



# CHES Replacement Technical Committee

8 March 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
- 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:+61272084607)
- Presentation materials were distributed shortly 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.

# Agenda

- 
- Welcome and open actions
- 
- Member feedback from last meeting
- 
- Project status update
- 
- Project scope approach
- 
- Opportunities for a staged implementation
- 
- EY independent review
- 
- Forward work plan
-

# Welcome and open actions

# Presenters

- 
- Tim Whiteley
- 
- Katie McDermott
- 
- Keith Purdie
- 
- Triona Quinlan
- 
- Chris Boyes
- 
- Russell Eyre
- 
- Felicity Potter
-

# Open actions

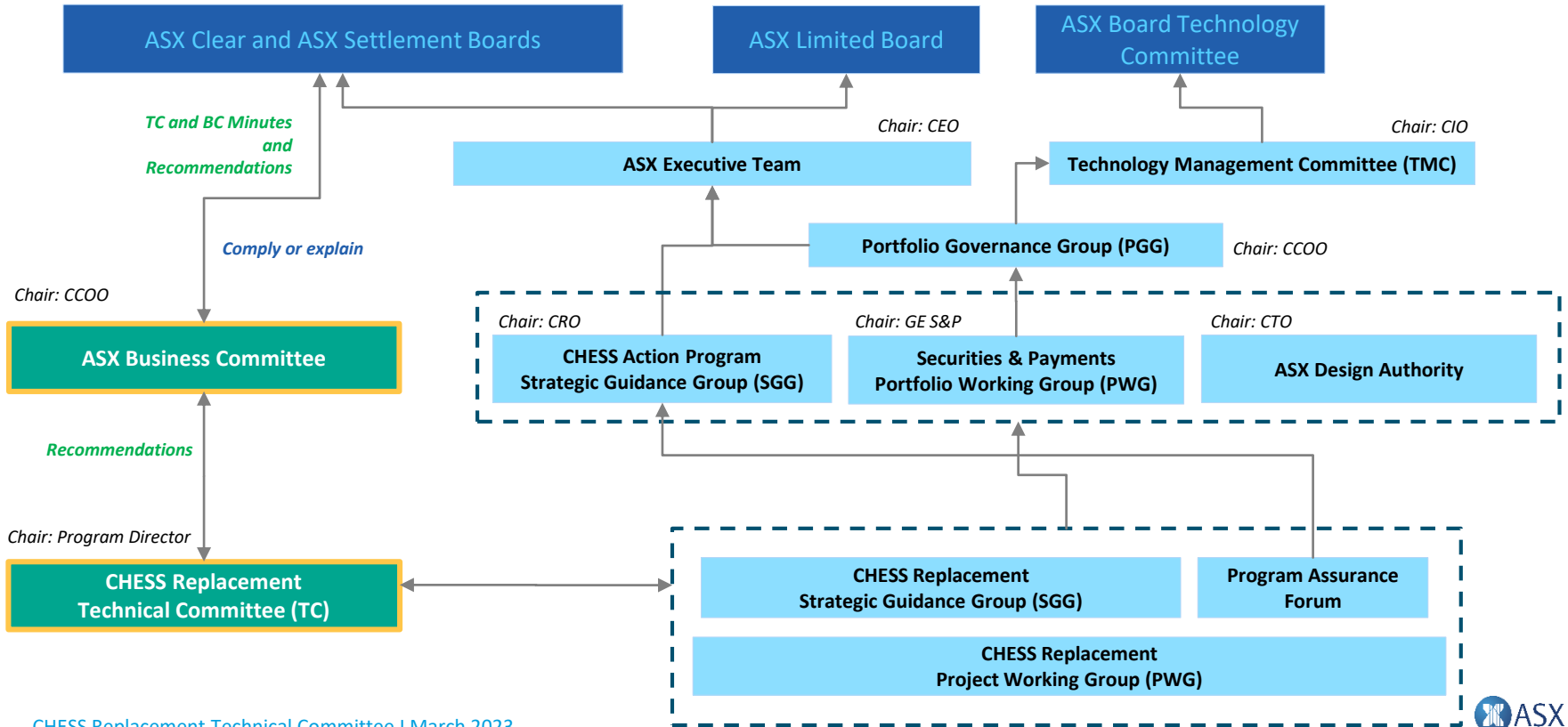
## Captured from the February Technical Committee

