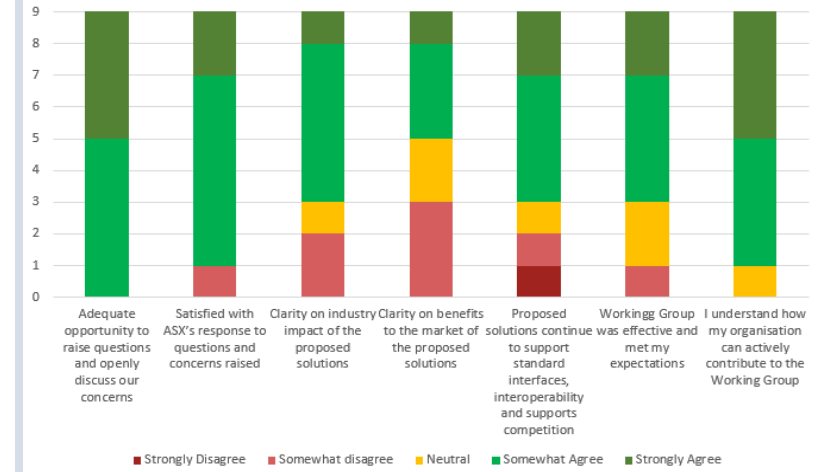
- > 2 respondents
- > ASX plans to further engage to understand pulse survey feedback and determine action plan

I&T Working Group



- > 8 respondents
- > Overall sentiment to the I&T working group is positive
- > Key focus areas
 - Industry impact & benefits of the proposed solution

Business Design Working Group



- > 9 respondents
- > Key focus areas
 - Industry impact & benefits of the proposed solution
 - Proposed solution supports standard interfaces, interoperability and competition

07 – Pulse Survey Results – Additional Commentary

H2 2024 – Overview of additional commentary provided to be addressed

| Category | Written Feedback / Requests |
|------------------------|---|
| CHESS Project | ASX needs to continue to actively engage w/ AMOs. ASX needs to take position and lead from the front with its solution. |
| | Across the organisation there is still a level of uncertainty in ASX meeting proposed deadlines/goals, so gaining full engagement and project priority internally can be challenging at times. |
| Meeting Administration | It would be helpful following meetings the ASX send out the updated decks rather than wait many days for the updated deck to be available on the website. This would be beneficial in relaying questions / comments etc internally & enable feedback to the ASX where needed. |
| | As the project has matured at this stage, frequency of meetings might decrease. It would be on a case-by-case basis but as the key parameters are now set in place, streamlining the engagement might be in order. |

08

Forward Engagement for 2025

08 – Proposed 2025 Forward Plan

CY2025 Committee Schedule

| Month | Date | Time |
|---------------------|------------------------|-----------|
| Technical Committee | | |
| March meeting | Monday, 3 March | 1pm – 3pm |
| April meeting | Wednesday, 2 April | 2pm – 4pm |
| May meeting | Tuesday, 6 May | 2pm – 4pm |
| June meeting | Wednesday, 4 June | 2pm – 4pm |
| July meeting | Wednesday, 9 July | 2pm – 4pm |
| August meeting | Wednesday, 6 August | 2pm – 4pm |
| September meeting | Wednesday, 3 September | 2pm – 4pm |
| October meeting | Wednesday, 8 October | 2pm – 4pm |
| November meeting | Wednesday, 5 November | 3pm – 5pm |
| December meeting | Wednesday, 3 December | 2pm – 4pm |

| Month | Date | Time |
|--------------------|-------------------------|----------|
| Business Committee | | |
| March meeting | Wednesday, 12 March | 12pm-2pm |
| June meeting | Wednesday, 18 June | 12pm-2pm |
| September meeting | Wednesday, 17 September | 12pm-2pm |
| December meeting | Wednesday, 10 December | 4pm-6pm |

TNF Australasia Meeting 2025

- The Network Forum Australasia Meeting 2025 is scheduled for Tuesday 4 and Wednesday 5 March 2025 in ASX's Sydney office



Questions

Observer Feedback

Disclaimer/important information

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Appendix A – Release 2 Roadmap and Indicative Timeline

