#### ASX CHESS Replacement ......... ..... ...... ................... .......... ..............

• 0 . 44 %

\*\*\*\*\*

....

....

....

....

....

...

..........

...........

.....

...........

............

....

....

\*\*

ASX

-

...

....

.......

..........

...........

...

....

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

> ............. ...........

..........

.........

.........

.......

....... .........

.....

....

....

...

.....

........

...................

...................

...................

...

...... ....

...............

................

...

.....

..... ..........

.....

.....

....

......

...... .........

............

............. .............

.........

.........

...........

......

......

.....

.....

.....

....

....

**Technical Committee** 

7 August 2024

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

 $\mathbb{R}$ 

## Housekeeping Troubleshooting

- Please mute yourself when not speaking
- Please use the 'raise hand' feature on MS Teams if you would like to ask a question
- Please introduce yourself when talking for the benefit of all members
- Meeting is being recorded for the purposes of minute taking
- Dial in details (audio only):
  - o +61 2 7208 4607
  - Phone Conference ID: 260 229 664#
- Presentation materials will be distributed after 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.







## 01 – Welcome

Open actions and member feedback



## Technical Committee Open actions

#	Action	Raised	Update	Status
01	ASX to revert to the Committee with the assurance activity schedule when it is available	TC June 2024	<ul> <li>ASX will present the assurance activity schedule at the August Committee Meeting</li> </ul>	Propose to close
02	ASX to provide an industry test approach when available	TC July 2024	<ul> <li>ASX will provide regular updates on the industry test approach from the August I&amp;TWG onwards</li> </ul>	Open
03	ASX to provide the proposed approach to technical & functional specification document delivery	TC July 2024	<ul> <li>ISO Specifications delivery process to be presented at August Committee meeting</li> </ul>	Open
04	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> <li>Forward plan tabled at 6 August I&amp;TWG and noted in August Committee meeting</li> </ul>	Open
05	Members to revert with any initial feedback on Cum Entitlement Approach presented in July Committee Meeting	TC July 2024	<ul> <li>Limited feedback has been received, with further discussion and feedback expected at the upcoming Business Design Working Group</li> </ul>	Propose to close