Item #	Action	Follow-up	Due	Status	Owner
2023 Feb (1)	ASX to provide a project governance chart illustrating the relationships and decision making	Refer to slide 9	8 March 2023	Open	ASX
2023 Feb (2)	ASX to consider the appropriateness of sharing the RFI with members	Update in committee	8 March 2023	Open	ASX
2023 Feb (3)	ASX to consider conducting a 'Pre-Mortem' and to proactively identify mitigants	Update in committee	8 March 2023	Open	ASX
2023 Feb (4)	ASX to provide a list of requested items from members and ASX's response for visibility	Open actions tracked in minutes and in each TC	8 March 2023	Open	ASX
2023 Feb (5)	ASX to propose plan for workshops to scope requirements	Refer to slide 16	12 April 2023	Open	ASX
2023 Feb (6)	Introduce a meeting observer to help identify improvements into establishing the right level of conversation and outcomes	Ryan Jones (CommSec) for March 08/03 TC Volunteer required for April 12/04 TC	8 March 2023	Open	ASX/TC members



# Open action

## Action 2023 Feb (1) - CHES Replacement Project Governance (as at March 2023)



# Member feedback from the last meeting

# Member feedback

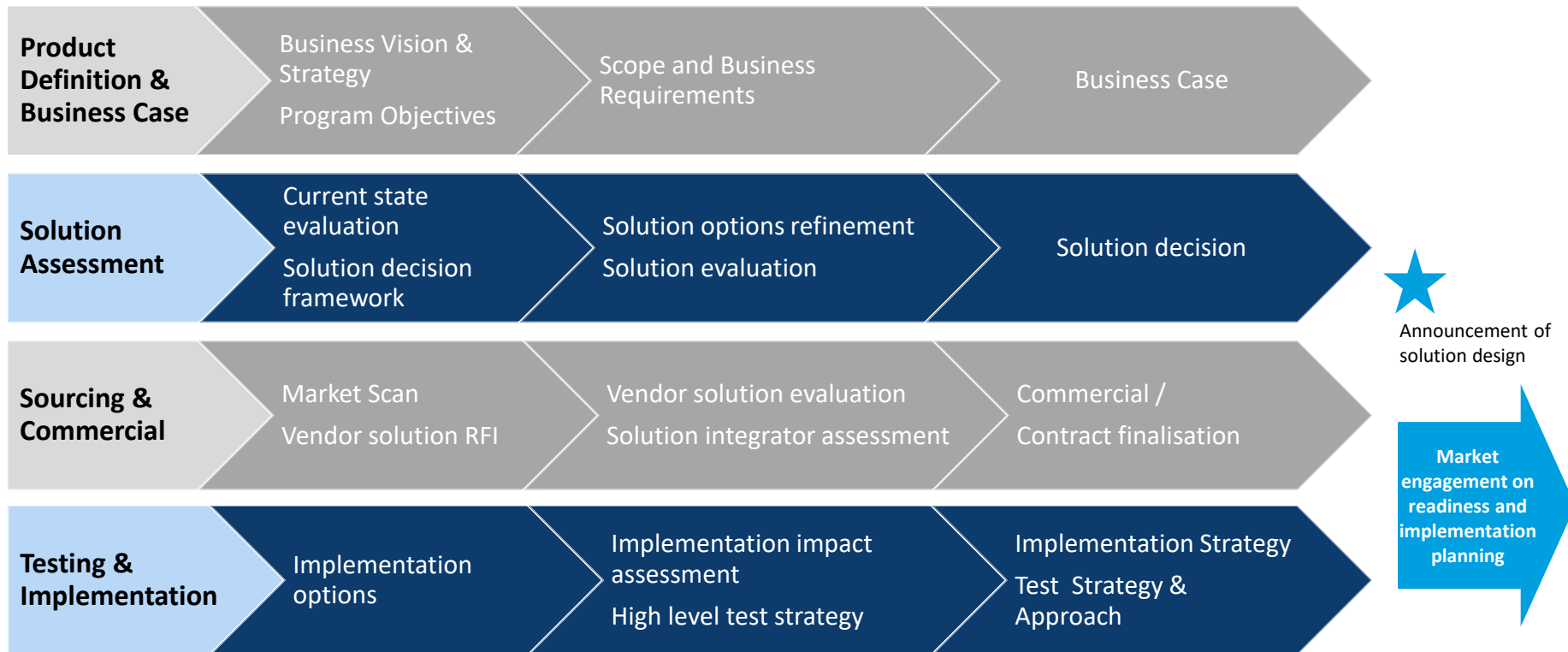
## Captured from the February Technical Committee

