



# CHES Replacement Technical Committee

21 August 2023

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
- Please introduce yourself when talking for the benefit of all members
- Meeting is being recorded for the purposes of minute taking
- Dial in details (audio only):
  - [+61 2 7208 4607](tel:+61272084607)
  - [Phone Conference ID: 486 431 578#](tel:+61272084607486431578)
- 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 (including latest Pulse Survey results)
- 
- Project status and governance
- 
- Steps to finalise scope recommendations to Business Committee
- 
- Project scope – playback and discussion of scope recommendation survey results
- 
- Approach to interface options
- 
- Forward work plan
- 
- Observer playback
-

# Open actions

## Captured from previous Technical Committees

Item #	Action	Follow-up	Due	Status	Owner
2023 June (1)	ASX to include the solution's messaging protocol (e.g. EIS versus ISO messaging) as a TC topic.	To address as part of the connectivity options Technical Committee agenda item	4 October 2023	Open	ASX

# Member feedback from the last meeting

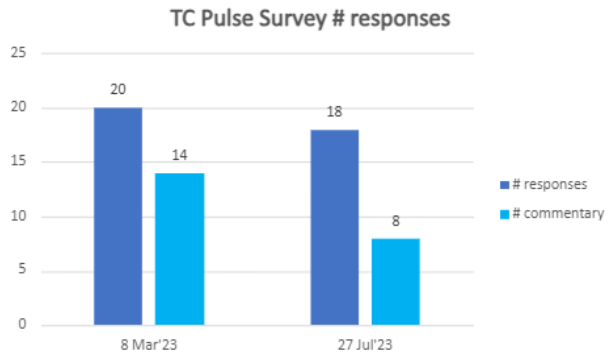
Including TC Pulse Survey Results (end Q2 2023)