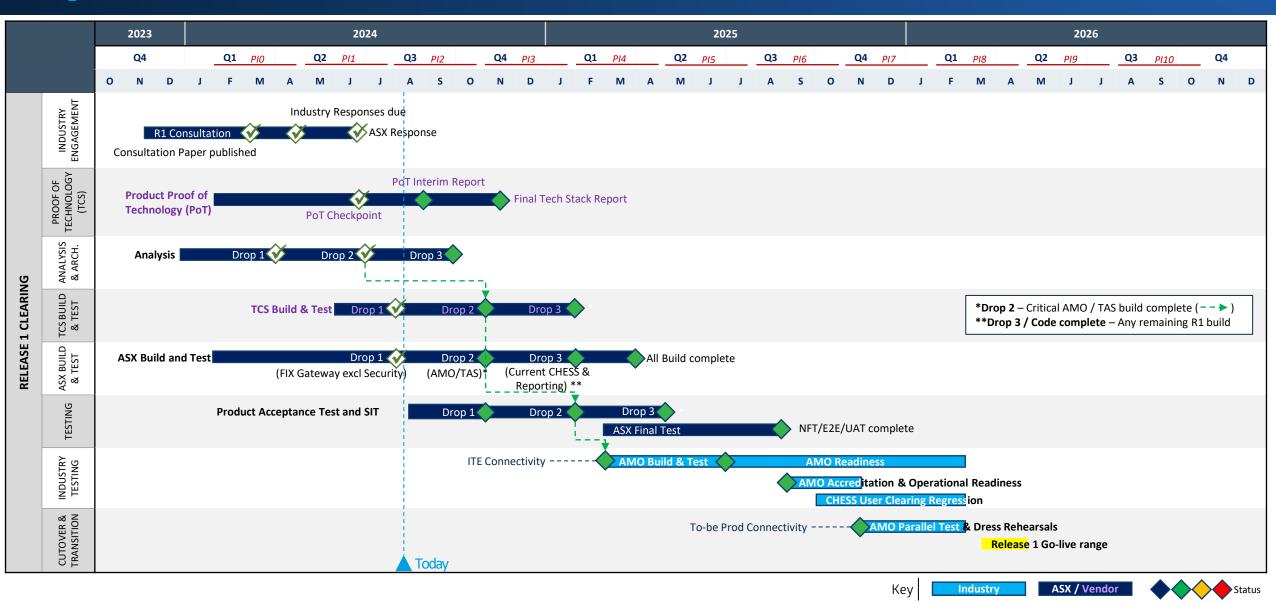




## 02 – Project Status



## 02 – Indicative Release 1 Project Timeline High level overview of the indicative timeline



## 02 – Project Status August 2024 update

The project continues to track GREEN. Key updates include:

- Release 1
  - TCS build for drop 1 was delivered to ASX on 31 July. TCS is currently progressing with shakedown testing in the ASX environment
  - Product Acceptance Testing (PAT) and System Integration Testing (SIT) is targeting to commence on 8 August. SIT for Drop 1 will cover integration of the FIX gateway to TCS BaNCS
  - TCS drop 2 build has commenced as per the plan 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 3 testing has completed, successfully processing 4 million trades in 60 minutes. Cycle 4 has commenced testing throughput of 15 million trades which is targeting to be completed by 12 August
- 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 August 2024

Risks are still tracking as planned and being actively managed.

These risks are expected to be closed as we complete the Proof of Technology testing and finalise the indicative project timeline as part of the Consultation Paper for Release 2.

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 CHESS Replacement and a T+1 cutover.	Medium	Being managed via industry engagement	Open
Cloud Deployment	Elements of the CHESS 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 and regulatory compliance.	Medium	Continued engagement with Board on progress of Cloud Foundations Project	Open
Technology	Scalability of the solution on the chosen AWS Technology Stack (PoT)	We are working with TCS to perform a Proof of Technology (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 CHESS Replacement solution. The PoT will enable us to confirm the solution, delivery timeframe, related risks and costs.	Medium	The Proof of Technology (PoT) Cycle 3 testing has completed, successfully processing 4 million trades in 60 minutes. Cycle 4 has commenced testing throughput of 15 million trades.	Open
Schedule	Revised timeline may be impacted by Release 2 Consultation Paper response	High priority engagement topics to be discussed in the relevant 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 that the critical milestones are met for input into the revised Release 2 plan.	Medium	Being managed via industry engagement	Open
Schedule	If Release 2 project ramp-up commences as planned there may be an impact to shared and critical resources supporting Release 1	Release 2 timeline has been reviewed and impact on overlapping activities has been mitigated to reduce the Release 1 resource contention.	Medium	Release 2 planning in progress however changes have been made to reduce the overlapping activities to minimise the impact to Release 1 resource.	CLOSED





## 03 – Assurance Plan



## 03 – Assurance Plan Summary

- Scope of the Assurance Plan covers Release 1 (Clearing) activities to go live and key Release 2 (Settlement and Sub-Register) activities to the end of CY2024
- Annual review process will be used to evolve coverage as the project progresses and project plans for Release 2 advance as a result of industry consultation. This will ensure review topics remain relevant, timely and aligned to key risks
- Risk based approach applied to develop the Assurance Plan with a mix of reviews linked to key milestones to build confidence in key stages and support decision
  making
- Top down and bottom up process to designing the Assurance Plan:
  - Top-down design was based on the project's macro plan and anchor milestones, industry practices and assurance frameworks, and topics from previous assurance program
  - Bottom-up design considered findings from prior reviews, project identified risks, detailed project schedule and release plan
- Assurance providers will comprise a small mix of independent internal and external assurance parties, including a primary provider for a wide range of review topics and for continuity of oversight. On-boarding of the primary assurance provider is targeted for second half of August 24



