CHESS Replacement Technical Committee

10 May 2023

ASX

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

ARTWORK BY: LEE ANNE HALL, MY COUNTRY MY PEOPLE

Housekeeping: trouble shooting

- Please mute yourself when not speaking
- Please use the ‘raise hand’ feature on MS Teams if you would like to ask a question
- Meeting is being recorded for the purposes of minute taking
- Dial in details (audio only):
  - +61 2 7208 4607
  - Phone Conference ID: 486 431 578#

- Presentation materials were distributed before the meeting

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.

Welcome,
agenda & open actions

Agenda

- Welcome and open actions
- Member feedback from last meeting
- Project status and governance
- Project scope
- Testing approach
- Forward work plan
- Observer playback

Open actions

Captured from the April Technical Committee

Item #	Action	Follow-up	Due	Status	Owner
2023 Apr (1)	Members to provide feedback on industry testing by 28 April 2023.	Refer to slides 20-23	28 April 2023	Open -> **To be closed**	TC members
2023 Apr (2)	ASX to review the SGX implementation approach.	Verbal update to be provided at next TC	10 May 2023	Open -> **Update in meeting**	ASX
2023 Apr (3)	ASX to clarify the potential roles of centralised message translation in the implementation approach.	Verbal update to be provided at next TC	10 May 2023	Open -> **Update in meeting**	ASX

Member feedback from the last meeting

Project status & governance

Redesign Plan Update

Plan for Solution Design

	CY Q1	CY Q2	CY Q3 / Q4
Product Definition & Business Case	✓ Business Vision & Strategy ✓ Program Objectives	❑ Scope and business requirements refined	❑ Scope and business requirements baselined ❑ Business case submitted
Solution Assessment	✓ Current state evaluation ✓ Solution decision framework developed	✓ Solution decision framework approved ✓ Solution options refinement ❑ Solution options evaluated	❑ Solution design finalised ❑ Project estimation completed
Sourcing & Commercial	✓ Market Scan ✓ Vendor solution RFI	✓ Vendor RFI evaluation ❑ Vendor RFP issued and responses received ❑ Solution integrator RFP	❑ Vendor commercial and contracting processes ❑ SI selection and contracting
Testing & Implementation	✓ Implementation options review	❑ Implementation impact assessment ❑ High level test strategy	❑ Implementation strategy ❑ Test strategy & approach completed

★ Announcement of solution design

Market engagement on readiness and implementation planning

Key Risk:
- Commercial vendors' processes may impact the timeline for a Q4 announcement on a solution design

CHESS Replacement - Solution Update

Planning our thinking around the following key “Solution Types”

Fix CHESS Replacement

A solution based on the current implementation and targeting to solve core issues and complexity leveraging DAML as transaction processing

Build custom solution

A solution designed from ground-up with conventional technologies and aligned with principles and IT strategy