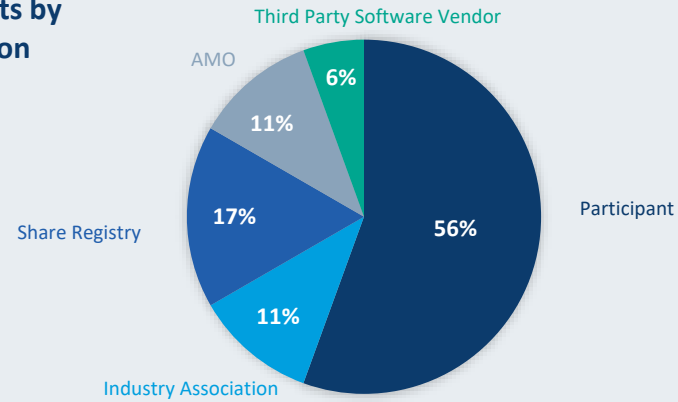
# TC Pulse survey as at end Q2 2023

Industry TC members surveyed for feedback following the second quarter

## End Q2 2023

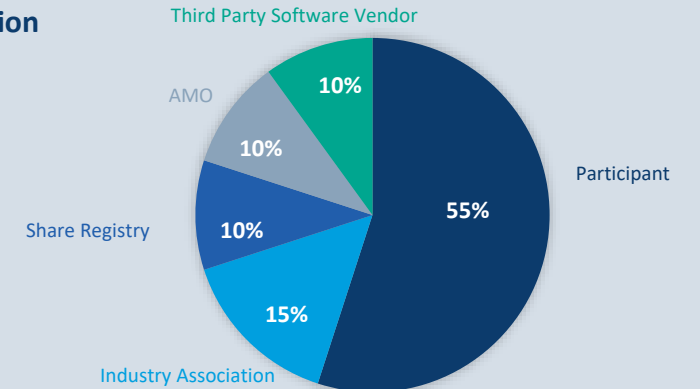


### Participants by organisation

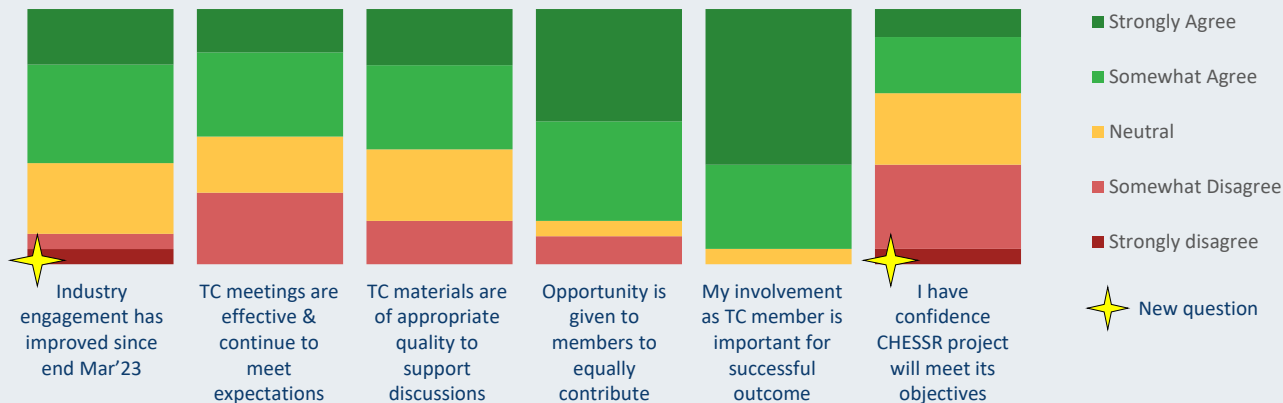


## End Q1 2023

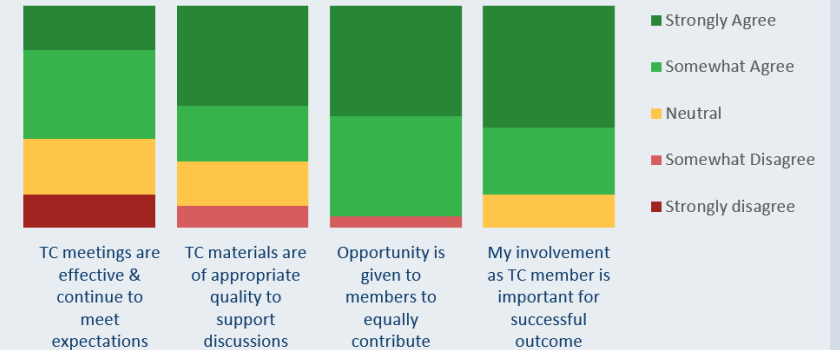
### Participants by organisation



### Meeting effectiveness



### Meeting effectiveness

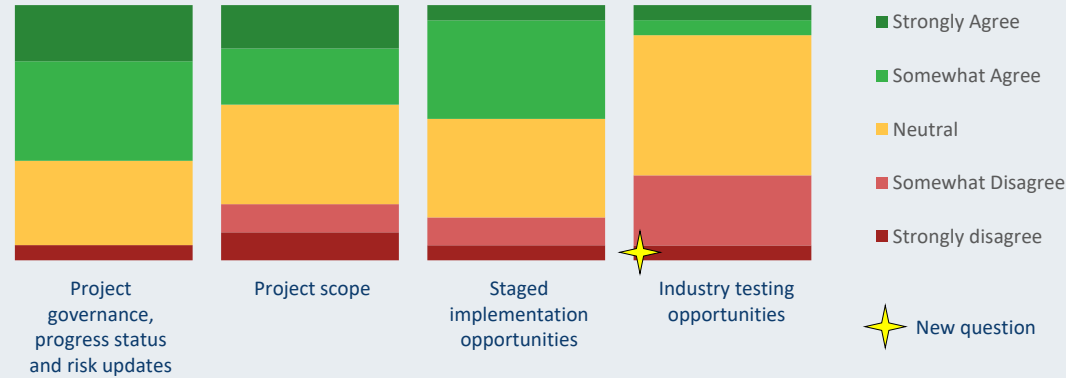


# TC Pulse survey as at end Q2 2023

Industry TC members surveyed for feedback following the second quarter

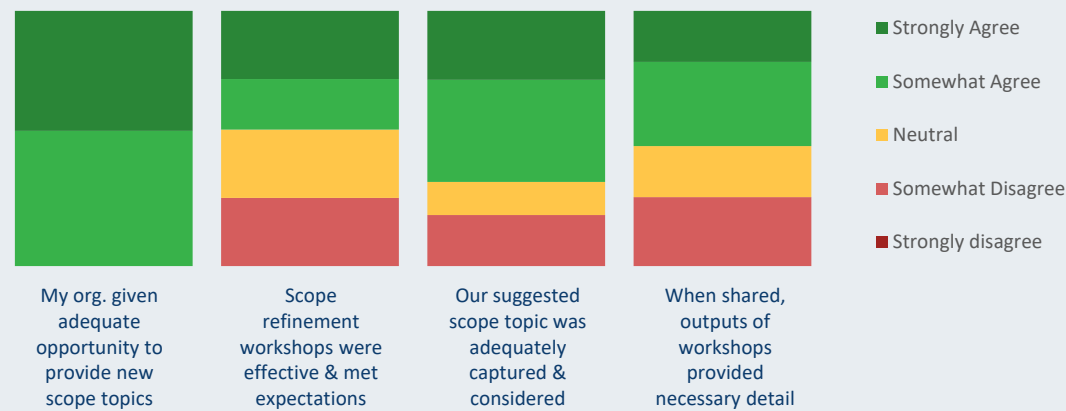
## End Q2 2023

### Topics discussed so far?



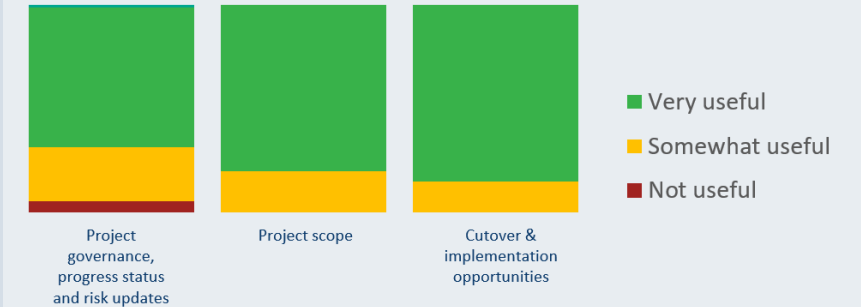
★ New questions

### Scope refinement workshops (n = 15)



## End Q1 2023

### Topics discussed so far?



# TC Pulse survey as at end Q2 2023

## Industry TC members surveyed after six TC meetings

Category	Written Feedback Received	ASX follow-up / actions
<b>Scope Refinement</b>	The scope discussions need to flow into design considerations.	As per the CHES Replacement scope process timeline (slide 19), industry engagement on design will be ongoing.
	It is imperative that where organisations are articulating problems that could be solved by CHES Replacement, the problem is clearly defined and supported with evidence.	ASX took on board a number of suggested refinements to the business canvases following the first scope refinement workshop.
	Discussions in scope sessions often focused on symptoms not causes and therefore solutions may not be fit for purpose.	The output of the scope refinement workshops were defined problem statements and scope objectives. Detailed analysis and design will follow once scope objectives are agreed upon. The Committee will be kept involved in the detailed design process to ensure solutions remain fit for purpose.
	Discussions do not cover scale or provenance of a matter (size of problem, frequency, breadth). There was no exploration of the root cause.	Scale and provenance differs from organisation to organisation. Alongside an overall recommendation, the scope recommendation survey issued on 3 August 2023 included organisation impact, priority and a free text field. These were intended to enable organisations to highlight any additional considerations specific to their business. Based on responses received, this topic will be discussed at the 21 August Technical Committee.
	Scope refinement information post focus group material was difficult to read and seemed unnecessarily complicated. It was not clear how big some of the issues were.	
<b>Meeting Administration</b>	It has been good to be involved in some health x-industry discussion which was allowed to ebb-and-flow to encourage the need to be explored fully (at times). More of this is needed.	ASX will continue to work with Committee members to identify topics that may require further industry engagement and setup working groups, similar to the scope refinement workshops, as required.
	The size of the group should be reviewed, particularly as the project moves through different phases from scoping to design, development, and testing. Participation is only for one member, however roles are often separated across divisions in larger businesses.	In terms of the role of the CHES Replacement Technical Committee going forward, ASX's sees the role as coordinating the subsequent phases of the project which are likely to enact more detailed working groups, requiring more targeted SME attendance to work through detail as needed.