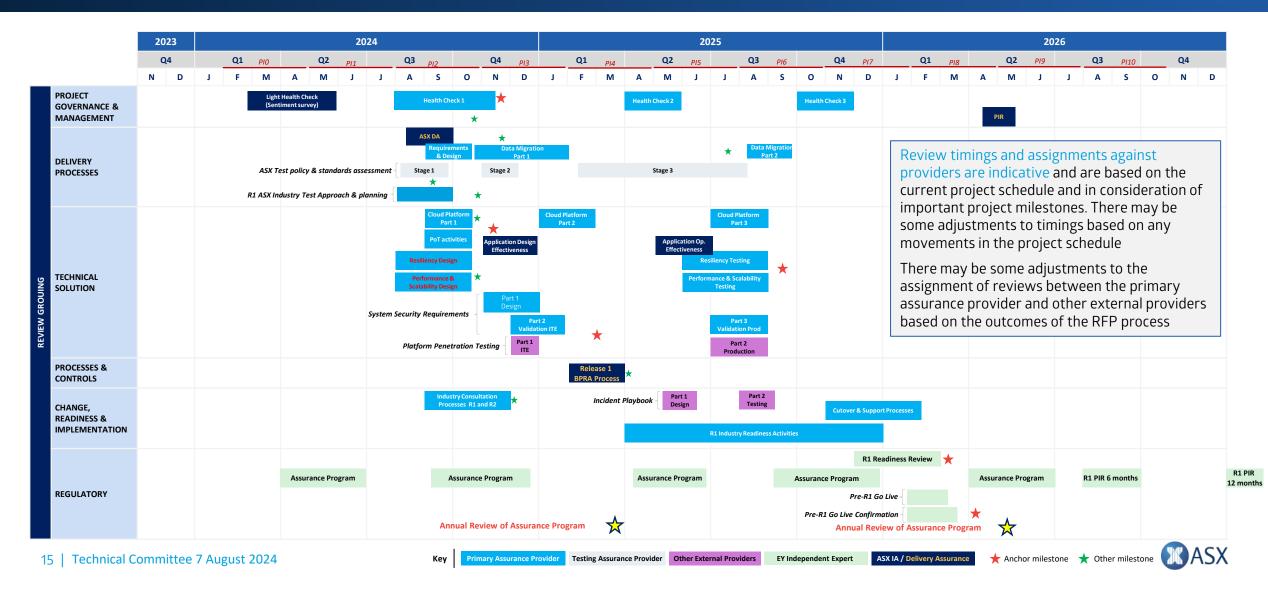
## 03 – Assurance Plan Summary

- Review topics fall into 6 broad groupings
  - **Project governance and project management reviews** on key processes and controls for managing the project schedule, scope, resources, costs, quality, risks, progress, reporting, decision making and communication
  - **Review of delivery processes** covering key activities within the systems development and delivery lifecycle
  - **Technical solution reviews** on key areas relating to infrastructure, technical components and non-functional aspects of the solution
  - **Process and control reviews** on operational and technology processes, and new or changed business processes
  - Change, readiness and implementation reviews covering organisational change management, industry engagement activities and readiness activities
  - Regulatory reviews that cover assurance activities required under licence conditions
- Independent expert review on the Assurance Plan completed in June 2024
  - EY's review concluded that the Assurance Plan is "fit for purpose" meaning the coverage, nature, timing and extent of assurance activities planned, and governance of the Assurance Plan is appropriate for the size and complexity of the project
  - EY's report, made public on the CHESS replacement website on Friday 26 July, can be accessed via the link below

30-june-2024-report-asx-independent-assessment-of-chess-replacement-assurance-program.pdf



