



# ASX CHESS Replacement

Technical Committee

11 September 2024



# 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

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- > Presentation materials were distributed before the meeting and will be published on the website.

# Important Information

## Competition Law Reminder

Workshop 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 Working Group Updates

04 Scope and Objectives Update

05 Release 1 – Industry Test Approach

06 Release 2 – Industry Test Approach – Proposed Engagement Plan

07 Release 2 – Consultation Update

08 Forward Engagement Update

# 01

## Welcome, Open Actions & Feedback

*For discussion*

# 01 – Open Actions

## September 2024

#	Action	Raised	Update	Status
01	ASX to provide an industry test approach when available	TC July 2024	<ul style="list-style-type: none"><li>ASX will provide regular updates on the industry test approach from the August I&amp;T WG onwards. Refer to agenda items 5 and 6</li></ul>	Propose to close
02	ASX to provide the proposed approach to technical & functional specification document delivery	TC July 2024	<ul style="list-style-type: none"><li>ISO Specifications included in the Release 2 timeline and will be managed via the ISO WG commencing in October</li></ul>	Propose to close
03	ASX to provide guidance as to how R2 Implementation Risk Management and roll back options will be assessed and handled through the I&TWG and TC	TC July 2024	<ul style="list-style-type: none"><li>ASX continues to provide guidance on R2 implementation risk management at the I&amp;T WG and then update the Technical Committee</li></ul>	Open
04	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"><li>ASX to follow up with member and address as part of the AMO WG</li></ul>	Propose to close

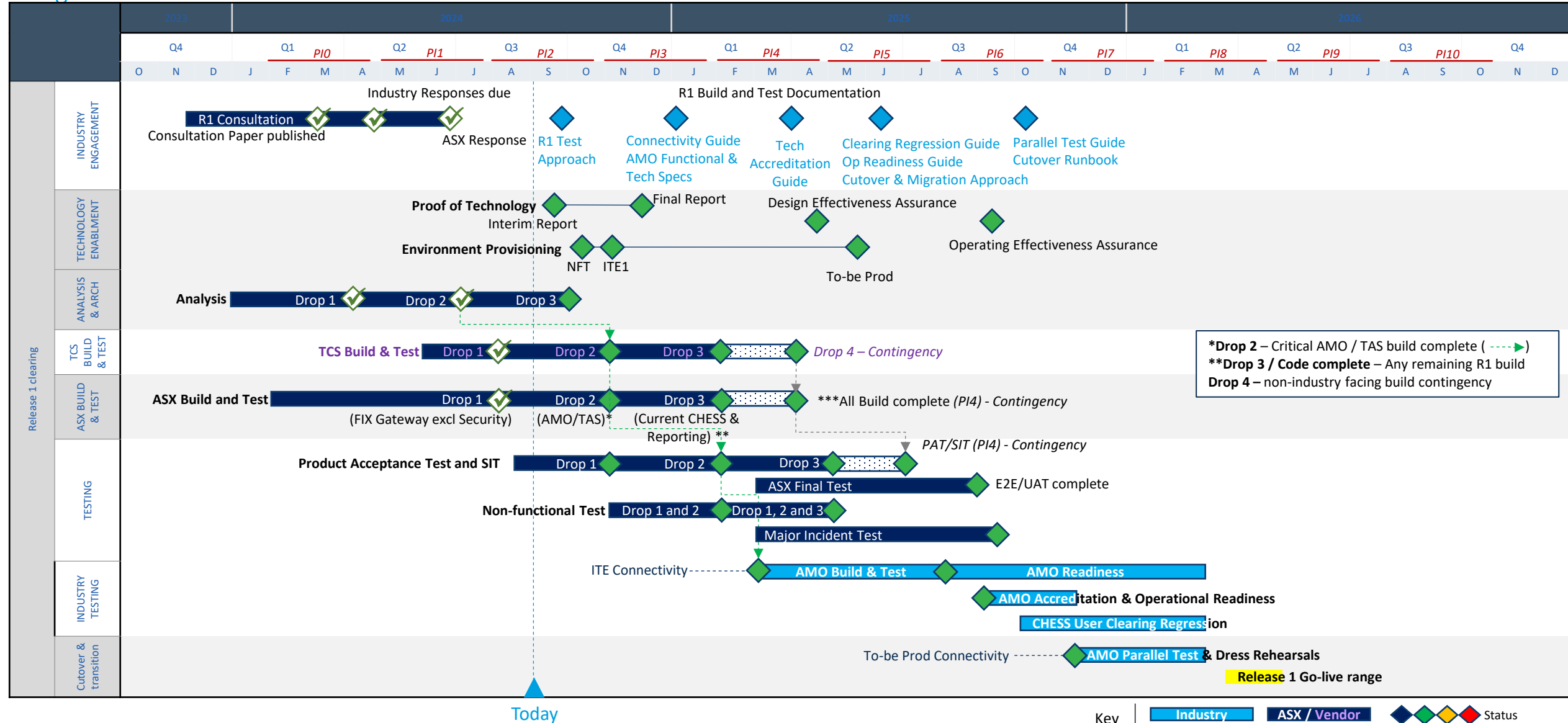
# 02

## Project Status



# 02 – Updated Release 1 Indicative Project Timeline – September 2024

## High level overview of the indicative timeline



# 02 – Project Status

The project continues to track **GREEN**. Key updates include:

- > Release 1
  - Drop 1 has been delivered to ASX and has been deployed successfully into the Product Acceptance Testing (PAT) environment where testing has commenced. Drop 1 delivers the interface between Approved Market Operators (AMO) and ASX, the BaNCS foundational system setup, trade registration and novation within BaNCS and an interface to current CHESS
  - Drop 2 build is continuing and will target the completion of the scope required to facilitate the commencement of the AMO build and test phase in Q1 2025
  - The Proof of Technology (PoT) Cycle 4 testing has completed, successfully processing 15 million trades in 6 hours with 2.1 million trades processed in the final 30 minutes.
  - KPMG have been appointed as the primary assurance provider.
- > Release 2
  - Consultation Paper for Release 2 has been published on 2 August
  - Release 2 planning has commenced targeting an updated plan in Q4 2024.

# 02 – Project Risks

## September 2024 – risks are still tracking as planned and being actively managed

Area	Description	Mitigation	Residual Exposure	Progress	Status
Scope	Market prioritisation of T+1 would impact the current program timeline and / or costs	The project will monitor the market engagement and provide input as to the optimum plan across CHES Replacement and a T+1 cutover	Medium	Being managed via industry engagement	Open
Cloud Deployment	Elements of the CHES Replacement schedule may potentially be impacted if the decision is made not to progress with AWS Hosting for licence services	The Cloud Foundations Project is delivering the Cloud Platform and a Cloud Assurance Framework to ensure the ongoing compliance with technology general controls	Medium	Continued engagement with Cloud Foundations Project on the Cloud Assurance Framework	Open
Technology	Scalability of the solution on the chosen AWS Technology Stack (PoT)	ASX is working with TCS to perform a PoT. The purpose is to prove how the product and selected underlying technology services will scale There is a risk that the PoT may change elements of the technology platform design for the CHES Replacement solution. The PoT will enable ASX to confirm the solution, delivery timeframe, related risks and costs	Medium	Four test cycles of the Proof of Technology are now complete. Test results were in line with expectations. The Interim Report for PoT, which will document the findings from the four test cycles, is scheduled to be provided by TCS in September 2024	Open
Schedule	Revised timeline may be impacted by Release 2 Consultation Paper response	High priority engagement topics to be discussed in the relevant Industry working groups to ensure Industry feedback is considered prior to publishing the Release 2 consultation paper. Manage and appropriately communicate the timeframe for the Release 2 consultation paper to ensure responses are met for input into the revised Release 2 plan	Medium	Being managed by industry engagement	Open
Schedule	Delays in delivery of Data Platform	External parties have been engaged to provide data platform expertise to ASX. Conduct Proof of Concept (PoC) to assess the data ingestion capabilities for near real time data replication for CHESSR use cases	Medium	Awaiting the key milestones of the Data Platform Plan	Open

# 03

## Working Group Updates

# 03a

## Implementation & Transition Working Group

# 03a – How is B3 relevant?

## What has been discussed to date?

### 03 – Release 2 Implementation Risks

The overall risk for Release 2 can be reduced through ongoing migration strategies involving ASX and industry participants.

Area	Risk Description	Mitigation	Residual Rating
Industry readiness	Some participants are not ready resulting in a delay to Go-Live	<ul style="list-style-type: none"> <li>Requirements tracking throughout Industry Testing to identify lagging indicators only</li> <li>Contingency planning to consider Industry Readiness scenarios and increased Industry Testing if required</li> </ul>	Medium
Functional issues	Major functional issues or 'edge case scenarios' found once live	<ul style="list-style-type: none"> <li>Provide sufficient time to perform Industry Testing on Production like environments and data, including industry wide testing and industry Parallel Testing</li> </ul>	Medium
Technical connectivity	Participants experience connectivity issues once live	<ul style="list-style-type: none"> <li>Verification of participant connectivity tests feed into weekend Go / No Go decisions. Provide demonstrated through stress scenarios</li> <li>Consistent connectivity and troubleshooting process for all environments</li> </ul>	Low
Migration	Migration issues either delay market open or results in data issues once live	<ul style="list-style-type: none"> <li>Develop readiness and refresh Go-Live weekend process</li> <li>In-flight migration testing to functionally validate post migration scenarios</li> <li>Data quality reports and early migration of account data</li> </ul>	Low
Performance issues	Major performance issues causes major market disruption	<ul style="list-style-type: none"> <li>Scheduled windows of simulated volume during CHES user testing and IWT</li> <li>Software Providers and CHES users to conduct performance testing for their systems when connected to ITE</li> <li>Extensive internal performance testing forms part of overall ASX Test Strategy</li> </ul>	Low
CHES user investment issues	Participants find issues with their internal investment systems	<ul style="list-style-type: none"> <li>CHES users to establish and to end environments for CHES user testing, industry wide testing and industry parallel testing</li> </ul>	Low

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### 1. Release 2 Key Implementation Risks

Summary of key implementation risks for Release 2 and targeted mitigation strategies involving ASX and industry participants.