	Earlier slide packs, allowing time to receive feedback across the group.	This feedback was noted in the July Technical Committee and will be taken on-board for the planning of future workshops and focus groups. The timing surrounding the early release of pre-reading material was limited due to the desire to keep the survey response windows open for as long as possible to ensure the appropriate coverage for each business canvas.

# TC Pulse survey as at end Q2 2023


## Industry TC members surveyed after six TC meetings

Category	Written Feedback Received	ASX follow-up / actions
<b>Solution Selection</b>	<p>To date ASX has not performed (or at least shared with participants) any analysis on best-in-class international settlement systems or functionality and they appear to be unaware of how major markets operate their post-trade infrastructure. As a minimum we feel ASX should have performed a benchmark exercise on post trade infrastructures to assess functional capabilities before re-commencing work.</p>	<p>As presented in the February Technical Committee ASX reviewed the top 20 global exchanges, assessing the technology used in Clearing, Settlement and CSD domains. ASX then validated an enhanced list with our consulting partners, leveraging their global alliances and partnerships.</p>
<b>Progress Status</b>	<p>Some clearer guidance around entire project timelines would be helpful, so we can properly plan project resourcing / priorities / budgets etc.</p>	<p>As noted in the project status update, ASX continues to work through the solution definition and recommendation process with plans to announce the solution decision in Q4 of this calendar year. Following the announcement there will be further consultation in the new year to confirm the detailed scope and design of the solution in consultation with industry before any work is likely to commence. Following the design consultation, the project team will mobilise.</p> <p>Taking these factors into account there may be six months or more following the announcement of the solution design before the project moves beyond the design consultation and resource scaling stages, although this timing will depend on factors including the duration of the design consultation process (which itself will depend on, among other things, the nature and extent of responses received).</p> <p>These points may assist you to consider timeframes for resource planning.</p>
	<p>There has been a lot of activity in a lot of different areas in the project however our view is that the sequence of a lot of these activities has not been correct. A number of activities have been undertaken without key principles and objectives for the project being set - concrete foundations are still not yet set yet decisions about the future are already being made.</p>	<p>ASX has presented the solution decision framework and project objectives at previous meetings of this Committee. Additionally, and as mentioned in the previous response, there are several factors and activities to undertake prior to future decisions being made. ASX welcomes further clarity on this feedback to enable a more complete response and appropriately address industry concerns.</p>