## 03 – Assurance Plan Plan on a Page

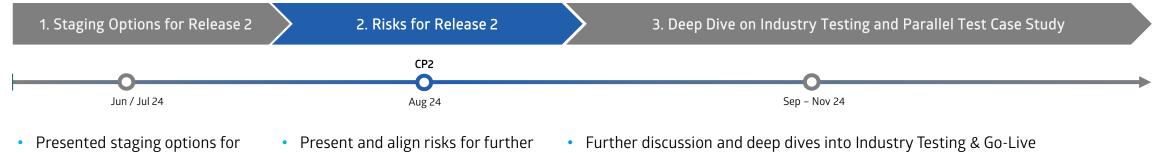




# 04 – R2 Implementation – Risk Discussion



### 04 – Recap What has been discussed to date?



- Release 2 to help reduce implementation risks
- staging
- Focus on risks mitigants
- Provide high-level summary of Industry Testing and how it will mitigate risk
- Readiness
- Provide summary of case studies relevant to CHESS Replacement •
- Overview and key learnings from the B3 Integration Project

03 - Sta	aged Im	pleme									
teren inter	13 – Stay		nleme								
	taging hu										
50 - 100 March	03 -	- Stag	ed Imp								
Literty -Care States" The year and	Stag										
1 10	Option Lab		Stage	d Impl		ation					
8	State of the local division of the local div	Early	Access t	1 - U.S.	teo acci		or critic				
2 <u> </u>		Early Intern	Station .	Carson Citical	Col 14 Industriant	Rend to Operational Box Reductors	Operations for	Terrinal Teaching	Halad Input	Selvery Rol - Schelek rec	
2 2	Nerroration of the second seco		Station .	Corner Corner - Eliferature - Lineage	Provide Provide Provide distribution distribution Provide Pr	End to December Institution and the set presence of the and science affect of the science and set of the science and science and set science and science and science science and science and science and science and science and science	-00.0000 s second of the second of the			<ul> <li>School &amp; pro-</li> </ul>	
2 2	Reserve 1 Correct of the second seco		- August - gates	Corner Corner - Eliferature - Lineage	Parts Parts and a Part of the second Second Second	Early a Converse in Bola College Provide College State And College College	-00.0000 s second of the second of the		<ul> <li>MONORIZED</li> <li>MONORIZED</li></ul>	<ul> <li>School &amp; pro-</li> </ul>	Annual Parket Second Second Second Second Second
2	Constanting of the second seco		- August - gates	Corner Corner - Eliferature - Lineage	Provide Provide Provide distribution distribution Provide Pr	Land Arithma strend Test Reference Provides and Tax and provides of the strend strend and at 12 Name and add of 12 Name and 12 Name and 12 Name add of 12 Na	-00.0000 s second of the second of the		<ul> <li>MONORIZED</li> <li>MONORIZED</li></ul>	<ul> <li>School &amp; pro-</li> </ul>	A second and second denset is party schedule regist
2 2	Name 1		- August - gates	Corner Corner - Eliferature - Lineage	Fel 14 Industries • Figural montocada • So Solo Securit Mal manting	Envirol to Ciper control total to to control on the control of the set message of the set total set of the total set of total set of total set of total set of total set of total set of total set of total set of total set of total set of total set of total set of	fore on the - 00.000 s spont and r sportspon	- head-out instead	<ul> <li>MONORIZED</li> <li>MONORIZED</li></ul>	<ul> <li>School &amp; pro-</li> </ul>	A second and second denset is party schedule regist
30	Network (1999)		- August - gates	Erran (AD)	Fel 14 Industries • Figural montocada • So Solo Securit Mal manting	Environment terre de la construction environment envir	fore on the - 00.000 s spont and r sportspon	- head-out landers	<ul> <li>MONORIZED</li> <li>MONORIZED</li></ul>	<ul> <li>School &amp; pro-</li> </ul>	A second and second denset is party schedule regist
30	Name of the second seco		- August - gates	Current Cold	Fel 14 Industries • Figural montocada • So Solo Securit Mal manting	Envirol to Ciper control total to to control on the control of the set message of the set total set of the total set of total set of total set of total set of total set of total set of total set of total set of total set of total set of total set of total set of	fore on the - 00.000 s spont on the spont of the	Critical Traditional Traditionation (per RC per first) (per RC per first)	* Store and Color and Store and Store against	<ul> <li>School &amp; pro-</li> </ul>	A second and second denset is party schedule regist