Product based solution

A solution relies on a vendor product with additional ASX components if required

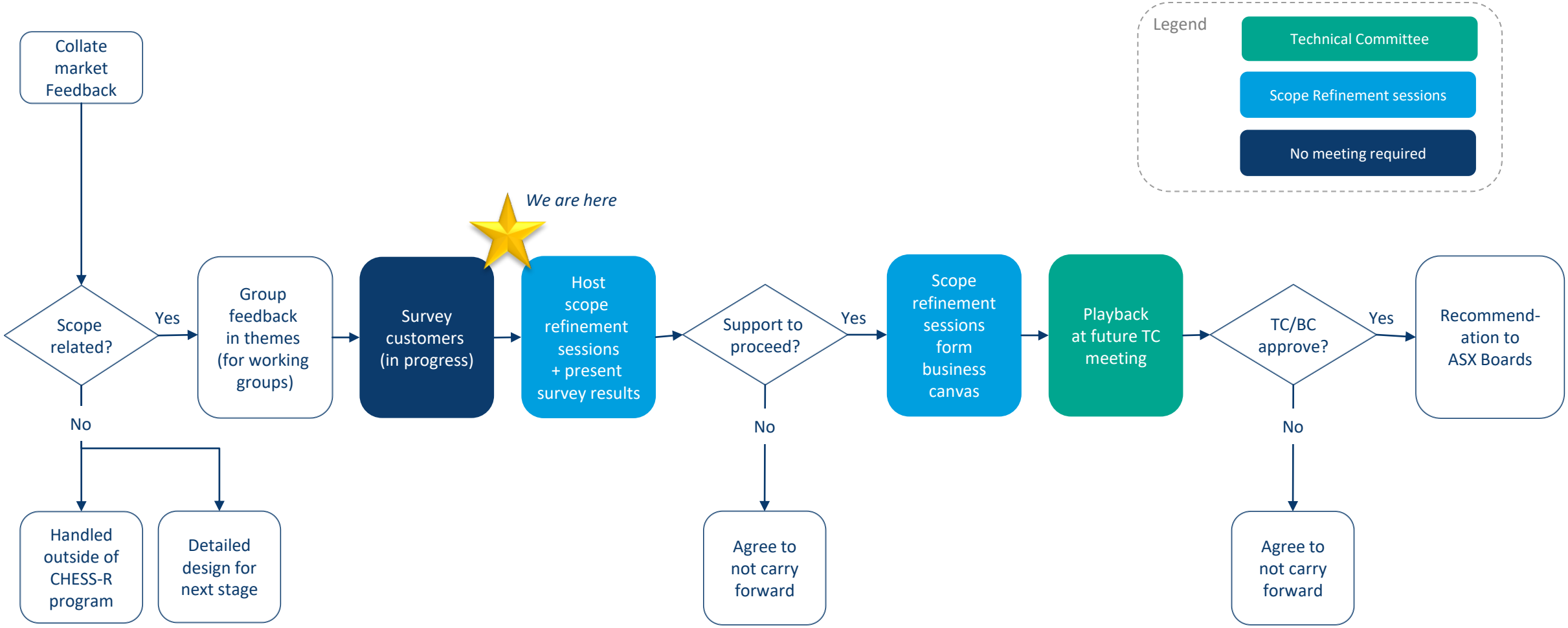
Iterate over legacy CHESS

A solution starts from legacy CHESS codebase and iterates to achieve new capabilities in a phased manner