Appendix A - Indicative Release 2 Roadmap

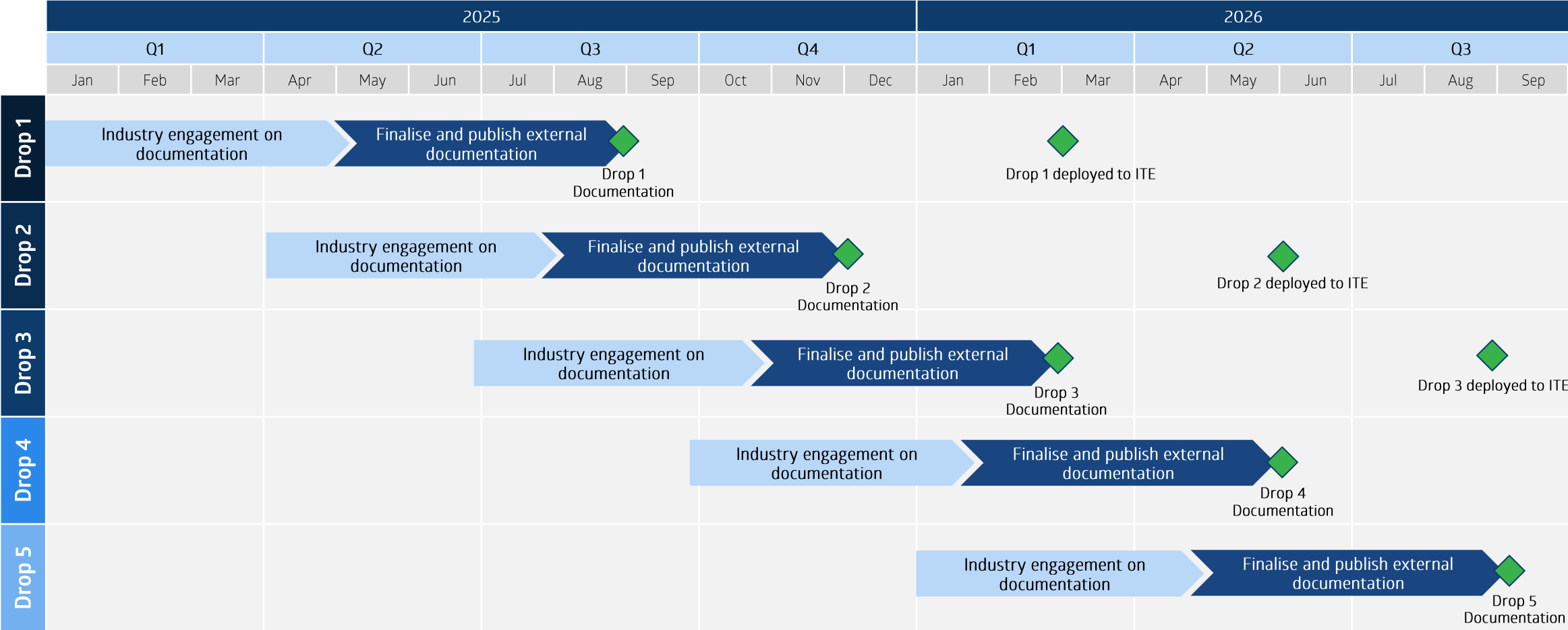
| | Drop 1 | Drop 2 | Drop 3 | Drop 4 | Drop 5 |
|---------------|--|--|---|--|--|
| Feature Scope | <ul style="list-style-type: none"> > Participant and registry/issuer Setup > Accounts and investor data > Holdings > Unilateral demand transfers > Account and holding reporting | <ul style="list-style-type: none"> > Trade registration & netting > Settlement instructions > Batch settlement (excluding payments) > AMO security details report | <ul style="list-style-type: none"> > Payments with limits > Issuer sponsored processes > Holding adjustments > Cum entitlement balance reporting > Claims and adjustments | <ul style="list-style-type: none"> > Change of controlling participant & portfolio transfer > Batch exceptions (including default management and backout) > RITS integration(s) | <ul style="list-style-type: none"> > ETO/CMM collateral > Daily margin advice > Offer administration facility > Corporate action elections without payment > Corporate action elections with payment |
| User Journeys | <ol style="list-style-type: none"> 1. Participants can test the full account lifecycle (create & update, lock and cancel) and communication of investor data 2. Participants can perform simple transfers between accounts they administer 3. Registries can receive account and holding-related reports | <ol style="list-style-type: none"> 1. Participants can receive market trades in ISO20022, novate, net and schedule for settlement 2. Participants can match and schedule settlement instructions 3. Participants can settle instructions in a daily batch (excluding payment provider and payment services flows), including unit failure 4. AMOs can test any changes | <ol style="list-style-type: none"> 1. Payment providers can manage payment facilities, authorise funds and utilise cash limit tracking 2. Participants and Registries can test issuer sponsored flows 3. Registries can process corporate actions including performing holding adjustments 4. Participants and Registries can receive corporate actions reporting 5. Participants obligations are adjusted to account for fails | <ol style="list-style-type: none"> 1. Participants can perform change of controlling participant and portfolio transfers 2. Participants and ASX can test batch exception processes (such as default management, backout, extension and cancellation) 3. ASX and RBA can commence testing of RITS integration(s) | <ol style="list-style-type: none"> 1. Participants can lodge non-cash collateral and ETO cover and adjust margin 2. Participants and Registries can test takeovers and buybacks 3. Participants and Registries can test option elections without payment (DRP/BSP) 4. Participants and Registries can test option elections with payment (Rights, SPPs) |