### 03 – How risk will be mitigated through Industry Testing

The industry testing phase allows software providers and users to demonstrate and demonstrate readiness for Go-Live

Prior to CHES user Industry Testing, it is proposed that Software Providers will have 12 months to progress build and test as functionality is delivered. Additionally, it is proposed that an additional 6 months of Software Provider Readiness testing will support final testing, ensuring 1 month of regression following any defect patch release. Implementation risks mitigated through Industry Testing:

CHES User Industry Test Phase	Description	Duration	Industry Readiness	Functional Issues	Technical Connectivity	Migration	Performance Issues	CHES User Investment
CHES User Readiness	CHES users to internally test on newly delivered software from the software providers or develop in-house. This test phase will also provide the opportunity to conduct performance testing and simulated network outage testing	5 - 6 months	✓	✓	✓	✓	✓	✓
Industry Migration Testing	Demonstrates workflow starting in current CHES complete successfully in CHES Replacement	3 months (overlap with other testing)	✓	✓	✓	✓	✓	✓
Operational Readiness	Operational readiness is a mandatory test phase providing ASX assurance that CHES users are ready for go-live and that they are able to successfully operate their Business As Usual (BAU) functions using the CHES Replacement system	4 months	✓	✓	✓	✓	✓	✓
Industry Wide Testing	Provides an opportunity for CHES users to participate in a simulated production like testing environment. ASX will share an operational industry wide testing to provide CHES users the ability to perform business related functions with other counterparties	3 months	✓	✓	✓	✓	✓	✓
Implementation Stress Benchmarks (ISB)	Ensures all required activities to implement the Release 2 target state can be completed with the target timeframe over a single weekend	4 weekend months over a 1 month period	✓	✓	✓	✓	✓	✓
Industry Parallel Test	Industry Parallel Testing will validate a subset of business processes, comparing Production CHES to CHES Replacement over a period of time. This involves conducting business across all CHES user investment Producer processing to replicate where possible	4 months	✓	✓	✓	✓	✓	✓

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### 2. Industry Testing

High level view of how the Industry Testing phase will reduce risks for Software Providers and CHES users, acknowledging further engagement is required.

### 03 – Context

**Background**

The B3 Integration Program was a multi-phased initiative aimed at modernising and integrating Brazil's financial market infrastructure under B3 (Brazil's main stock exchange), consolidating them into a unified Clearinghouse. B3 had four Clearing Houses, each supported by exclusive netting agreements, risk models and safeguard structures.

The integration of the Clearing Houses was executed in 3 phases:

- Phase 1: Involved the replacement and integration of financial and commodity futures, options, and OTC derivatives, went live in 2014.
- Phase 2: Included the integration of cash equities, cash equity derivatives, corporate bonds, and securities lending, went live in 2017.
- Phase 3: Treasury bonds and FX spot

The scope and complexity of the B3 program extended beyond the CHES Replacement initiative. Due to the larger scale of Brazil's economy, participants and the implementation impacting multiple segments of Brazil's financial markets vs. a specific function within ASX's operations (clearing and settlement).

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Verbal note B3 5x bigger than CHESR

ASX will work B3 2x in parallel after CHESR

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### 3. B3 Case Study

Key learnings for how a similar large scale exchange project mitigated implementation risk through a strong focus on operational readiness and industry parallel testing.

# 03a – Context

## Background

The B3 Post-Trade Integration Project (IPN) was a multi-phased initiative aimed at modernising and integrating Brazil’s financial market infrastructure under B3 (Brazil’s main stock exchange), consolidating them into a unified Clearinghouse.

B3 had four Clearing Houses, each supported by exclusive netting agreements, risk model and safeguard structures.

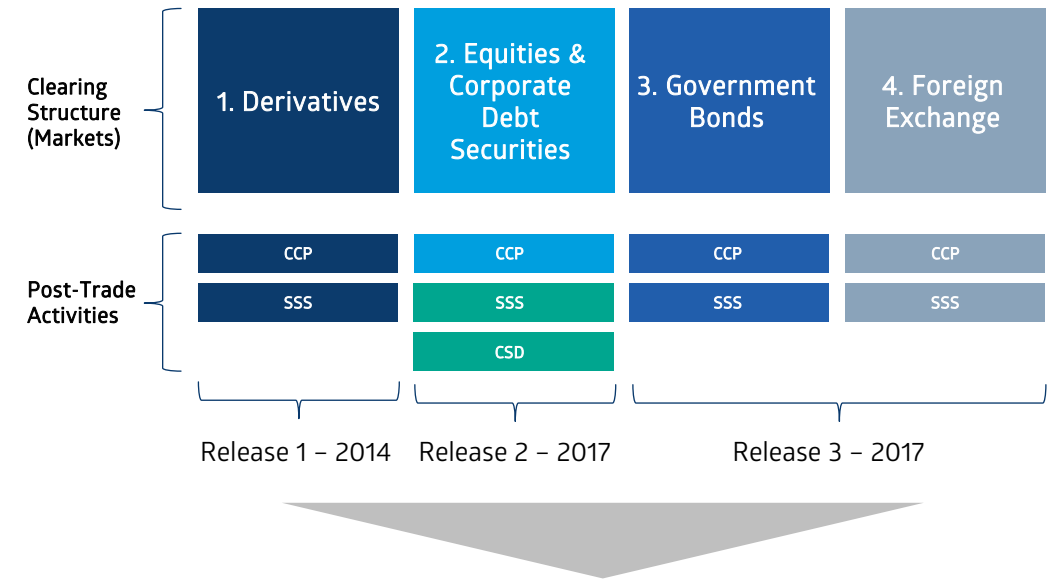
The integration of the Clearing Houses was executed in 3 releases, each implemented as a single cutover requiring a period Industry Testing (including parallel production):