Project scope

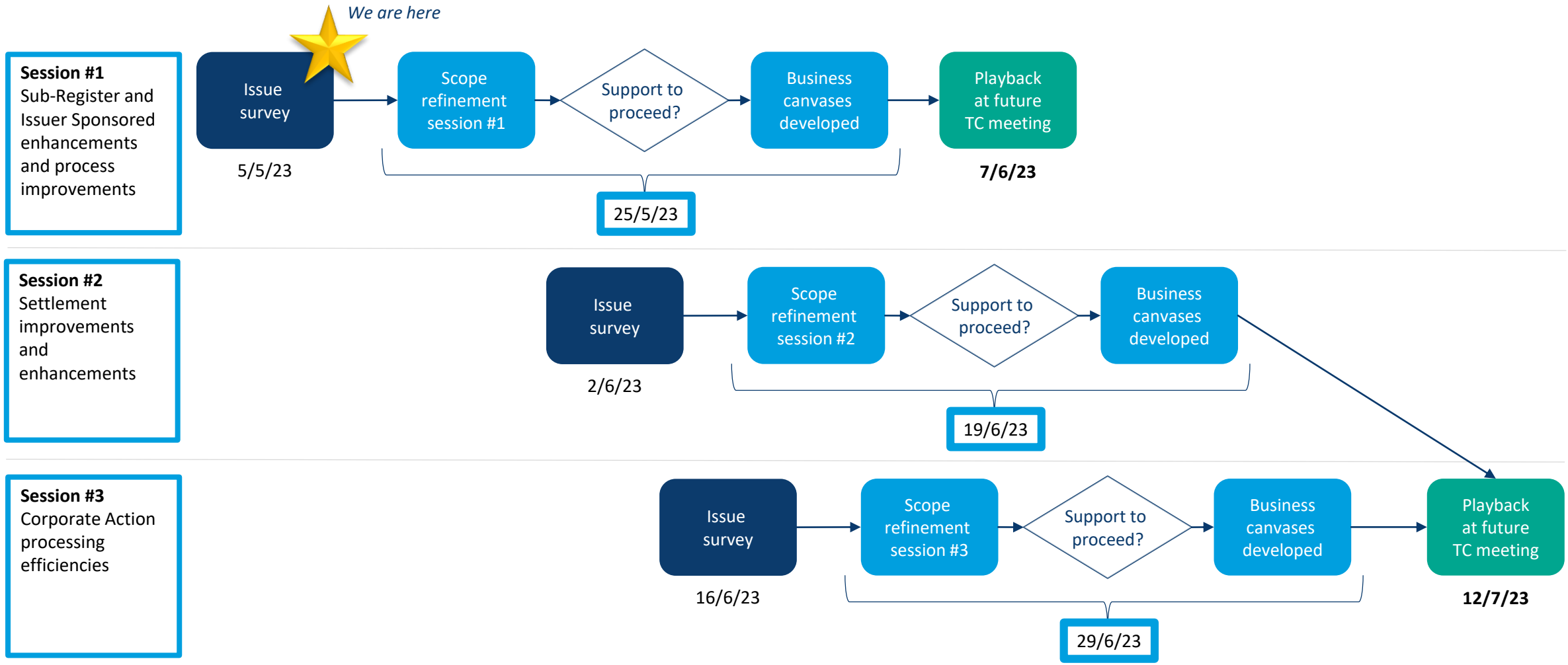
Project scope - revisited

Feedback from industry and scope refinement engagement approach



Project scope - revisited

Feedback from industry and scope refinement engagement approach



Project scope - revisited

Engagement plan for scope refinement sessions

Overview of Upcoming Scope Refinement Sessions:

- Scope refinement sessions will be 4 hour collaborative sessions, held at ASX's offices at Bridge Street and virtually via Teams.
- In each session the aim will be to construct a number of business canvases (refer sample) that articulate the problem statements and proposed solutions for each scope request as well as benefits, risks and impacts.
- Invitees will be surveyed in advance of the each scope refinement session, with the feedback informing the priorities for the session and initial drafting of the business canvases. Survey questions are based on scope feedback already received.
- A representative from an industry association will attend and act as moderator for each session. They will assist in ensuring voices are heard and the canvases are reflective of stakeholder sentiment.
- The sessions will be interactive and attendees are encouraged to send SMEs with relevant knowledge on the business need.

	When	Moderator	Invitees
Sub-Register and Issuer Sponsored enhancements and process improvements	**17 May** 9am-1pm Sydney, Bridge St.	**AFMA** (Damian Jeffree)	Settlement Participants, Share Registries
Settlement improvements and enhancements	**19 June** 9am-1pm Sydney, Bridge St.	**AFMA** (Damian Jeffree)	Settlement Participants
Corporate Action processing efficiencies	**29 June** 9am-1pm Sydney, Bridge St.	**ACSA** (David Travers)	Settlement Participants, Share Registries

Project scope - revisited

Scope refinement working groups – Business Canvas (example)

Problem Statement
What is the problem we are solving?

Participants who are also Payment Providers must approve all payments regardless of value.

Existing Alternatives
How is this done today?

Manually via UI

Additional vendor build

Solution Proposal
How would this work?

Ability to set a standing instruction in CHESS for automatic approval of payments.

Should be optional

Benefits
What are the customer benefits?

Reduced operational overhead

Reduced build cost

Risks / Challenges
What are the risks or challenges we must overcome?

Management of standing instructions

Success Criteria
How do we know that we've been successful?

Enablement of Bilateral DvP

Customer Segments
Who does this impact?

Participants

Payment Providers

Priority
When do we need this?