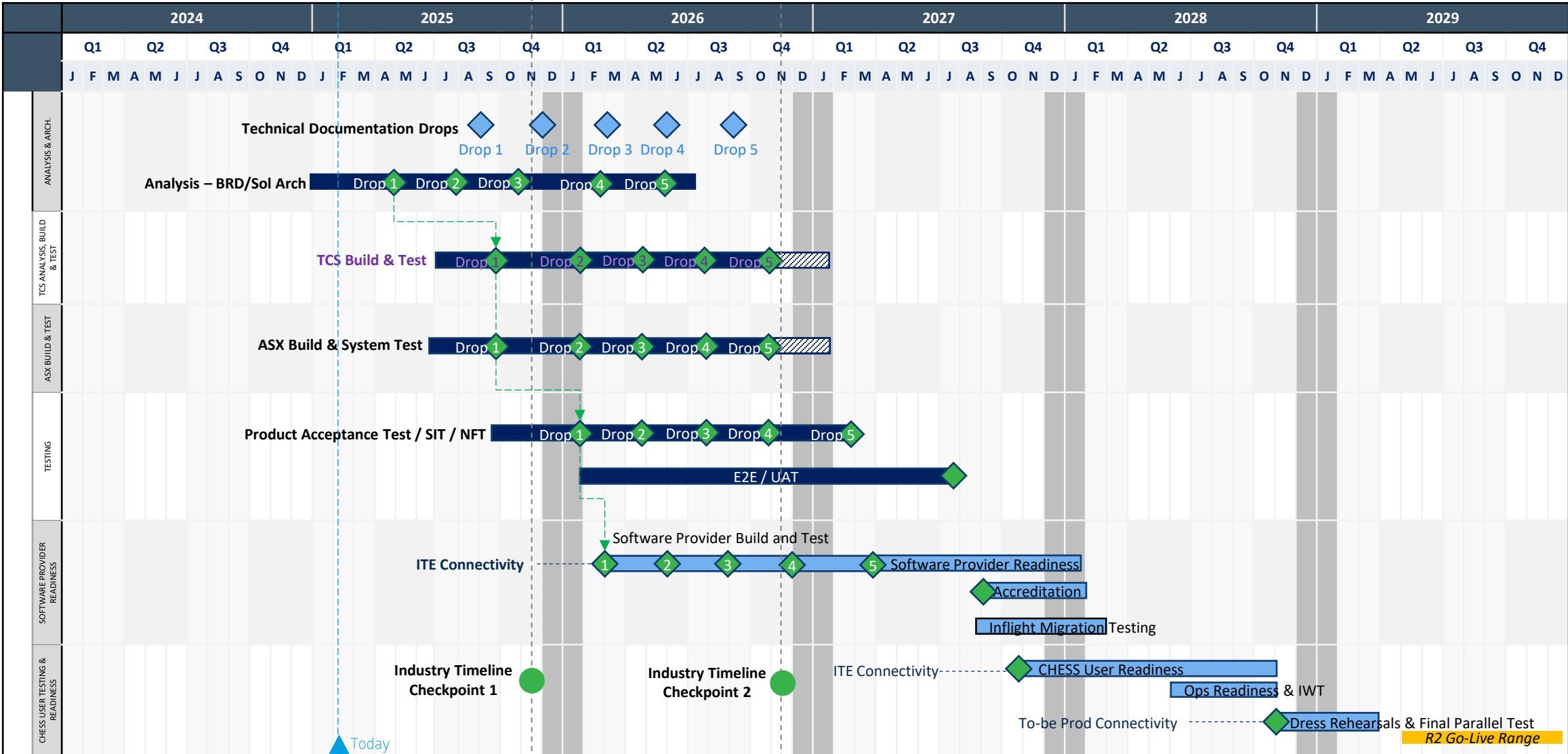
Indicative Roadmap – Subject to Change

Appendix A - High-level Planned Industry Engagement Process for Documentation

Message schema and usage guidelines, high-level business process flows including related reports, and accompanying release notes are planned to be provided following industry engagement on documentation. Test tools and test data are planned to be provided to support the documentation releases.



Appendix A - Updated Release 2 Indicative Project Timeline – February 2025



Appendix B – Readiness Activities

Appendix B - Release 1 Engagement Activities - Proposed 2025 Plan

Activities and Documentation to Support R1 Industry Readiness

| Activity | Subject | Purpose | Planned Date | Status |
|-----------------------|--|---|--------------|--------------------------|
| Publish Documentation | Release 1 Industry Test Approach | Documentation describing the detailed industry test approach and expected activities of each involved party, as well as timing, entry and exit criteria and expected test outcomes of all Release 1 industry test phases | Q3 2024 | Published 6 Sep 2024 |
| Publish Documentation | Release 1 FIX Specifications | Documentation providing a detailed specification of all FIX messages, including message structures, rules, and message flow diagrams. Market-relevant specifications will be published in iterations as ASX analyses and completes designs for each drop | Q4 2024 | Published 14 Nov 2024 |
| Publish Documentation | Release 1 Connectivity Guide | Documentation detailing the technical connectivity requirements to connect to the CHES project's system, including connectivity method(s), network details and security details | Q4 2024 | Published 17 Dec 2024 |
| Engagement Activity | Release 1 ITE Open overview, including Industry Testing Activity and Progress Tracking | I&T WG session to provide overview of the opening of ITE, and discuss ASX proposed approach to tracking and reporting test phase activity | Q1 2025 | |