1. **Release 1:** Involved the replacement and integration of financial and commodity futures, options, and OTC derivatives, went live in 2014
2. **Release 2:** Included the integration of cash equities, cash equity derivatives, corporate bonds, and securities lending, went live in 2017
3. **Release 3:** Treasury bonds and FX spot.

The scope and complexity of the B3 program extended beyond the CHES Replacement initiatives due to:

- The larger scale of Brazil’s economy and number of participants
- B3 involved integrating Clearinghouses including the Risk and Collateral System (CCP) and Settlement System (SSS).

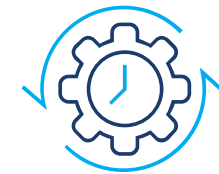
## B3’s Four Clearinghouses



The New BM&FBOVESPA Clearinghouse

# 03a – B3 Approach to Industry Testing

The Industry Testing phase for B3 allowed the Market to validate software solutions and business processes, building confidence and demonstrating readiness for Go Live.



## 1. Industry test

## 2. Operational Readiness

## 3. Parallel Production

- > Provided an opportunity for the market to participate in a stimulated working environment
- > It was facilitated and co-ordinated industry wide to ensure all market participants could smoothly perform business functions with the new integrated clearing system

### Approach

- > Operational readiness was a distinct phase as part of industry testing
- > It was to ensure that all market participants were verified during the testing in preparation for the live environment

- > The B3 Parallel Production was the reproduction of specified critical processes in the “test/future production environment”
- > It was performed by cycles and check points, with specific periods dedicated to key parallel production steps to achieve separate and combined equities and derivatives parallel test objectives



Example: Key stages of B3 Parallel Production Release 2



# 03a – B3 Parallel Production Objectives

Parallel production was crucial to going live as it served as a key risk mitigant prior to Release 2 being implemented.

The B3 Parallel Production phase required a reproduction of specified critical processes performed using the test and to be future production environment.

The key objectives that B3 set out for Parallel Production included:

- > Testing of real production scenarios to replicate full market operations
- > Validation of data migration from the old to new platform
- > Discovery and resolution of edge cases and unexpected incidents
- > Positive reconciliation of selected business processes in the parallel production environment
- > Deliver confidence in readiness and systems operations prior to Go / No-Go decision.

# 03a – Industry Wide Readiness Tracking and Communications

Emphasis on tracking was key to ensuring the market was ready for parallel production.

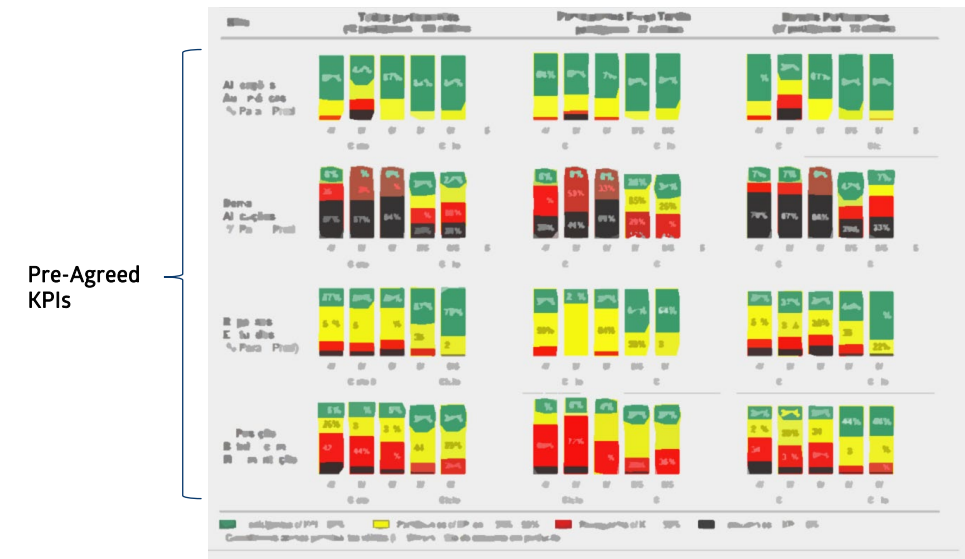
## Industry Readiness Tracking

Used transparent industry dashboard to focus resource and effort on those that need more time to get ready – and industry could see context of where they were in progress vs others – anonymised dashboard.