# Project status & governance

# Redesign plan update

## Plan for solution design

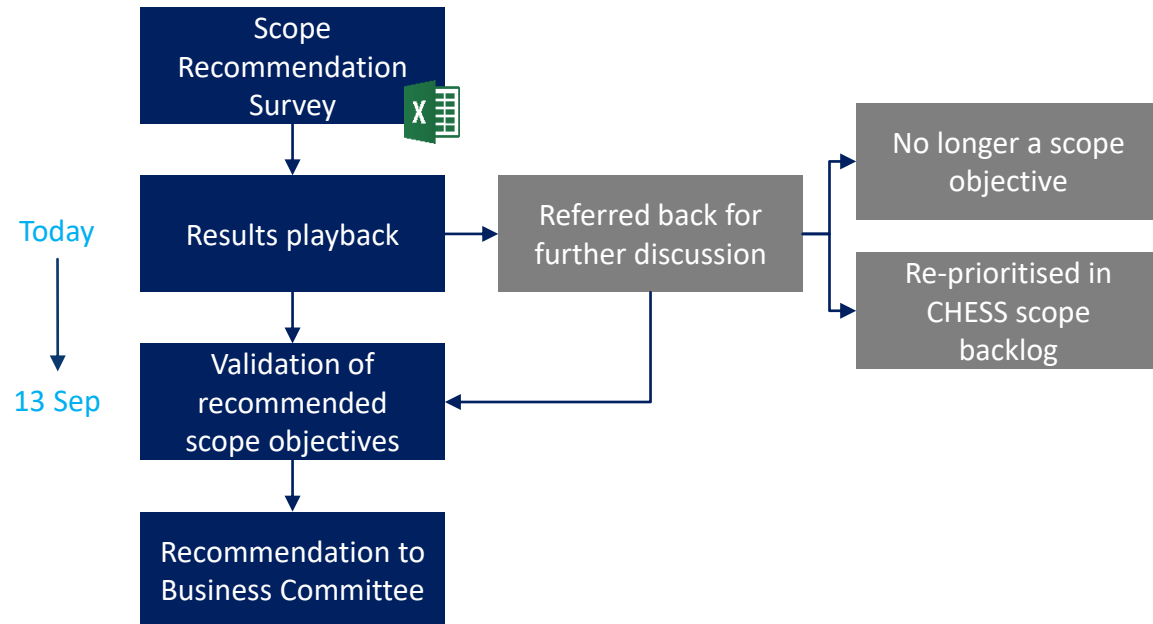
	CY Q1	CY Q2	CY Q3	CY Q4
<b>Product Definition &amp; Business Case</b>	<ul style="list-style-type: none"> <li>✓ Business Vision &amp; Strategy</li> <li>✓ Program Objectives</li> </ul>	<ul style="list-style-type: none"> <li>✓ Scope and business requirements refined</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Scope and business requirements baselined</li> <li><input type="checkbox"/> Business case submitted</li> </ul>	
<b>Solution Assessment</b>	<ul style="list-style-type: none"> <li>✓ Current state evaluation</li> <li>✓ Solution decision framework developed</li> </ul>	<ul style="list-style-type: none"> <li>✓ Solution decision framework approved</li> <li>✓ Solution options refinement</li> <li>✓ Solution options evaluated</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Solution design finalised</li> <li><input type="checkbox"/> Project estimation completed</li> </ul>	<ul style="list-style-type: none"> <li>★ Announcement of solution design</li> </ul>
<b>Sourcing &amp; Commercial</b>	<ul style="list-style-type: none"> <li>✓ Market Scan</li> <li>✓ Vendor solution RFI</li> </ul>	<ul style="list-style-type: none"> <li>✓ Vendor RFI evaluation</li> <li>✓ Vendor RFP issued and responses received</li> <li>✓ Solution integrator RFP</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Vendor commercial and contracting processes</li> <li><input type="checkbox"/> SI selection and contracting</li> </ul>	
<b>Testing &amp; Implementation</b>	<ul style="list-style-type: none"> <li>✓ Implementation options review</li> </ul>	<ul style="list-style-type: none"> <li>✓ Implementation impact assessment</li> <li>✓ High level test strategy</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Implementation strategy</li> <li><input type="checkbox"/> Test strategy &amp; approach completed</li> </ul>	
<div style="border: 1px solid black; padding: 5px;"> <p><b>Key Risk:</b></p> <ul style="list-style-type: none"> <li>• Commercial vendors' processes may impact the timeline for a Q4 announcement on a solution design</li> </ul> </div>				
<div style="border: 1px solid black; padding: 5px;"> <p><b>Legend:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Inflight</li> <li>✓ Completed</li> </ul> </div>				