- Design and approach
  - Members requested scope to be revisited as requirements may have changed with the passage of time
  - Members expressed concern regarding scope for potential rework
  - Members were supportive of the RFI process and its consideration of international options, however there were questions about managing requirements in parallel with the vendor RFI/RFP process
  - Members expressed concern about balancing potential workload between maintaining current CHES for a longer timeframe and CHES replacement
- Governance and engagement
  - Several members raised concerns that the appropriate representation from their organisations
  - Some initial scepticism about how ASX engages with stakeholders
  - Members see the need to monitor the committee's input and engagement at regular intervals and continuously improve
- Other general feedback
  - Members were generally supportive of the committee's charter and objectives, but are seeking improved transparency on how project status is reported
  - Some members were unclear on the process for dealing with recommendations raised at the Technical Committee

# Project status update

# Redesign Plan Update

## High level plan to Solution Design



# Project scope approach

# CHES Replacement scope

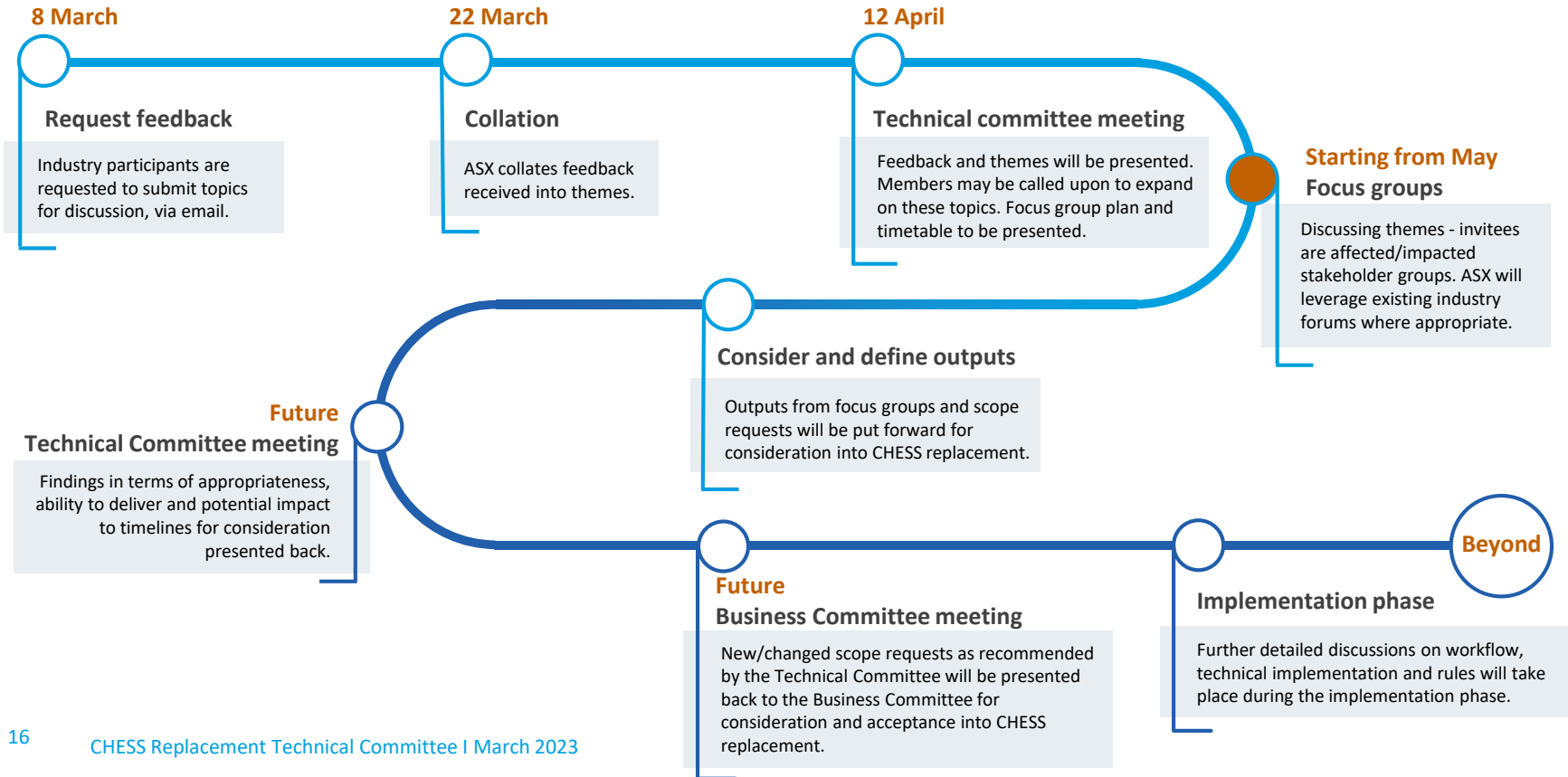
Spans current CHES, existing scope for Day 1 CHES Replacement & beyond