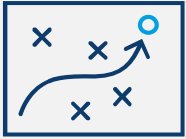

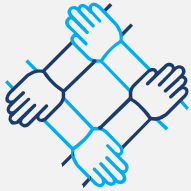
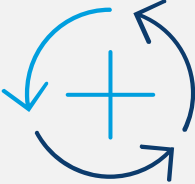


## Test Cycle Tracking

During Parallel Production, each cycle was tracked to assess results and pinpoint issues against pre-agreed KPIs, for a set of business processes. Participants were required to **replicate selected events** occurring in production to the parallel production environment.



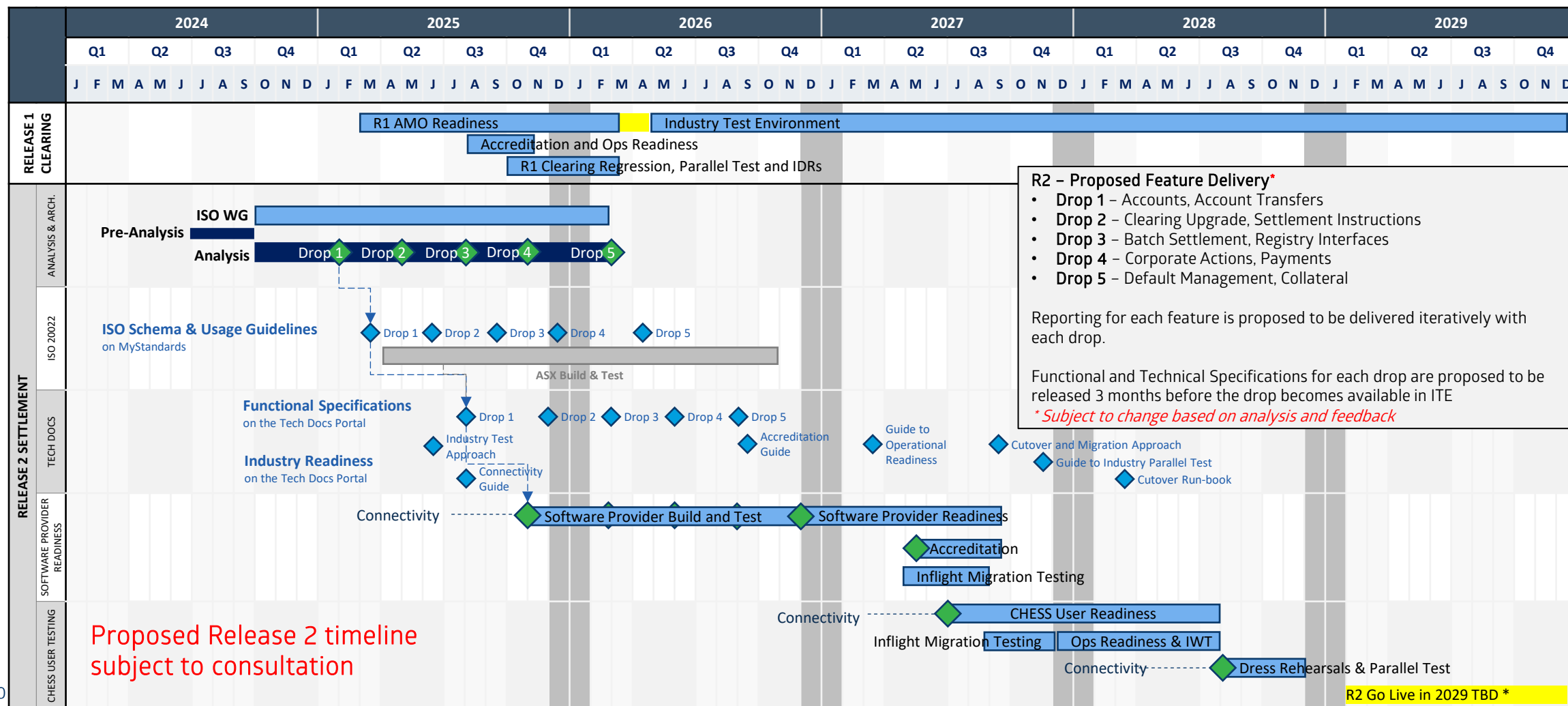
# 03a – Results and Key Learnings

<h2>Results</h2> <ul style="list-style-type: none"><li> No major risks post Go-Live</li><li> No major defects post Go-Live</li><li> Established confidence from the Market to Go-Live</li></ul>				
	<h3>SUCCESSFUL SINGLE CUTOVER</h3>	<h3>SUFFICIENT TIME FOR OPERATIONAL READINESS &amp; PARALLEL TESTING</h3>	<h3>ROBUST TRACKING &amp; TRANSPARENT COMMUNICATIONS</h3>	<h3>SUFFICIENT OPERATIONAL RESOURCES</h3>
	<p>Parallel production was a crucial risk mitigant, uncovering any hidden defects during testing ahead of the go-live phase, thus ensuring the market's readiness. It also exemplified the success of executing a complex single cutover</p>	<p>Setting up sufficient time for both operational readiness and parallel testing to ensure the market is ready, mitigate any unknown defects and enable a smooth transition to go-live</p>	<p>Consistent and accurate tracking of operational readiness, the parallel production environment, open lines of communication with Participants and ensuring issue resolution was addressed in a timely manner</p>	<p>There was a large emphasis on the additional operational resources required from B3 and the market, attributing to the project's success. Despite all the preparation, the undertaking required extensive effort to manage effectively</p>

# 03a – Implementation and Transition WG update

Proposed R2 timeline subject to industry consultation & assessment.