# Steps to finalise scope recommendations to Business Committee

# Scope Recommendation Survey

## How recommendations are made to the Business Committee

### Process



### What does success look like?

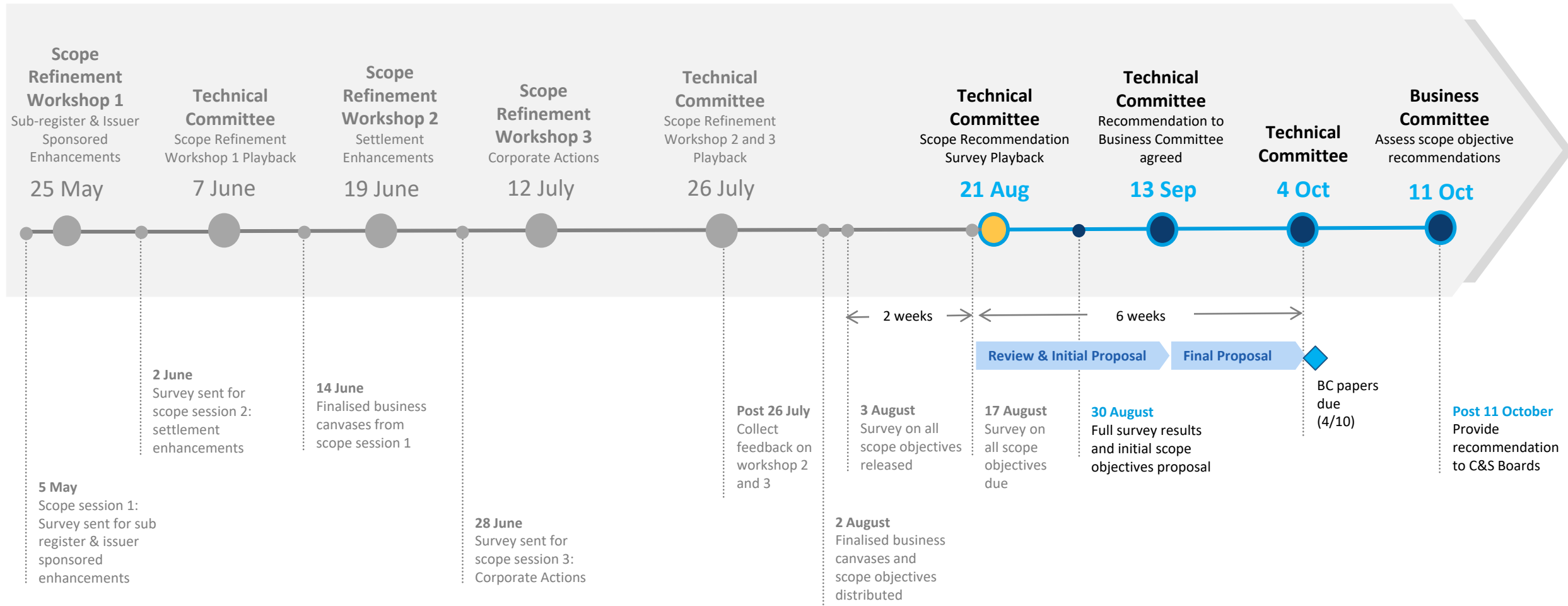
Success of the scope recommendation process is quite broad. For example, success can be:

- that all scope objective recommendations are brought to the Business Committee
- that none of the scope objective recommendations are brought to the Business Committee
- that some of the scope objective recommendations are brought to the Business Committee
- a negative outcome would be the inability for the Technical Committee members to decide whether a scope objective is or isn't brought to the Business Committee
- **in the instance where consensus on a scope objective cannot be reached, it will not be brought to the Business Committee until a time when consensus is achieved**



# Technical Committee – Next steps

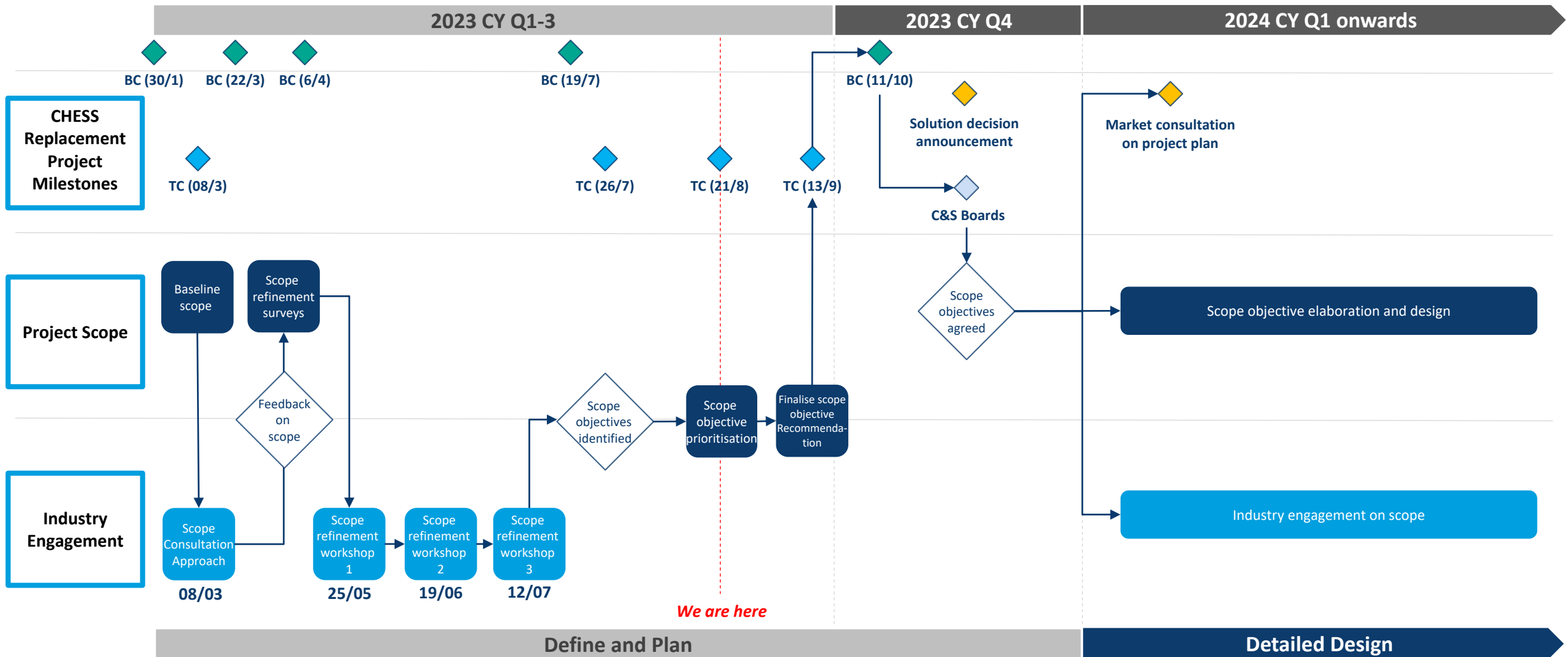
## Key dates for recommendations on scope