	Existing scope for Day 1 CHES replacement: – current CHES functionality plus the below	Currently out of scope for Day 1 CHES replacement:
<b>Account information</b>	<ul style="list-style-type: none"> <li>Standardised registration details</li> </ul>	<ul style="list-style-type: none"> <li>Aggregated view of holdings</li> <li>Common investor number</li> <li>Additional investor information</li> <li>Centralised data capture and storage</li> </ul>
<b>Clearing</b>	<ul style="list-style-type: none"> <li>Changes to netting process (non-materialised NBO)</li> </ul>	
<b>Pre-settlement</b>	<ul style="list-style-type: none"> <li>Settlement lock for CHES holdings</li> <li>Bilateral transaction matching (additional matching criteria and revised tolerances)</li> </ul>	<ul style="list-style-type: none"> <li>Bilateral transaction matching (pre-matched status)</li> <li>Single access point to validate SRNs</li> <li>Settlement lock for issuer sponsored holdings</li> <li>Transfer of novated equity transactions between CPs</li> <li>Additional preliminary payment notifications</li> </ul>
<b>Settlement</b>	<ul style="list-style-type: none"> <li>Changes to settlement process (net settlement)</li> <li>Linking bilateral settlements</li> <li>Non-batch DVP bilateral settlement</li> </ul>	<ul style="list-style-type: none"> <li>Settlement message enhancement</li> <li>Settlement in foreign currencies</li> <li>Optional early client settlement</li> <li>Auto-borrow</li> </ul>
<b>Corporate Actions</b>	<ul style="list-style-type: none"> <li>Electronic DRP and BSP elections, DRP enquiry</li> </ul>	<ul style="list-style-type: none"> <li>Electronic DRP and BSP elections, DRP enquiry</li> <li>Electronic processing of dividend claims</li> <li>Electronic proxy voting</li> <li>Transfer of cum entitlement balance</li> <li>Electronic acceptance of entitlement offers</li> <li>Electronic payment for entitlement offers</li> </ul>
<b>Reporting</b>		<ul style="list-style-type: none"> <li>Continuous holding balance information</li> </ul>
<b>Participant Structure</b>		<ul style="list-style-type: none"> <li>Participant models for clearing and settlement services</li> </ul>
<b>mFund</b>		<ul style="list-style-type: none"> <li>Real-time cash settlement, 'hold' status and transfer capability</li> </ul>

Further details on each of the scope items can be found in the [2018 CHES Replacement New Scope and Implementation Plan](#) (2018), [CHES Replacement Changes to Netting & Settlement Workflow](#) (2021) and [CHES Replacement Tranche 3 and Combined Rule Amendments Consultation Paper](#) (2021).