| Publish Documentation | Release 1 AMO Accreditation Guide | Documentation providing detail on the CHES Project's AMO Accreditation phase, expectations regarding conduct and expected results including the Accreditation process, connectivity, and message scenarios | Q1 2025 | |
| Engagement Activity | Release 1 Clearing Regression Overview | I&T WG session to provide overview & discuss the prerequisites & process for completing the Clearing Regression phase | Q2 2025 | |
| Engagement Activity | Release 1 Cutover Overview | I&T WG session to provide overview & discuss the prerequisites & process for completing Release 1 cutover activities | Q2 2025 | |
| Publish Documentation | Release 1 Clearing Regression Test Guide | Documentation detailing the minimum ASX-specified Clearing Regression test scenarios, key activities and expectations regarding conduct and expected results including entry and exit criteria | Q2 2025 | |
| Publish Documentation | Release 1 Guide to Operational Readiness Phase | Documentation detailing the Operational Readiness scenarios including mandatory success criteria | Q2 2025 | |
| Publish Documentation | Release 1 Cutover and Migration Approach | Documentation detailing 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. | Q2 2025 | |
| Engagement Activity | AMO Parallel Phase Overview | I&T WG session to provide overview & discuss the prerequisites & process for completing the Parallel Test phase | Q3 2025 | |
| Publish Documentation | Release 1 Guide to AMO Parallel Test | Documentation providing detail on the Parallel Test phase, key activities and expectations and expected results including entry and exit criteria | Q3 2025 | |
| Publish Documentation | R1 Cutover Runbook | Documentation providing 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 | Q3 2025 | |

Note: indicative only, subject to change based on industry inputs and further planning.