# Scope recommendation survey – Results playback

# CHES Replacement scope process

## Timeline view



# Scope Recommendation Survey

## Results playback – As at 18 August

### Response Rate

- 56% Overall responses received:
  - C&S Participants = 78% (14/18)
  - Third Party Vendors = 60% (3/5)
  - AMO's = 0% (0/4)
  - Share Registries = 20% (1/5)
- ASX will follow up organisations to confirm if they are going to respond.

Topic	Functionality	Ref	Scope Objective	Strongly support	Somewhat support	Not supportive	# of commentary
Sub-register and issuer sponsored		1.1	Standardise, improve and better synchronise the data sharing between participants and share registries	14	2	1	12
		1.2	Foreign restricted securities - review and simplify the current processes for holdings and transfers	7	8	1	8
		1.3	SRN Enquiry & Validation Implement a faster and more efficient SRN enquiry process	15	1	1	8
		1.4	Issuer Sponsored Holding Locks Reduce settlement risk in relation to issuer sponsored sales	7	3	4	7
		1.5	ETF Creations & Redemptions Reduce operational risk in relation to the current ETF creation/redemption workflow	4	1	2	6
		1.6	Continuous Holding Balance Provide more efficient, reliable and faster access to holding information	7	6	1	8
Settlement		2.1	Reduce operational risk by ensuring participants are able to submit and match transactions at the earliest time as soon as practical whilst minimising the likelihood of incurring a failed settlement (eg. using sub-accounts to separately match and schedule a transaction)	7	3	3	7
		2.2	Bilateral Matching Improvements Reduce operational risk by minimising mismatches and failed settlements - including the data sharing and matching fields available and/or making use of information available in participant systems	6	7	2	6
		2.3	Standing Instructions Reduce operational overhead in relation to standing instructions - including the data sharing and approvals in the system within such limitations	3	4	3	6
		2.4	Preliminary Payment Notifications Provide more certainty to participants - including more frequent and/or configurable access to preliminary payment data	2	6	3	5
		2.5	N/A Bilateral Matching - use of Transaction Basis (on and off-asset)	3	5	2	6
		2.6	N/A Schedule Settlement CHES to CHES Transfer request (including the data sharing and approvals within a participant group structure)	3	3	0	5
		2.7	N/A Deferred settlement securities - review processes to ensure/improve settlement efficiencies	6	5	3	6
Corporate Actions		3.1	Review and enhance the current processes for automated claims (diary adjustment) - including the data sharing and approvals to meet the market needs	9	4	4	8
		3.2	Provide standardised straight through processing capability for corporate action elections and cost effective associated payments	10	4	2	9
		3.3	Corporate Action Election and Acceptance Processing Reduce operational risk in relation to DRP - including the data sharing and approvals	9	6	2	8
		3.4	Cum Entitlement Balance Transfer Evaluate opportunities to facilitate the transfer of entitlements (pre and/or post Record Date) ensuring this does not impact issuer schedules	8	5	3	7
		3.5	Electronic Notification of Payment Advice Provide standardised electronic transmission of corporate action distribution information to create opportunities for automation and process improvement	8	5	3	9
		3.6	Other Corporate Action Efficiencies Evaluate whether ASX can help with the transmission of bank account information in relation to bid offers	7	8	2	8
		3.7	Other Corporate Action Efficiencies Ensure holding adjustment reason codes are up to date and being used correctly	11	6	0	6
		3.8	Other Corporate Action Efficiencies Make sub-register state more readily available to participants to help improve processes in relation to de-listings	6	10	0	6
		3.9	Other Corporate Action Efficiencies Standardised electronic proxy voting	3	10	0	8

# Approach to interface options

# Approach to interface options

## Discussion summary

Topics for today's discussion include:

- Approach to industry engagement on interface options;
- Transaction interfaces;
- Data interfaces;
- Rationale for ISO 20022; and
- Engagement on business and technical design.