# Project scope approach

## Scope consultation approach





# CHES Implementation Approach

Opportunities for a staged  
implementation

# Opportunities for a staged implementation

## Revisiting opportunities for a staged implementation

*"AFMA strongly supports a staged approach to go live which allows for a reduction in the risk but would require all participants and impacted parties to be obligated to cut over by a certain date rather than be open-ended. Go-live might be by product/functional slice whilst maintaining connectivity with old and new technology with cutover managed with clear rollback plans."*

# Opportunities for Staged Implementation

## Goal

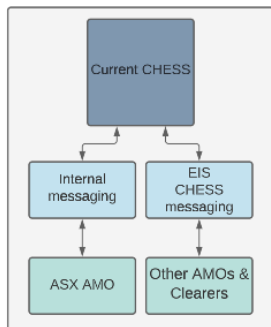
Achieve a safe, reliable and predictable implementation

### Clearing Journey

### Settlement/Sub-Register Journey

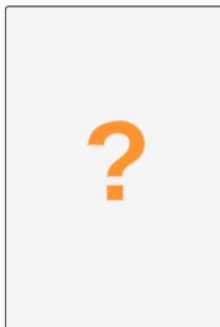
#### Starting State

Current CHES with an internal interface for ASX AMO and CHES EIS messaging for non-ASX AMO's



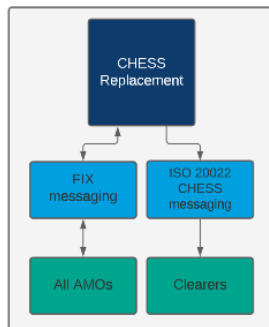
#### Transition State

Transition over one or more migration events



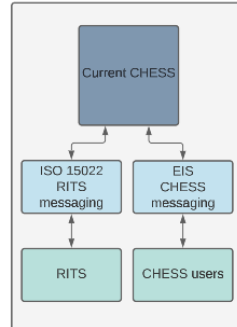
#### Target State

CHES Replacement with standardised FIX interface for all AMOs and ISO 20022 for Clearers



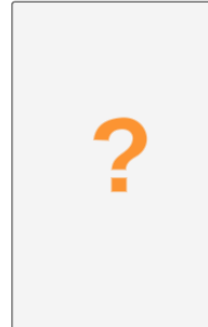
#### Starting State

Current CHES with SWIFT 15022 for RITS messaging and CHES EIS for CHES messaging



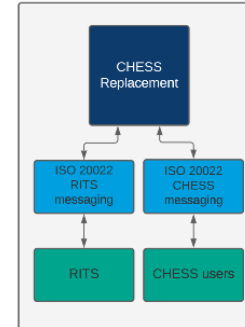
#### Transition State

Transition over one or more migration events



#### Target State

CHES Replacement with ISO 20022 messaging for both RITS and CHES



# Opportunities for a staged implementation

## Objective

### Identify staged implementation opportunities that reduce overall risk

- Consider incremental adoption as an alternative to single cut-over events
- Clear rollback plans
- Avoid complex data synchronisation requirements between current and replacement systems
  - Limited reconcilable one-way asynchronous data synchronisation is acceptable
- Avoid complex centralised message translation requirements between EIS and ISO 20022
  - Limited “like-for-like” translation could be considered for some of the stages
- Agreement with the market of the timing and scope of the stages

# Opportunities for Staged Implementation

## What's changed?

Original assumption	New assumption (to be validated)	Opportunities created
No or very minimal changes allowed to current CHES	CHES life has been extended and will be able to support limited changes to facilitate staged implementation	<ul style="list-style-type: none"><li>• Ability to transition fix interface, trade acceptance &amp; clearing ahead of settlement</li><li>• Ability to transition RITS interface to ISO 20022</li></ul>
Some CHES users would not be supportive of connecting to both current and replacement systems concurrently	Segments of the market have expressed willingness to connect to both current and replacement systems concurrently, and manage the associated operational support to facilitate this. AFMA - <i>"Go-live might be by product/functional slice whilst <b>maintaining connectivity with old and new technology</b>"</i>	<ul style="list-style-type: none"><li>• Ability to transition certain functions ahead of others (e.g. trade notifications, pass-through transactions)</li></ul>
There is no market appetite for a second settlement batch to facilitate transition by security/issuer/asset class	Segments of the market have suggested transition by product/functional slice. <i>"Go-live might be by <b>product/functional slice whilst maintaining connectivity with old and new technology</b>".</i> Transition by product implies a second settlement batch.	<ul style="list-style-type: none"><li>• Ability to transition by security/issuer/asset class tranche</li></ul>