Appendix B - Release 2 Readiness Activities – Proposed 2025 / 26 Plan

Activities and Documentation to Support R2 Industry Readiness

| | | | | Key | Focus Groups | Documentation | Overviews | Checkpoints |
|-----------------------|---|--|--|-----|--------------|---------------|-------------------|-------------|
| Activity Planned | Subject | Purpose | | | | | Planned Date | |
| Engagement Activity | Release 2 Industry Test Tooling High Level Approach | I&T Working Group (I&T WG) workshop providing an overview of ASX planned approach to test environments, data, and tooling to enable CHES User testing in Release 2, and discuss/identify unmet industry needs or challenges for additional consideration | | | | | Q1 2025 | |
| Engagement Activity | ISO20022 and Business Design Working Groups | Workshops to obtain industry input and feedback into the design of Release 2 ISO messages and specified CHES functionality | | | | | Q4 2024 – Q2 2026 | |
| Engagement Activity | Release 2 Industry Test Tooling Focus Groups | I&T WG workshops to walk through Release 2 message initiation and response testing once ISO specifications and message workflows drafted. Schedule will incrementally follow collation of industry feedback to Drop 1 – 5 documentation | | | | | Q2 2025 – Q3 2026 | |
| Publish Documentation | ISO20022 Specifications & Functional & Technical Specs | Documentation providing a detailed specification of all ISO messages including message structures, rules message flow diagrams., and tooling to support testing ASX will target release this documentation incrementally in line with the 5 feature drops. | | | | | Q3 2025 – Q3 2026 | |
| Engagement Activity | Phase High Level Approach 1- Release 2 Parallel Test | I&T WG session providing high level overview of Release 2 Parallel Test Approach, to discuss/identify unmet industry needs for additional consideration | | | | | Q3 2025 | |
| Engagement Activity | Guide Overview 1- Release 2 Industry Test Approach | I&T WG session providing overview of draft Release 2 Industry Test Approach, to inform industry and obtain feedback prior to publishing | | | | | Q3 2025 | |
| Publish Documentation | Release 2 Industry Test Approach | Documentation describing the approach, responsibilities, timing, entry and exit criteria and expected outcomes for each Industry Test phase. | | | | | Q3 2025 | |
| Publish Documentation | Release 2 Connectivity Guide | Documentation detailing the technical connectivity requirements to connect to the CHES project's system including connectivity method(s), network details and security details. | | | | | Q4 2025 | |
| Engagement Activity | Phase High Level Approach 2- Release 2 Cutover & Rollback | I&T WG session providing high level overview of Release 2 Cutover & Rollback Approach, to discuss/identify unmet industry needs for additional consideration | | | | | Q3 2025 | |
| Engagement Activity | Release 2 Timeline Checkpoint 1 | Gauge industry progress and obtain industry feedback to ascertain its ability to continue meeting the Release 2 project timeline following the release of the Industry Test Approach and initial Functional & Technical Specifications | | | | | Q4 2025 | |
| Engagement Activity | Activity and Progress Tracking Overview | I&T WG session to provide overview and discuss ASX proposed approach to tracking and reporting test phase activity | | | | | Q1 2026 | |
| Engagement Activity | Phase Overview 1- ITE Open | I&T WG session to provide overview & discuss the prerequisites + process for completing the Software Provider B&T Phase | | | | | Q1 2026 | |
| Engagement Activity | Guide Overview 2- Release 2 Connectivity Guide | I&T WG session providing overview of draft Release 2 Connectivity guide and process | | | | | Q1 2026 | |
| Engagement Activity | Guide Overview 3- Release 2 Failover & Recovery Guide | I&T WG session providing overview of draft Failover & Recovery guide, to inform industry and obtain feedback prior to publishing | | | | | Q3 2026 | |
| Publish Documentation | Release 2 Failover and Recovery Guide | Documentation providing information on failover testing, covering what components ASX will simulated-fail and proposed frequencies. | | | | | Q3 2026 | |
| Engagement Activity | Release 2 Timeline Checkpoint 2 | Gauge industry progress and obtain industry feedback to ascertain its ability to continue meeting the Release 2 project timeline following the release of all Functional & Technical Specifications. Identify and incorporate agreed industry requirements into CHES User test phases schedule | | | | | Q4 2026 | |
| Engagement Activity | Guide Overview 4- Release 2 Accreditation Guide | I&T WG session providing overview of draft Release 2 Accreditation Guide, to inform industry and obtain feedback prior to publishing | | | | | Q4 2026 | |
| Publish Documentation | Release 2 AMO Accreditation Guide | Documentation providing overview of the Release 2 Accreditation phase, including accreditation process, connectivity scenarios & message scenarios | | | | | Q4 2026 | |

Note: indicative only, subject to change based on industry inputs and further planning.