# Approach to interface options

## Industry engagement

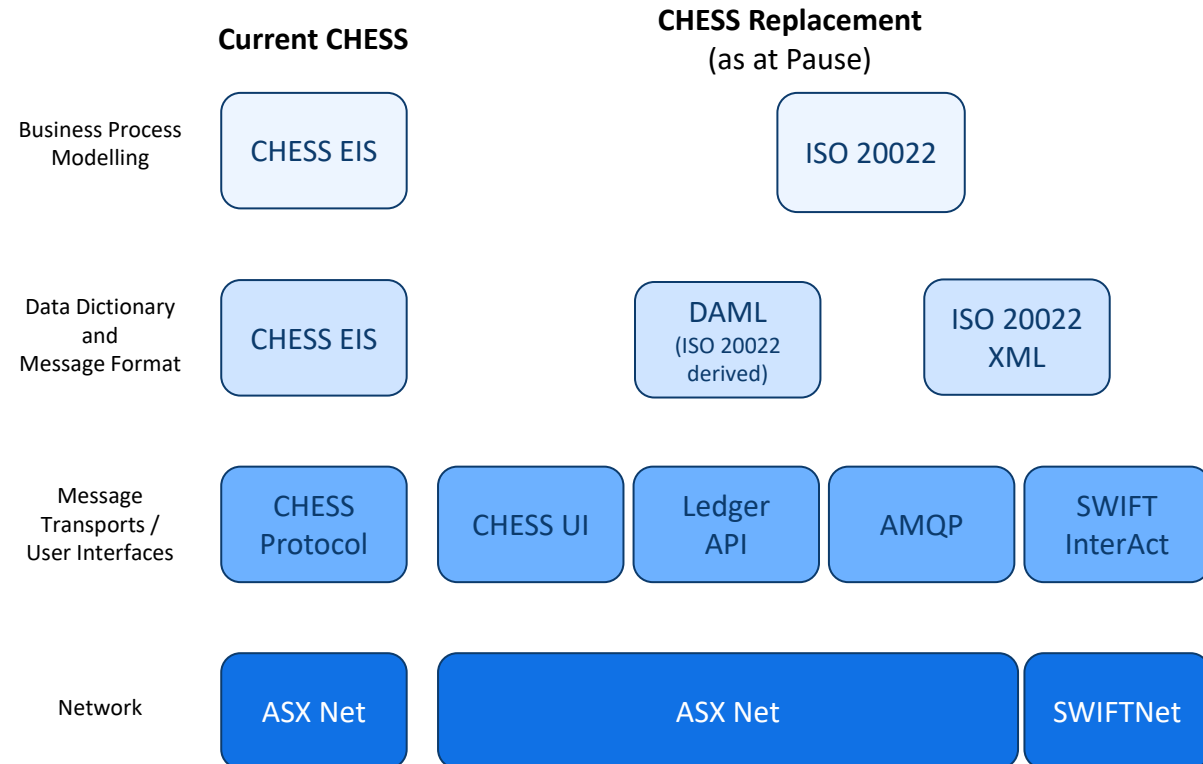
- ASX is seeking feedback on preferred interface options and is proposing to survey Technical Committee members. The results of which will be played back and discussed at the 13 September Technical Committee.
- The proposed survey would ask members to nominate their preferred transaction and data interface option/s including a free-text field to provide rationale and use cases. Members have the ability to select 'no preference' where applicable.
- The proposed survey would include an opportunity for members to nominate any alternative interface options.
- Message transports will be selected based on a range of factors, including:
  - Participant preferences;
  - Ability to rationalise/simplify options;
  - Alignment to standards; and
  - Complexity.

# Interface overview

## Transaction interfaces

### Summary:

- Interface layering:
  - Business Process Modelling;
  - Data Dictionary and Message Format;
  - Message Transport; and
  - Network.
- ISO 20022, an open global standard for financial information and the emerging standard in settlement, was introduced as part of the CHES Replacement project.
- As at the program pause CHES Replacement offered four message transports and a browser-based user interface.