# Opportunities for a staged implementation

## Candidates

### Clearing

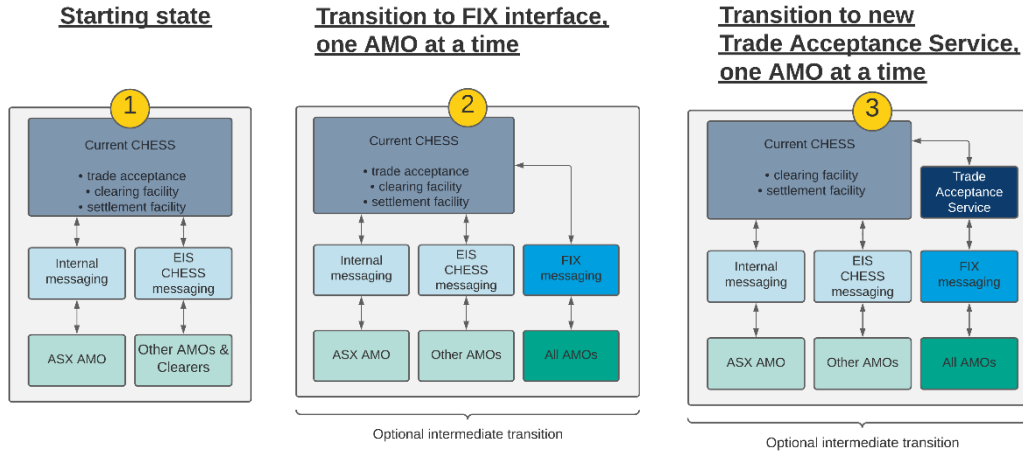
- AMO interface
- Trade acceptance
- Clearing facility
- Settlement integration

### Settlement & Sub-Register

- RITS interface
- “Pass-through” transactions (TFN/Bank notifications)
- mFund order management (non-cleared)
- Primary Market Facility (non-cleared)
- Tranched securities (clearing eligible)

# Opportunities for Staged Implementation

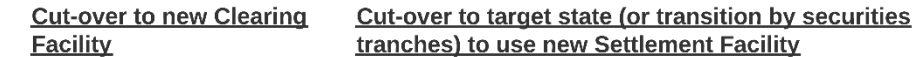
## Clearing



Provides staged implementation of the target clearing facility, supporting incremental adoption by AMOs and Clearing Participants

Required enablers by stage:

- 2 • FIX interface into current CHES (ASX, AMO)
- 3 • Ref. data synch (ASX)
- 4 • One-way outbound ISO 2022 to EIS router/converter for notified trades (ASX) and/or
- Clearer supports ISO 2022 for notified trades (Clearer)



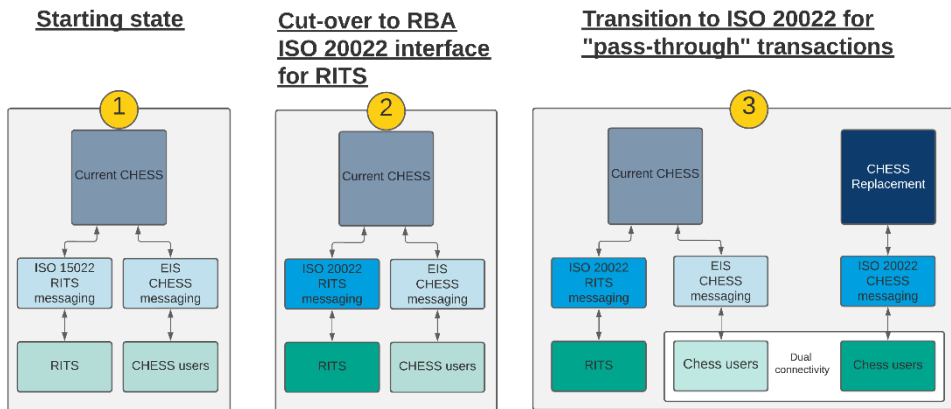
# Opportunities for Staged Implementation