For go-live

Impact
What are the impacts to the industry?

May require rules amendment and/or legal review

Recommendation
What is the justification for inclusion in to scope?

RECOMMENDED

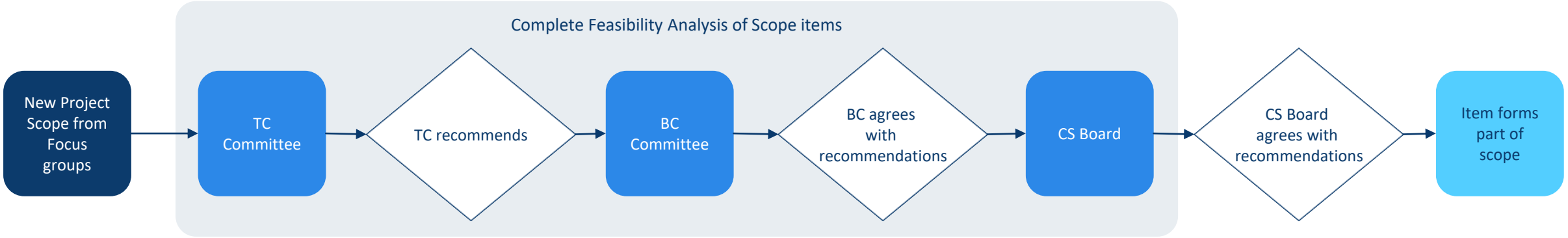
ILLUSTRATIVE EXAMPLE

Project scope

Acceptance into project requirements

The Process:

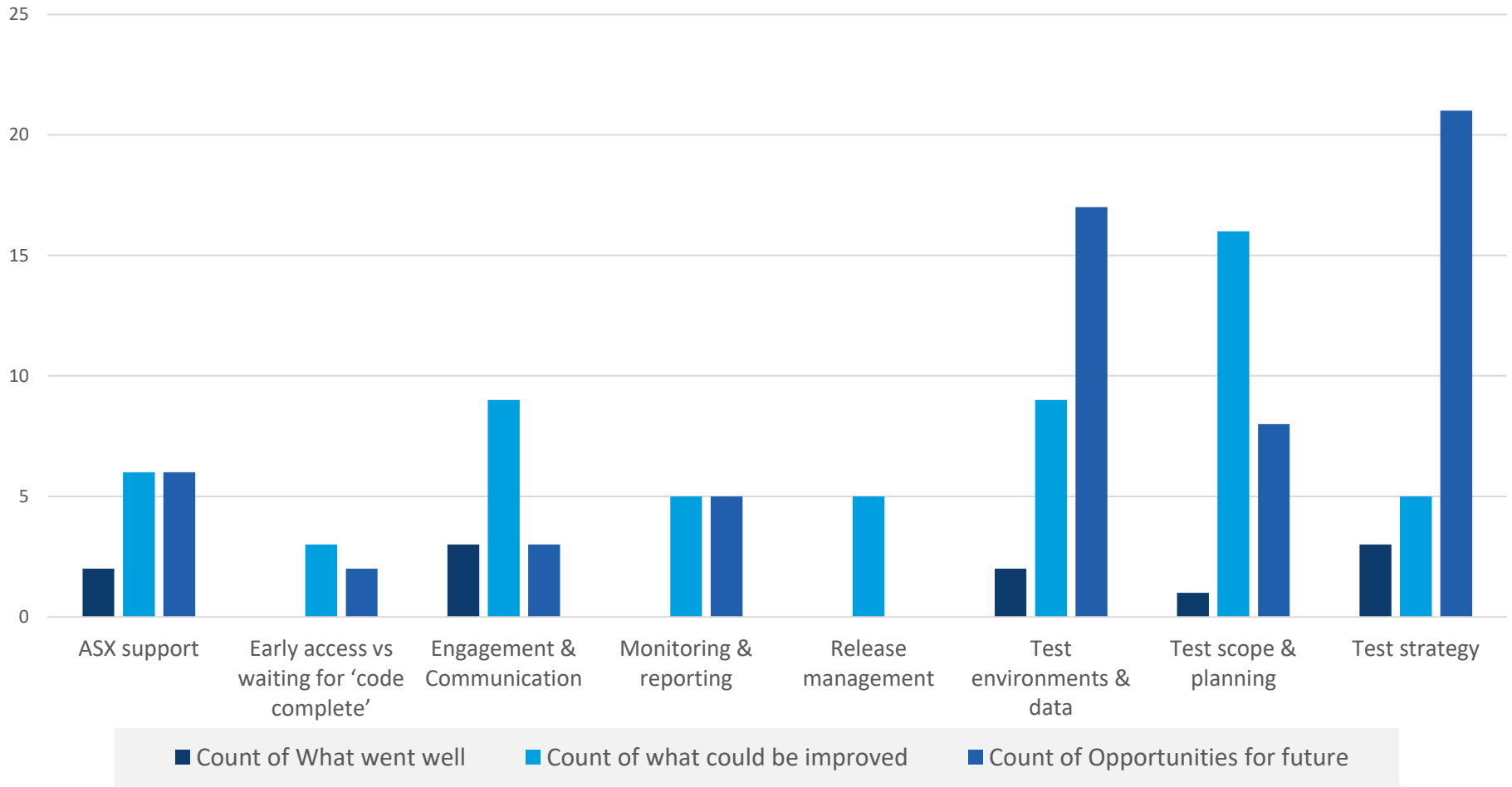
- New project scope agreed upon in the Technical Committee will will be recommended to the Business Committee. If approved in the Business Committee, recommendations will be presented to the CS Board before forming part of the scope.
- ASX may undertake further feasibility analysis (e.g. assessment against the solution option, potential legal and/or rule changes, and impact to project timelines)
- Proposed scope will be assessed for an overall recommendation for the business case. The recommendation approach will be discussed in the next Technical Committee (7 June 2023).
- Project scope will form part of a future industry consultation on CHESS Replacement
- A process to incorporate subsequent scope changes into the project will be established