ASX is considering a number of scenarios for the timing of Release 2 in 2028 and 2029. One 2029 scenario is set out below:



# 03b

## AMO Working Group

# 03b – AMO Working Group

## FIX Gateway Resilience

- > Member feedback was provided on the proposed architecture set up
- > Bilateral meetings have been held to seek further input and address feedback
- > A further update will be provided on FIX Gateway resilience at the AMO Working Group meeting on 26 September.

# 03c

## Business Design Working Group

# 03c – Business Design Working Group

## Upcoming and completed sessions

#	Proposed Topic	Objectives	Proposed Date	Working group	Business Design Document
-	Kick-off and Planning	-	11 December 2023	Completed	-
1	Clearing Design – Trade Acceptance and Netting	4.1, 5.3	31 January 2024	Completed	<a href="#">Published</a> , accepting feedback
2	SRN Enquiries & Issuer Sponsored Holdings	1.3, 1.4	28 February 2024	Completed	<a href="#">Published</a> , accepting feedback
3	Data & Connectivity	1.6	27 March 2024	Completed	<a href="#">Published</a> , accepting feedback
4	T+1 Considerations for CHES Replacement	NEW	2 May 2024	Completed	N/A
5	Settlement Design (Matching, Batch Settlement, Non-Batch DVP & Related Payments)	4.2, 5.3, 2.1, 2.2, 3.2	29 May 2024	Completed	<a href="#">Published</a> , accepting feedback
6	Registration Details & Investor Information	1.1, 3.6	20 June 2024	Completed	<a href="#">Published</a> , accepting feedback
7	Corporate Actions – DRP, Entitlements, Distribution Information & Related Payments	3.2, 3.3, 3.5, 3.7, 3.8, 4.5	11 July 2024	Completed	<a href="#">Published</a> , accepting feedback
8&9	Cum Entitlement Balance Design Review & Settlement Design (cont...)	3.4, 5.5, 1.5, 2.1, 2.2, 2.6, 4.3, 4.4, 4.5	22 August 2024	Completed	In progress
10	Cum Entitlement Balance (cont...) & Market Claims (Diary Adjustments)	3.1	17 September 2024	Pre-read sent 10/09	Pending
11	ETFs Creation/Redemption Process Deep Dive	1.5	21 October 2024		
12	Transaction Basis Process Deep Dive	2.5	23 November 2024		



# 04

## Scope and objectives backlog update

# 04 – CHESS Replacement Scope Objectives

## Prioritised backlog (1/2)

Proceed to CHESS Replacement design evaluation and consultation Scope Objectives:

The following Scope Objectives were identified as items that should proceed to CHESS Replacement design evaluation and consultation

Functionality	Ref	Scope Objective	Status	Update
Changes to Netting Process	4.1	Review the design for netting in the context of the solution	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
SRN enquiry and validation	1.3	Implement a faster and more efficient SRN enquiry process	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
Issuer sponsored improvements	1.4	Reduce settlement risk in relation to issuer sponsored sales	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
Interoperability	5.3	Ensure the solution is designed to enable potential future interoperability between CCPs, SSFs and/or sub-registers	CP2	Outlined in Consultation Paper 2
Payments	2.8	Payment processes for corporate actions, batch and non-batch DvP settlement processes	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a> <i>Further work via ESPPSC</i>
Continuous holding balance	1.6	Provide more efficient, reliable and faster access to holding information	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
Registry HIN Validation	1.7	Provide the ability for Share Registries to validate account details to facilitate CHESS allotment of investor accepted offers	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
Changes to settlement process	4.2	Review the design for settlement in the context of the solution	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
Bilateral Matching Improvements	2.1	Reduce operational risk by ensuring participants are able to submit and match transactions in the system as soon as practical whilst minimising the likelihood of incurring a failed settlement (e.g. being able to separately match and schedule a transaction)	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
Bilateral Matching Improvements	2.2	Reduce operational risk by minimising mismatches and failed matches by increasing the data sharing and matching fields available and/or making use of information available in upstream systems	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
Non-batch DvP Bilateral Settlement	4.5	Bilateral Non-Batch DvP Settlement – review and evaluate in the context of payment processes	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>

Proceed to CHESS Replacement design

# 04 – CHES Placement Scope Objectives (cont...)

## Prioritised backlog (2/2)

Proceed to CHES Replacement design evaluation and consultation Scope Objectives:

The following Scope Objectives were identified in the Scope Refinement Workshops as items that should proceed to CHES Replacement design evaluation and consultation on Release 2