## Settlement & Sub-register

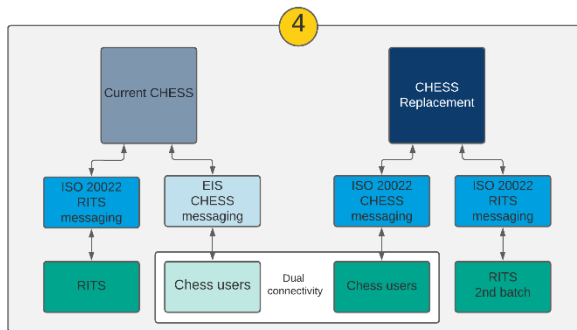
Provides staged implementation of the target settlement and sub-register facilities, supporting incremental adoption for Registries, Participants and Payment Providers

Required enablers by stage:

- 2 • RITS ISO 20022 interface into current CHES (ASX, RBA)
- 3 • Ref. data synch, including accounts (ASX)  
• Dual connectivity/routing (Participants, Registries)
- 4 • Second RITS payment batch (ASX, RBA, Payment Providers, Settlement Participants)



### Introduction of second CHES settlement batch to support transition by product/security tranche



A new RITS 2nd batch co-exists with the original CHES batch for the duration of transition.

It provides a mechanism to transition settlement and subregister capabilities and all related CHES messaging by product and/or securities tranches as follows:

#### Non-novated only batch

- Primary market facility
- mFund order management

#### Novated and non-novated batch

Remaining securities by one or more tranches, for example:

- Dummy only securities
- Small cap selection
- Outside top 500
- All remaining

Non-security specific transactions like account maintenance would continue against current CHES and changes would be synch'd across to CHES Replacement. These transactions would be cut-over in a final stage (not shown)



# Opportunities for Staged Implementation

## Summary

Staged Implementation	How it reduces risk...	Impacts...	Required Enablers...
AMO FIX Interface	<ul style="list-style-type: none"><li>Each AMO can transition independently with potential to rollback to existing interface</li></ul>	<ul style="list-style-type: none"><li>AMOs</li></ul>	<ul style="list-style-type: none"><li>FIX interface for current CHES (ASX, AMOs)</li></ul>
Trade Acceptance Service	<ul style="list-style-type: none"><li>Each AMO can transition independently with potential to rollback to existing TAS</li></ul>	<ul style="list-style-type: none"><li>AMO's</li></ul>	<ul style="list-style-type: none"><li>Reference data synch from CHES to CHES Replacement (ASX)</li></ul>
Clearing Facility	<ul style="list-style-type: none"><li>Provides scalable trade capacity as soon as possible, with potential to rollback</li><li>Allows clearers to optionally commence receiving ISO 20022 notified trades</li></ul>	<ul style="list-style-type: none"><li>AMO's</li><li>Clearers (optional)</li></ul>	<ul style="list-style-type: none"><li>Current CHES must provide a loosely couple interface to allow a CCP to report net obligations for settlement (ASX)</li><li>(Optional) Dual connectivity/routing (Clearers)</li><li>Message translation (ASX)</li></ul>
RITS ISO 20022 Interface	<ul style="list-style-type: none"><li>Allows independent cut-over of the critical RITS interface to target state according to RBA's schedule</li></ul>	<ul style="list-style-type: none"><li>RBA</li></ul>	<ul style="list-style-type: none"><li>Current CHES must support an ISO 20022 interface to RITS (ASX)</li></ul>
"Pass-through" transactions	<ul style="list-style-type: none"><li>Allows Account Participants and Registries to transition independently and prove out basic ISO 20022 messaging with lower risk transactions</li></ul>	<ul style="list-style-type: none"><li>Account Participants</li><li>Registries</li></ul>	<ul style="list-style-type: none"><li>Account data synch from CHES to CHES Replacement (ASX)</li><li>Dual connectivity/routing (Account Participants, Registries)</li></ul>
Settlement and sub-register	<ul style="list-style-type: none"><li>Allows incremental transition by product and security tranches, starting with non-novated obligations</li></ul>	<ul style="list-style-type: none"><li>RBA</li><li>Payment Providers</li><li>Settlement Participants</li></ul>	<ul style="list-style-type: none"><li>Dual connectivity/routing (Account Participants, Registries)</li><li>Second settlement batch (Market)</li><li>Potential regulatory changes</li></ul>