Testing approach
- industry feedback

Member Feedback on Industry Testing

Across themes



Themes	No. of feedback
ASX support	14
Early access vs waiting for 'code complete'	5
Engagement & communication	15
Monitoring & reporting	10
Release management	5
Test environments & data	28
Test scope & planning	25
Test strategy	29
Total	**131**

Member Feedback on Industry Testing

Key feedback items

1. Test Strategy

Continue

- Continue to adopt market feedback

Improve / Consider

- Testing should be as automated as much as possible
- End user testing should be focused on “day in the life testing” type operational testing
- Test strategy to address implications of implementation

2. Test Environments & Data

Continue

- Having access to CDE environment allowed us to workshop solutions & highlight deficiencies with our vendor
- Provide the tools and data to allow participants to test independently, though requires more flexibility and coverage – to continue

Improve / Consider

- Early access to CDE needs to be balanced with quality releases
- allow a CHESSR test environment to run continuously & independent of IWT/Parallel environment
- Stability needed in Industry Test Environments to minimise impact to test execution (resets, data loss caused disruption)
- Data and tools to provide more flexibility or coverage to allow for more effective independent testing
- Environment availability to accommodate offshore teams
- Plan the need for Test data with the industry

3. Parallel Test & Parallel Run

Continue

- Continue engaging industry in assessing feasibility of an industry parallel test

Improve / Consider

- Ability for CHESS to apply production market trades to ‘test’ environments
- Parallel Run increases risks to our internal systems linked to our vendor Clearing & Settlement system and will require significant effort to facilitate therefore we are not supportive of a Parallel Run
- We are supportive of multiple ‘industry wide tests’ for a specified period using production like data
- Prod parallel UAT testing would be very useful to flush out real-life scenarios

4. Test Strategy

Continue

- Functional deliverables were clear as to what functional code was intended to be delivered into CDE