Area	Risk Description	Nitigation	Residual Ratin
industry readiness	Some participants are not ready resulting in a delay to Go Live	<ul> <li>Readiness tracking throughout industry Testing to identify lagging indicators early.</li> <li>Confingency 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 ive	<ul> <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> <li>Verification of participant connectivity tests feed into weekend Go / No Go decision. Process demonstrated through dress rehearsals</li> <li>Consistent connectivity and on-boarding process for all environments</li> </ul>	Low
Migration	Nigration issues either delay market open or results in data issues once live	Oress rehearsals will reflect Go Live weekend process     In-flight migration testing to functionally validate post migration scenarios     Data quality reports and early migration of account data	Low
Performance issues	Hajor performance issues causes major market disruption	<ul> <li>Scheduled windows of simulated volume during DHESS user testing and IWT</li> <li>Software Providers and CHESS users to concluct performance testing for their interfaces when connected on TE</li> <li>Extensive internal performance testing forms part of overall ASX Test Strategy</li> </ul>	Low
CHESS user	Participants find issues with their internal integrated systems	<ul> <li>CHESS users to establish end to end environments for CHESS user testing, industry wide testing and industry parallel testing.</li> </ul>	Low

	try Testing, it is proposed that Software Providers will have 12 month	s to progress b	uild and tes	t as functio	nalityis de	livered. Ad	ditionally, it	is
oposed that an addition	al 4 months of Software Provider Readiness testing will support fina	I testing, ensuring			on following risks mitigat			
CHESS user Industry Test Phase	Description	Duration	Industry Readerers	Functional Neuros	Technical connectivity	Hystor	Performance Notes	OESS downsi
CHESS User Readiness	CHESS users to internally text on newly delivered software from the software providers or developed in house. This text phase will also previde the opportunity to conduct performance texing and simulated retwork outage texting.	5 - 9 months	1	~			*	~
inflight Migration Testing	Demonstrates workflows starting in current CHESS complete successfully in CHESS Replacement.	3 months (everlaps with other testing)	1	1		1		~
Operational Readiness	Operational Readness is a mandatory text phase providing ASX assurance that CRESS sums are ready for gar-live and that they are able to soccessfully operate their Business As Usual (BAU) functions using the CRESS Replacement system.	4 months	1	1				~
industry-Wide Testing	Provides an opportunity for CHESS users to participate in a simulated production the working environment. ASX will facilitate co-ordinated industry wide botting to provide CHESS users the ability to perform business reliated functions with other counterparties.	3 months	1	*			1	~
implementation Dress Rehearsals (IDFs)	Ensures all required activities to implement the Release 2 target state can be completed within the required timeframe over a single weekend	4 weekend events.cover.a.4- month period	× .		~	1		~
Industry Parallel Test	Industry Parallel Testing will validate a subset of business processes, comparing Production CRESS to DRESS Replacement over a period of time. This involves coordinating advivos across all CRESS sues to ensure Production processing is resoluted when possible.	4 months	1	1		1		~



## 04 - Staging Release 2 further

#### Recent focus has been on assessing options to stage Release 2 implementation to reduce risk

ASX has assessed the options put forward by stakeholders against factors relating to operational risk, delivery risk, technical feasibility, and market impact, and whether the alternatives would reduce overall implementation risk compared to implementing Release 2 as one release. The assessment indicated that the proposed implementation of Release 2 as one release remains the approach that presents the least operational and delivery risk. It is also the option that is least likely to introduce additional technical complexity and delay completion of CHESS replacement.