Functionality	Ref	Scope Objective	Status	Update	
Proceed to CHES replacement design	Linking Bilateral Settlements	4.3	Settlement Linking – review and evaluate solution design	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
	Settlement Lock for CHES Holdings	4.4	Settlement Locking – review and evaluate solution design	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
	Registration details and investor information	1.1	Standardise, improve and better synchronise the data sharing between participants and share registries	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
	Corporate action election and acceptance processing	3.2	Provide standardised straight through processing capability for corporate action elections and cost-effective associated payments	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
	Corporate action election and acceptance processing	3.3	Reduce operational risk in relation to DRP standing instructions	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
	Electronic notification of payment advice	3.5	Provide standardised electronic transmission of corporate action distribution information to create opportunities for automation and process improvement.	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
	Bid Offeror Automation	3.10	Provide an electronic Bid Offeror finalisation process in relation to Takeovers & Buybacks.	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
	Cum entitlement balances	5.4	Review use cases for Cum Entitlement balances and assess its continued effectiveness for the Australian market	CP2, BDD in progress	Outlined in Consultation Paper 2. Business Design Document in progress & further engagement required
	Electronic Dividend Claims	3.1	Review and enhance the current processes for automated claims (diary adjustments) to ensure it continues to meet the market needs.	CP2, BDWG Sep 17	Outlined in Consultation Paper 2. Business Design Working Group scheduled

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

# 04 – Current CHESS

## Prioritised backlog

### Evaluate in current CHESS:

The following Scope Objectives were identified in Scope Refinement Workshops as items that should proceed to CHESS Replacement design evaluation and consultation as part of Release 2 (and where possible, evaluate the opportunity to make improvements in current CHESS)

	Functionality	Ref	Scope Objective	Status	Update
Evaluation in current CHESS	Corporate actions – holding adjustments	3.7	Ensure holding adjustment reason codes are up to date and being used correctly	Under consideration	Enhancements to Holding Adjustment Codes to be considered for inclusion alongside R1.
	ETF Creations & Redemptions	1.5	Reduce operational risk in relation to the current ETF creation/redemption workflow	CP2, BDWG October	Outlined in Consultation Paper 2. Small group ETF session scheduled for October 2024.
	Corporate actions – bank account information	3.6	Evaluate whether ASX can help with the transmission of bank account information in relation to bid offers	Deferred to CHESS Replacement	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
	Corporate actions – sub-register state	3.8	Make sub-register state more readily available to participants to help improve processes in relation to de-listings	Deferred to CHESS Replacement	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
	Settlement Improvements	2.6	Scheduled Settlement CHESS to CHESS Transfer Request (MT107) - support usage within a participant group structure	Deferred to CHESS Replacement	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>

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

# 04 – Further Consideration Scope Objectives

## Prioritised backlog

The following Scope Objectives will remain with the Technical Committee for further consideration until a time where they can be brought back to the Business Committee for recommendation to ASX Clear and ASX Settlement Board as to the next steps in evaluation and consultation

Functionality	Ref	Scope Objective	Status	Update
House/Client Segregation	5.2	House/client segregation consultation and potential impacts to the CHES Replacement Project	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
Standing Instructions	2.3	Reduce operational overhead in relation to payment provider authorisations by allowing for automated approvals in the system within cash limits.	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a> with continued engagement through ESPPSC
Preliminary Payment Notifications	2.4	Provide more certainty by enabling more frequent and/or configurable access to preliminary payment data.	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a> with continued engagement through ESPPSC
Registration Details and Investor Information	1.2	Foreign restricted securities - review and simplify the current processes for holdings and transfers	CP2, BDD	Outlined in Consultation Paper 2. Business Design Document <a href="#">available</a>
Bilateral Matching Improvements	2.5	Bilateral Matching – use of Transaction Basis (on and off-market)	BDWG November	Small group session scheduled for November 2024.
Cum Entitlement Balance Transfer	3.4	Evaluate opportunities to facilitate the transfer of entitlements (pre and/or post Record Date) ensuring this does not impact issuer schedules.	BDWG September	To be discussed in September BDWG on Market Claims
Settlement Improvements	2.7	Deferred settlement securities – review process to ensure/improve settlement efficiencies	Future backlog	To be considered outside of CHES Replacement
Proxy voting	3.9	Standardised electronic proxy voting	Future backlog	To be considered outside of CHES Replacement

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

# 05

## Release 1 Industry Test Approach

# 05 – R1 Industry Test Approach

## R1 Industry Test Approach – Published 6 September 2024

Providing an overview and timeline for R1 industry test phases including:

- > An approach to industry testing for AMOs, Software Providers, and Clearing Participants
- > Entry and exit criteria for each test phase
- > An overview of the industry test environments
- > The release plan for other supporting industry testing documentation.

# 06

Release 2 Industry Test Approach – proposed engagement plan



# 06 – Proposed R2 Industry Testing Phases Designed to Mitigate Risk

The proposed nine Release 2 industry testing phases conducted over a 3-year window allow Software Providers and CHESSE users to validate their software solutions and business processes, building confidence and demonstrating readiness for Go Live.