# Opportunities for a staged implementation

## Feedback sought from stakeholders on potential impacts

### Stakeholders

### We would like to hear your feedback regarding...

AMOs	<ul style="list-style-type: none"><li>• ...the Clearing Journey and specifically whether you support a staged transition to a FIX interface for trade acceptance.</li></ul>
Clearing Participants	<ul style="list-style-type: none"><li>• ...the Clearing Journey and specifically whether during Stage 4 you would prefer to receive trade notifications in EIS only, ISO 20022 only, or both</li></ul>
RBA/Payment Providers	<ul style="list-style-type: none"><li>• ...the Settlement &amp; Sub-register Journey and specifically whether you support Stage 2 and the second settlement batch enabler in Stage 4, noting Payment Providers would need to connect to both systems concurrently for Stage 4.</li></ul>
Participants and Registries	<ul style="list-style-type: none"><li>• ...the Settlement &amp; Sub-register Journey and specifically whether you support Stage 3 and the second settlement batch enabler in Stage 4, noting they both require the ability to connect to both systems concurrently. If you support Stage 4, what would be your preferred way to tranche products/securities.</li></ul>
All stakeholders	<ul style="list-style-type: none"><li>• ...new assumptions listed on the “What’s changed’ slide</li><li>• ...anything discussed today</li><li>• ...any alternate implementation proposals that you would like to table</li></ul>

Please send feedback on behalf of your or your respective stakeholder group to [CHESSReplacement@asx.com.au](mailto:CHESSReplacement@asx.com.au) by 22 March so that we can collate and playback at the next meeting.

EY independent review

# Overview of EY independent review

**Review Purpose:** To review the current (“Define and Plan”) phase of the project to assist the ASX Board in determining whether an appropriate and robust process is performed to select a solution and supplier(s) for the delivery of critical national infrastructure

**Review Objectives:** To assess;

- ① **Deliverability of the current phase** - Achievability of the schedule and the breadth of activities are adequate
- ② **Robustness of the assessment and selection process** for:
  - a. evaluation of solution options
  - b. assessment and selection of any product/solution vendor
  - c. assessment and selection of a System Integrator (SI)
- ③ **Review of key deliverables** - A quality review of key inputs and outputs for the assessment and selection process, and other key deliverables, including the business case
- ④ **Deliverability of the proposed solution and delivery model** - review project management and governance processes for successful delivery, considering complexity, capability and maturity
- ⑤ **Implementation of program specific Accenture actions due in the current phase**

## Review Approach

The review will utilise;

- EY frameworks to assess against defined criteria
- EY local and global subject matter resources

# Overview of EY independent review

**Review outputs** - Iterative findings and feedback will be shared with ASX throughout the review in the form of fortnightly risks, issues, and observations. A final report will be produced at the end of the review and will be made public

**CHESS Replacement Technical Committee** - Additionally, EY will be attending the CHESS Replacement Technical Committee meetings as 'observers' going forward to;



- 1 Review the effectiveness of the strategy, plans and processes ASX have in place for engaging with industry stakeholders



- 2 Observe and assess ongoing information sharing, transparency, consultation, feedback and support from industry stakeholders



- 3 Review and assess the effectiveness of ASX addressing feedback from industry stakeholders

# Forward work plan

# Forward work plan

Calendar invitations have been shared for monthly meetings in 2023



## Agenda items:

- Project status update
- Scope:
  - Feedback on project scope and staged implementation
  - Access channels / connectivity options
  - Decision framework
  - RFI process update



## Future TC meetings:

- 12 Apr 2023
- 10 May 2023
- 7 Jun 2023
- 12 Jul 2023
- 9 Aug 2023
- 13 Sep 2023
- 4 Oct 2023
- 8 Nov 2023

## Business Committee meetings:

- 22 Mar 2023
- 19 Jul 2023
- 11 Oct 2023
- 6 Dec 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 CHES priorities
- Industry testing update (parallel options)
- Industry readiness activities
- Accenture recommendations

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



# Next steps

- ASX will conduct a Customer Pulse Survey shortly
- Results of the Customer Pulse Survey are expected to be shared in the 22 March Business Committee



# Observer playback

Thank you.



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