#	How to transition	Key enabler	Summary of risk relative to Release 2 as one release
1	Stage by Participant	Full message backwards compatibility (EIS to ISO 20022 like-for-like)	<ul> <li>Significant increase in delivery risk due to the need to implement a like-for-like interim release</li> <li>Significant delay to implementing CHESS replacement target state</li> <li>Increase in operational risk and market impact due to a phased ISO release approach</li> <li>Participant cutover risk remains with single cutover from like-for-like to enhanced ISO state</li> </ul>
2	Stage by Issuer	ASX and the market operate two separate systems in Production for settlement	<ul> <li>Increase in operational risk and market impact due to operating two production systems for settlement</li> <li>Increase in delivery risk relating to complexities of running two production settlement batches</li> </ul>
3	Stage by function a) Bilateral Settlement matching b) Account maintenance c) Holdings d) Pass-through transactions	CHESS users to interface to both EIS and ISO 20022 Requires systems to be synchronised for functions in scope	<ul> <li>a) Increase in delivery risk and market impact moving to final settlement matching ISO state</li> <li>b) and d) Increase in delivery and operational risk due to need for interim like-for-like translation and complexities of data synchronisation between CHESS and CHESS Replacement</li> <li>c) Not technically feasible due to significant change requires in current CHESS</li> </ul>

Industry consultat

Industry Testing and Go Live Readiness are key mitigants for Release 2 implementation risks and the I&TWG seeks consensus (subject to market consultation) on the approach to do this.

#### Additional mitigation options under review

- Early access of migrated accounts
- Go Live day 1 as non-settlement day
- Incremental release of market settlements (for further discussion in the September I&TWG)
- 18 | Technical Committee | 7 August 2024 | Public



## 04 - Release 2 Key Implementation Risks

The overall risk for Release 2 can be reduced through targeted mitigation 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> <li>Readiness tracking throughout Industry Testing to identify lagging indicators early</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> <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> <li>Verification of participant connectivity tests feed into weekend Go / No Go decision. Process demonstrated through dress rehearsals</li> <li>Consistent connectivity and on-boarding process for all environments</li> </ul>	Low
Migration	Migration issues either delay market open or results in data issues once live	<ul> <li>Dress rehearsals will reflect 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	Performance       Major performance issues causes major market         ✓ Scheduled windows of simulated volume during CHESS user test         ✓ Software Providers and CHESS users to conduct performance test		Low
CHESS user downstream issues	Participants find issues with their internal integrated systems	<ul> <li>CHESS users to establish end to end environments for CHESS user testing, industry wide testing and industry parallel testing</li> </ul>	Low



# 04 - How risk will be mitigated through Industry Testing

The Industry Testing phase allows Software Providers and CHESS users to validate software solutions and business processes, building confidence and demonstrating readiness for Go Live.

Prior to CHESS 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 4 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

CHESS user Industry Test Phase	Description	Duration	Industry Readiness	Functional issues	Technical connectivity	Migration	Performance issues	CHESS user downstream
CHESS User Readiness	CHESS users to internally test on newly delivered software from the software providers or developed in-house. This test phase will also provide the opportunity to conduct performance testing and simulated network outage testing.	5 – 9 months	✓	~			~	~
Inflight Migration Testing	Demonstrates workflows starting in current CHESS complete successfully in CHESS Replacement.	3 months (overlaps with other testing)	✓	✓		✓		✓
Operational Readiness	Operational Readiness is a mandatory test phase providing ASX assurance that CHESS users are ready for go-live and that they are able to successfully operate their Business As Usual (BAU) functions using the CHESS Replacement system.	4 months	~	✓				~
Industry-Wide Testing	Provides an opportunity for CHESS users to participate in a simulated production-like working environment. ASX will facilitate co-ordinated industry-wide testing to provide CHESS users the ability to perform business related functions with other counterparties.	3 months	~	~			✓	~
Implementation Dress Rehearsals (IDRs)	Ensures all required activities to implement the Release 2 target state can be completed within the required timeframe over a single weekend.	4 weekend events over a 4- month period	✓		<b>√</b>	✓		✓
Industry Parallel Test	Industry Parallel Testing will validate a subset of business processes, comparing Production CHESS to CHESS Replacement over a period of time. This involves coordinating activities across all CHESS users to ensure Production processing is replicated where possible.	4 months	~	~		✓		~

ASX is proposing a 16 month window allocated to CHESS user Industry Testing and readiness