Improve / Consider

- Sequence of accreditation and test phases with software providers and participants considering dependencies, involvement and concurrency of events
- A more robust approach to Corporate action testing is required
- Avoid overlap of Software Provider and CHESS User testing and allow time for defect fixes between phases
- More time required to conduct CHESS User testing prior to Operational Readiness and IWT

Member Feedback on Industry Testing

Key feedback items

5. IT Support

Continue

- Continue with CHESS UI availability to allow for information gathering in support of testing
- Publication of the known issues list – this was good for determining when issues were properly lodged, resolved, and ultimately when they could be retested

Improve / Consider

- Improve the ability for triage along with resolution efficiency and pro-active follow up.
- Streamline support process and usage of issue/problem management tool
- Industry Test support to accommodate offshore teams

6. Early Access vs Code Complete

Continue

- We believe early access to ASX test environment can be beneficial
- Preference to early access VS waiting for code complete but with considerations on change and quality

Improve / Consider

- We want working software
- Ensure documented requirements are met prior to releasing to CDE

7. Engagement and Communication

Continue

- The Bi-Weekly meetings with our account manager where beneficial to work through the requirements

Improve / Consider

- Release communication and documentation to improve ensuring all change and expected errors are clear
- Ability to provide status on test environments e.g. known issues, current status, active CA events etc.
- Need earlier visibility

8. Monitoring & Reporting

Continue

- No feedback

Improve / Consider

- A centrally stored issues ASX log available market wide to aid in understanding issues faced during testing, with ETA for resolution

Forward work plan

Forward work plan

Calendar invitations have been shared for monthly meetings in 2023

Agenda items:

- Project status update
- Scope: playback for first scope refinement workshop
- Approach for endorsing recommendations on scope

Industry webinar:

17 May 2023

Scope Refinement Workshops:

17 May 2023

19 Jun 2023

29 Jun 2023

Business Committee meetings:

19 Jul 2023

11 Oct 2023

6 Dec 2023

Future TC meetings:

7 Jun 2023

12 Jul 2023

9 Aug 2023

13 Sep 2023

4 Oct 2023

8 Nov 2023

Forward work plan

Topics for the Technical Committee will be in line with the project timeline and phasing

Topics for consideration with this Technical Committee* will likely include:

- Project status updates
- Project risks and issues
- Scope including potential Current CHESS priorities
- Access channels / connectivity options
- Industry readiness activities
- Accenture recommendations

(*) Member feedback on additional agenda items is welcomed.

Observer playback

Thank you.

ASX

Disclaimer

This document provides general information only. ASX Limited (ABN 98 008 624 691) and its related bodies corporate ("ASX") makes no representation or warranty with respect to the accuracy, reliability or completeness of the information. To the extent permitted by law, ASX and its employees, officers and contractors shall not be liable for any loss or damage arising in any way (including by way of negligence) from or in connection with any information provided or omitted or from anyone acting or refraining to act in reliance on this information.

© 2023 ASX Limited ABN 98 008 624 691

Appendix

Appendix A: Industry feedback on scope

Changes requested to existing services

Change Requested to Baseline	Scope Item	Request/In favour	Against	Proposal to TC
NEW	T+1	Three participants, a registry and an industry association expressed interest in T+1 settlement	Not sought/received	• ASX is currently surveying participants regarding T+1 outside of CHESS Replacement.
NEW	Decommission use of Cum Entitlement Balance	One registry, two participants and one industry association suggested decommissioning CEB as a result of T+1.	Not sought/received	
NEW	Deferred Settlement Changes	One participant requested changes to deferred settlement processing.	Not sought/received	• Not expected to be a dependency for CHESS Replacement. Feedback to be passed to CHESS BAU for assessment.
NEW	Bilateral Matching – Use of Transaction Basis	One participant and one industry association requested a review of usage Transaction Basis to flag Off-Market/Market/ALMO transactions	Not sought/received	
NEW	Foreign Stock in Omnibus	One industry association and one participant requested a review of how FOR stock are held in Omnibus.	Not sought/received	
NEW	Generation of ISINs & Ticker Codes	One AMO requested changes to the way ISINs/Security Codes are assigned.	None sought/received	• Outside of CHESS / CHESS Replacement remit. Feedback provided to relevant ASX teams.
NEW	Placements in CA STP	One registry requested inclusion of Placements in Corporate Actions STP ISO20022 messaging.	None sought/received	• Outside of CHESS / CHESS Replacement remit. Feedback provided to relevant ASX teams.