Industry Test Phase	Purpose	Who is involved	Proposed Timing
Software Provider Build and Test	Provide Software Providers a phase to connect to ASX's Industry Test Environment (ITE) to complete their development and undertake testing	Software Providers *	Nov 2025 – Nov 2026
Software Provider Readiness	Provide Software Providers a phase to complete functional and non-functional testing, and prepare their software for accreditation	Software Providers *	Nov 2026 – Sep 2027
Software Provider Accreditation	A mandatory phase where Software Providers will need to demonstrate their software's ability to connect and interact with the CHESSE Replacement system	Software Providers *	May 2027 – Sep 2027
CHESSE User Readiness	Provide CHESSE Users a phase to become familiar with new or upgraded solutions delivered by their Software Providers as well as any internal changes made to integrate upstream, downstream and reporting systems in preparation for demonstrating Operational Readiness	CHESSE Users #	Jul 2027 – Jul 2028
Inflight Migration Testing	A mandatory phase where Software Providers and CHESSE Users will need to test and validate workflows that start in CHESSE and finish in the CHESSE Replacement system.	Software Providers* CHESSE Users #	Apr 2027 – Aug 2027 Sep 2027 – Nov 2027
Operational Readiness	A mandatory phase where CHESSE Users will need to demonstrate the successful execution of (particular to each CHESSE User type) required end-to-end business flows (including exception handling) using accredited software and their integrated upstream, downstream and reporting systems	CHESSE Users #	Dec 2027 – May 2028
Industry-Wide Testing	A mandatory test phase where CHESSE Users participate in a simulated production-like working environment with mandatory, coordinated industry-wide testing to provide CHESSE Users the ability to perform required business-related functions with other counterparties	CHESSE Users #	May 2028 – Jul 2028
Implementation Dress Rehearsals (IDRs)	A mandatory test phase where CHESSE Users will need to complete comprehensive walkthroughs of the end-to-end activities that both CHESSE Users and ASX will perform during the go-live weekend	CHESSE Users #	Aug 2028 – Nov 2028
Industry Parallel Test	A mandatory test phase where CHESSE Users will need to validate a sub-set of required business processes in CHESSE Replacement by comparing them to current CHESSE, over a period of time.	CHESSE Users #	Aug 2028 – Nov 2028

\* Software Providers include both those CHESSE Users developing in-house systems as well as external vendors

# CHESSE Users include both CHESSE Participants as well as third parties of CHESSE Participants with integrated workflows dependent on CHESSE

ASX is proposing CHESSE Users utilise the 20 month window allocated between the commencement of Software Provider Build and Test and the commencement of the CHESSE User Readiness Phase to complete analysis, development and testing of their integrated upstream/downstream/reporting systems.

# 06 – Proposed Approach to Identifying R2 Industry Testing Requirements

ASX proposes bilateral discussions and industry focus groups to understand industry testing self-service solutions (test tooling) and environment data needs, with the objective of identifying potential enhancements required to enable industry readiness for each Release 2 test phase



Discussions with organisations to review CP2 responses and initial discovery of high-level testing needs + expectations throughout test phases.

In consideration of bilateral discussions and CP2 feedback, multiple sessions split by either:

- Grouped CHES functions, or
- Industry cohort

to review proposed ASX testing processes, data, and test tooling to identify additional industry needs.

Summary of R2 test environment tools & data:

- Identified as needed by industry cohorts throughout test phases, and
- ASX's proposed approach to meeting these needs.

Publication of ASX approach to industry test phases;

- Testing activities,
- Entry & exit criteria,
- Environments, and
- Test tooling and data.

# 07

## Consultation Paper on Release 2

# 07 – Consultation Paper on Release 2

## Overview

- > The Consultation Paper outlines ASX’s proposed approach to Release 2 of the CHESSE Replacement system
- > The paper invites feedback on the proposed:
  - **Design, scope, and schedule** for Release 2
  - **Testing and industry readiness approach** for Release 2
  - Approach to **interoperability** for CHESSE Replacement
  - High level plan for the timing and approach for a transition to a **T+1 settlement cycle** (noting that any such transition will not form part of the CHESSE Replacement project).
  
- > Responses are due 13 September via one of the following methods:
  - The electronic form via Qualtrics
  - An editable Excel form
  - Email to [CHESSEReplacement@asx.com.au](mailto:CHESSEReplacement@asx.com.au) in a format suitable to their organisation.
  
- > ASX is targeting a response to feedback in Q4 2024.

# 08

## Industry Engagement and Forward Plan

# 08 – Forward Plan

## CY2024 Committee Schedule

Month	Date	Time
<b>Technical Committee</b>		
October meeting	Wednesday 9 Oct	2pm – 4pm
November meeting	Wednesday 6 Nov	2pm – 4pm
December meeting	Thursday 5 Dec	2pm – 4pm
<b>Business Committee</b>		
September meeting	Wednesday 18 Sept	12pm – 2pm
December meeting	Wednesday 11 Dec	4pm – 6pm

Upcoming Working Groups	Proposed Topic	Month
Business Design	Market Claims and Adjustments	17 September
AMO	Trade Condition Codes and FIX Gateway	26 September
Implementation & Transition	Rule changes consultation approach (TBC)	2 October
ISO 20022 Design	Kick-off, ISO 20022 concepts and MyStandards usage	October

### Pulse Survey Update

- Published 25 July 2024. Feedback was requested on the working groups, Technical Committee and Consultation Paper 1
- The survey closed 15 August 2024
- Results and next steps will be provided at the October Technical Committee Meeting



# Questions

# Observer feedback



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Thank you.