Appendix B - Release 2 Readiness Activities – Proposed 2027 / 28 Plan

Activities and Documentation to Support R2 Industry Readiness

| | | | Key | Focus Groups | Documentation | Overviews | Checkpoints |
|-----------------------|--|---|-----|--------------|---------------|-----------|--------------|
| Activity | Subject | Purpose | | | | | Planned Date |
| Engagement Activity | Phase Overview 2 – Software Provider Readiness | I&T WG session to provide overview and discuss the prerequisites and process for completing the Software Provider Readiness Phase | | | | | Q1 2027 |
| Engagement Activity | Guide Overview 5 - Release 2 Operational Readiness Guide | I&T WG session providing overview of draft Release 2 Operational Readiness Guide, to inform industry and obtain feedback prior to publishing | | | | | Q2-Q3 2027 |
| Publish Documentation | Release 2 Guide to Operational Readiness Phase | Documentation outlining the Operational Readiness scenarios including mandatory success criteria. | | | | | Q3 2027 |
| Engagement Activity | Phase Overview 3 - Release 2 Inflight Migration | I&T WG session to provide overview and discuss the approach to the Inflight Migration testing phase | | | | | Q3 2027 |
| Engagement Activity | Phase Overview 4 - Release 2 Software Provider Accreditation | I&T WG session to provide overview and discuss the approach to the Software Accreditation phase | | | | | Q3 2027 |
| Engagement Activity | Phase Overview 5 - Release 2 CHESS User Readiness | I&T WG session to provide overview and discuss the approach to the CHESS User Readiness phase | | | | | Q3 2027 |
| Engagement Activity | Guide Overview 6 - Release 2 Parallel Test | I&T WG session to provide overview of draft Release 2 Parallel Test Guide, to inform industry and obtain feedback prior to publishing | | | | | Q3 2027 |
| Publish Documentation | Release 2 Guide to Parallel Test | Documentation providing details of key activities and expectations regarding test and scope boundaries, expected results including entry and exit criteria. | | | | | Q4 2027 |
| Engagement Activity | Guide Overview 7- Release 2 Cutover & Migration Approach | I&T WG session to provide overview of draft Cutover and Migration Approach, to inform industry and obtain feedback prior to publishing | | | | | Q4 2027 |
| Publish Documentation | Release 2 Cutover and Migration Approach | Documentation detailing the cutover and migration approach, key activities and responsibilities. | | | | | Q4 2027 |
| Engagement Activity | Cutover Date Focus Group | I&T WG session to identify the appropriate weekend/month that has broad industry support, to schedule Primary and Secondary cutover dates in 2029 | | | | | Q4 2027 |
| Engagement Activity | Guide Overview 8- Release 2 Guide to Industry Wide Testing | I&T WG session providing overview of draft Guide to Industry Wide Testing to inform industry and obtain feedback prior to publishing | | | | | Q1-Q2 2028 |
| Publish Documentation | Release 2 Guide to Industry Wide Testing | Documentation providing an overview of the Release 2 Industry Wide Test phase, detailing key activities, expected behaviours, scope boundaries, and expected outcomes including entry and exit criteria | | | | | Q2 2028 |
| Engagement Activity | Guide Overview 9- Release 2 Cutover Runbook | I&T WG session providing overview of draft Cutover Runbook to inform industry and obtain feedback prior to publishing | | | | | Q1-Q2 2028 |
| Engagement Activity | Phase Overview 6- Release 2 Operational Readiness | I&T WG session to provide an overview and discuss the approach to the Operational Readiness phase | | | | | Q2 2028 |
| Engagement Activity | Phase Overview 7- Release 2 Industry Wide Testing | I&T WG session to provide an overview and discuss the approach to the Industry Wide Testing phase | | | | | Q3 2028 |
| Publish Documentation | Release 2 Cutover Runbook | Documentation providing CHESS Users with detail on the tasks, milestones and steps associated with cutover, including planned timing. The runbook will be used in dress rehearsals and refined as required ahead of the final go-live event. Note that this document will also include the steps required to backout. | | | | | Q2 2028 |
| Engagement Activity | Phase Overview 8 - Release 2 Implementation Dress Rehearsals | I&T WG session to provide an overview and discuss the approach to Implementation Dress Rehearsal phase | | | | | Q3-Q4 2028 |
| Engagement Activity | Phase Overview 9 - Release 2 Parallel Test | I&T WG session to provide an overview and discuss the approach to Parallel Test phase | | | | | Q3-Q4 2028 |
| Engagement Activity | Go/No-Go and Rollback Decision Focus Group | I&T WG session to identify the appropriate decision framework that has broad industry support that will be employed during cutover activities | | | | | Q4 2028 |

Thank you.