Appendix A: Industry feedback on scope

Changes requested to design of existing scope

Change Requested to Baseline	Scope Item	Request/In favour	Against	Proposal to TC
REDESIGN	Netting & Settlement Design	Four participants expressed feedback that the current CHESS R design for netting and/or settlement should stay unchanged.	Seven participants and two industry associations provided feedback indicating the netting and/or settlement design should be revisited or reverted.	• Feedback will be noted as part of the solution decision. • ASX will workshop the specifics of netting & settlement workflow at a detail level during detailed design.
REDESIGN	Bilateral Non-Batch DvP	Four settlement participants and an industry association indicated this is a high priority feature, but requested a re-review of the process	Some participants indicated a low priority feature.	• No change to scope baseline. • Re-evaluation of workflow to be held during design phase.
REDESIGN	Settlement Linking	Two participants and an industry association requested this feature is retained but modifications made to the way it would be used.	Some participants indicated a low priority feature.	
REDESIGN	Simplification of Issuer Sponsored Transfers/Conversions (including RGID).	One registry requested a review of the Issuer Sponsored Transfers/Conversions process.	Not sought/received.	

Appendix A: Industry feedback on scope

Scope for consideration 1 - Settlement

Change Requested to Baseline	Scope Item	Request/In favour	Against	Proposal to TC
NEW	Bilateral Matching Improvements: • Common Identifier; • Acceptance feed from external system);	Three settlement participants and two industry associations requested the introduction of a common identifier for bilaterals, or related improvements to the matching process. Another participant suggested bilaterals could be sourced from an external system instead of being matched in CHESS.	Not sought/received	• **Scope Refinement working session** to be convened on improvements to Settlement Processes • Attendees to be interested Settlement Participants • Stakeholders to be surveyed in advance to prioritise scope.
NEW	Diary Adjustment Enhancements	One participant requested expansion of Diary Adjustment processing to more transactions.	Not sought/received	
NEW	Standing Instruction for Cash	One participant requested the ability to set a standing instruction for approval of cash settlements.	Not sought/received	
BRING FORWARD	Additional Payment Provider Notifications	One participant, one industry association requested this feature is brought into Day 1 scope	N/A	

Appendix A: Industry feedback on scope

Scope for consideration 2 - Sub-Register/Issuer Sponsored

Change Requested to Baseline	Scope Item	Request/In favour	Against	Proposal to TC
EXTEND / REVISE	Registration Details; Additional Investor Data	Two industry associations, two participants and a registry requested expansion of information captured and communicated. One AMO requested assessment against Consumer Data Right.	Two registries expressed concerns with ASX storing additional information in the sub-register.	• **Scope Refinement working session** to be convened on improvements to sub-register and issuer sponsored processes • Attendees to be interested/affected Settlement Participants and Share Registries • Stakeholders to be surveyed in advance to prioritise scope and inform discussions.
NEW	Issuer Initiated Holding Lock	One registry requested a new feature allowing the registry to lock a holding (e.g. during a trading black-out).	Not sought/received	
NEW	CHESS to CHESS Conversions	One registry requested a new feature allowing a conversion between CHESS HINs.	Not sought/received	
BRING FORWARD	Single Access Point to Validate SRNs; Settlement Lock for Issuer Sponsored Holdings	One settlement participant and one industry association requested consideration of improvements to the preparation for settlement of issuer sponsored holdings.	One registry expressed concern with the scope as previously defined.	
BRING FORWARD	Continuous Holding Balance Information	Three settlement participants and two industry associations requested this feature is brought into Day 1 scope	N/A	
NEW	Record Date Holdings	One participant requested a notification of Record Date holdings	N/A	
NEW	Enhanced process for ETF application/redemption	One industry association and one participant requested workflow improvements in relation to ETF applications/redemptions.	Not sought/received	