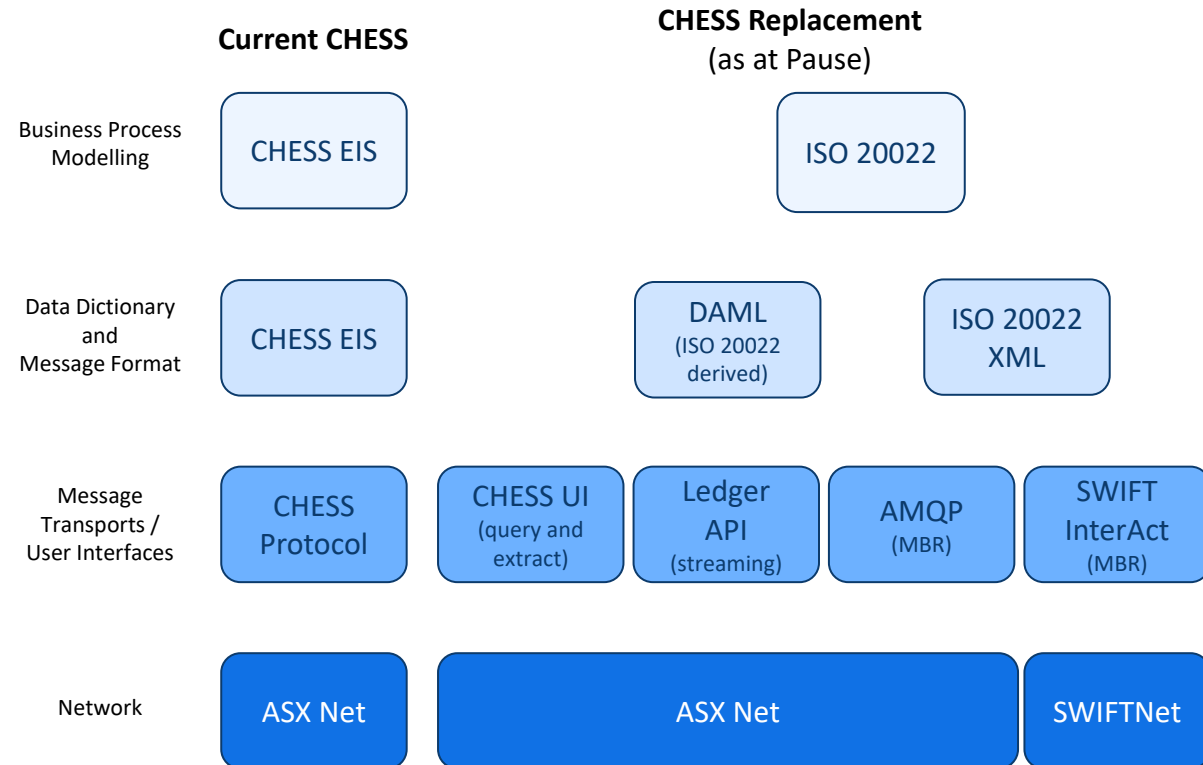


# Interface overview

## Data interfaces

### Data available as at the program pause CHES Replacement:

- Message based reporting (MBR) was available on all supported transports and the User interface.
- Ledger API supported streaming of changes to Participant data (such as holdings and obligations)
- CHES User Interface (UI) enabled the querying and extraction of data in a CSV format.



# Interface overview

## Move from a proprietary to a global standard

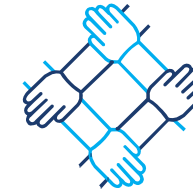
### ASX's ISO 20022 Journey:

- In 2014, ASX implemented ISO 20022 format messages for STP corporate actions.
- ASX engaged SWIFT in 2016 to map all existing EIS messages to ISO 20022 to ensure the standard was fit for purpose.
- ASX announced its intention to adopt ISO 20022 messaging in its September 2016 consultation paper and, with the support of the market, confirmed its adoption in March 2017.  
[\(ISO 20022 Technical Committee, 13 December 2016\)](#)
- ASX analysed 496 proprietary CHESSE EIS messages and, in consultation with the market from 2018 to 2021, mapped 275 EIS messages to 106 ISO 20022 base messages.
- ASX is subject to a regulatory expectation to move away from proprietary messaging to lower the barrier to entry and improve access.

### Benefits of ISO 20022 versus EIS Messaging



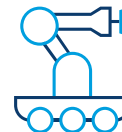
Standardisation



Lower barriers  
to entry



Futureproofing



Improve automation  
and efficiency



Enhanced data richness  
and flexible design  
(e.g. nested data and  
repeating groups)



Regulatory  
compliance

# Business and technical design

## Industry engagement

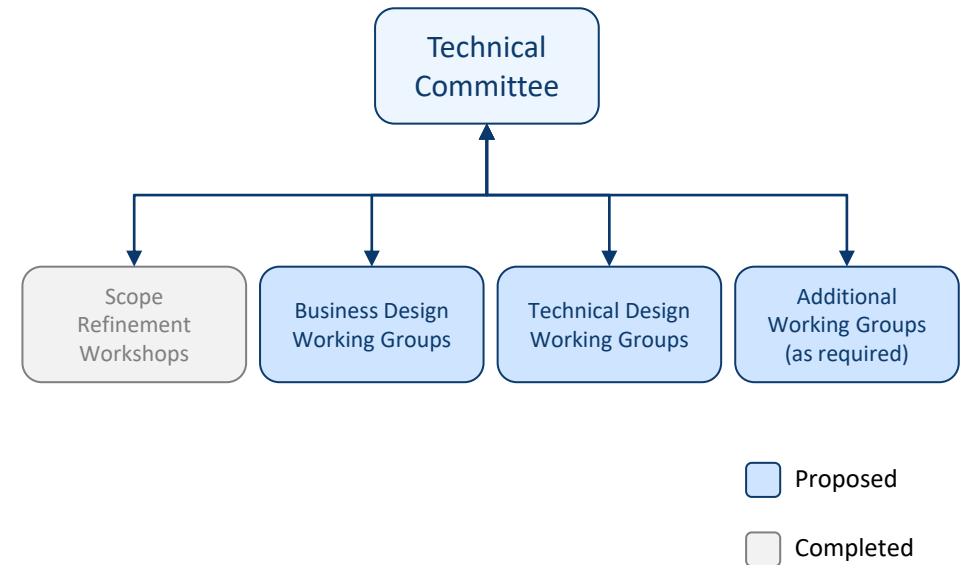
Industry engagement is ongoing and business and technical design will be supported by working groups, similar to the scope refinement workshops.

### Business Design

- Covering areas that may require further industry input such as netting and settlement, account model, cum entitlement balance and new scope.

### Technical Design

- ASX proposes to retain the existing ISO 20022 messages as the baseline for the project.
- ASX will consult in a similar format to the 2018 to 2021 engagement on any changes that result from the selected solution option and upgrades to the most recent standard.



# Forward work plan

# Forward work plan

Calendar invitations have been shared for monthly meetings in 2023



## Agenda items:

- Project status update
- Finalise scope objective recommendations to Business Committee
- Interface Options



## Business Committee meetings:

11 Oct 2023

6 Dec 2023

## Future TC meetings:

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
- Access channels / interface options
- Industry readiness activities
- Accenture recommendations

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

# Observer playback

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Thank you.