Appendix A: Industry feedback on scope

Scope for consideration 3 – Corporate Action processing efficiencies

Change Requested to Baseline	Scope Item	Request/In favour	Against	Proposal to TC
NO CHANGE (In Scope)	DRP/BSP Election & Enquiry	Four participants, two registries, two industry associations requested this feature is retained.	One registry expressed concern with design.	• **Focus Group** to be convened on efficiencies in Corporate Action Processing. • Attendees to be interested/affected Settlement Participants and Share Registries • Stakeholders to be surveyed in advance to prioritise scope and inform discussions.
BRING FORWARD	Dividend Claims	Two participants and an industry association requested this feature be brought forward.	One registry expressed concern with this feature.	
BRING FORWARD	Acceptance and Payment of Corporate Actions	Four participants, one industry association and one registry requested this feature be brought forward. Some requested it is expanded to more corporate actions.	One registry expressed concern with this feature.	
BRING FORWARD	Transfer CEB	Three participants, one industry association requested the ability to transfer Cum Entitlement Balances irrespective of shares.	One registry expressed concern with this feature.	
NO CHANGE (Out of Scope)	Proxy Voting	One participant expressed support for electronic proxy voting in Day 1.	Most participants and registries supported this feature remaining out of scope.	
NEW	Payment Advices	One participant requested a new feature that would allow communication of payment advice information for corporate actions.	None sought/received.	

Appendix A: Industry feedback on scope

Other feedback & topics

Change to Baseline	Scope Item	Request/In favour	Against	Proposal to TC
REVISE	Segregation of C&S	Two participants and one AMO questioned how ASX was approaching separating Clearing, Settlement & Sub-Register	Not sought/received	• ASX to provide overview of the way the various CHESS functions are expected to be segregated in a future TC.
BRING FORWARD	New Participation Models	An AMO and an industry associated requested a review of participation models in relation to segregation of C&S	Not sought/received	
KEEP (In Scope)	ISO20022	One industry association requested a review of ISO20022 messages to better align to global standards	One registry questioned why ISO20022 is being implemented and why EIS cannot be retained.	• ISO20022 will be retained. • Detailed ISO20022 consultation will commence during design phase.
NEW	NPP / RTGS	One registry and one participant asked ASX to explore the possibility of NPP as a payment channel	One industry association requested keeping RTGS	• ASX is exploring NPP for non-CHESS use cases. • The appropriate payment channels will be considered in the context of use cases.
NEW	File Upload for BCP purposes	One participant requested the provision of a File Upload for all transactions, to be used for BCP purposes.	None sought/received	• File upload capability is in scope (via CHESS UI). ASX to consider usage for BCP purposes.
NEW	Multiple connections per participant	One participant requested multiple connectivity channels	None sought/received	• In assessment with Architecture.
REVISE	Use of ReferencePoint ISO vs. CSV	One software vendor questioned the usage of fields in ReferencePoint ISO messages, not available in CSV.	None sought/received	• Feedback to be provided to ReferencePoint team.

Appendix A: Industry feedback on scope

No feedback provided

Change to Baseline	Scope Item	Request/In favour	Against	Proposal to TC
NO CHANGE	Aggregated view of holdings; Common investor number	No feedback related to bringing into Day 1 Scope		• Remains out of scope
NO CHANGE	Transfer of novated equity transactions between CPs	No feedback related to bringing into Day 1 Scope		
NO CHANGE	Settlement in foreign currencies; Optional early client settlement; Auto-borrow	No feedback related to bringing into Day 1 Scope		
NO CHANGE	mFund Real-time cash settlement, 'hold' status and transfer capability	No feedback related to bringing into Day 1 Scope		