# 05 – Working Group Updates





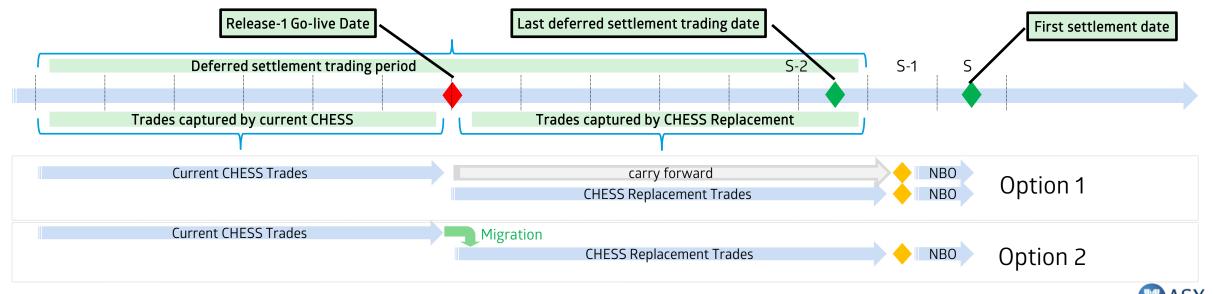
# 05a – Implementation & Transition Working Group

6 August 2024



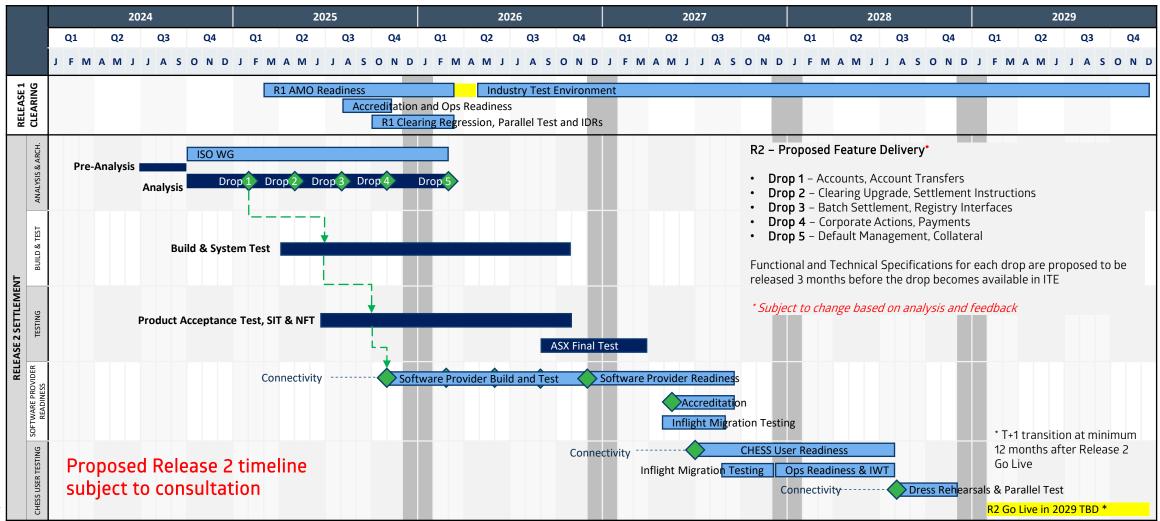
## 05a – Deferred Settlement Two High-level Options

- Deferred settlement trades currently get held gross and netted on S-1 when they reach settlement date
- If the deferred settlement trading period of a security spans the R1 go-live date, an approach is needed to determine how to deal with the trades matched prior to and post go-live
- Two general options are available:
  - Option 1: Manage deferred settlement trades in the system where they were captured (i.e. current CHESS vs CHESS Replacement) with two resulting sets of settlement instructions (either net or gross)
  - Option 2: Migrate trades captured in the current CHESS system to the CHESS Replacement system to allow them to net all deferred settlement trades on S-1



# O5a – 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:



Kev Milestone

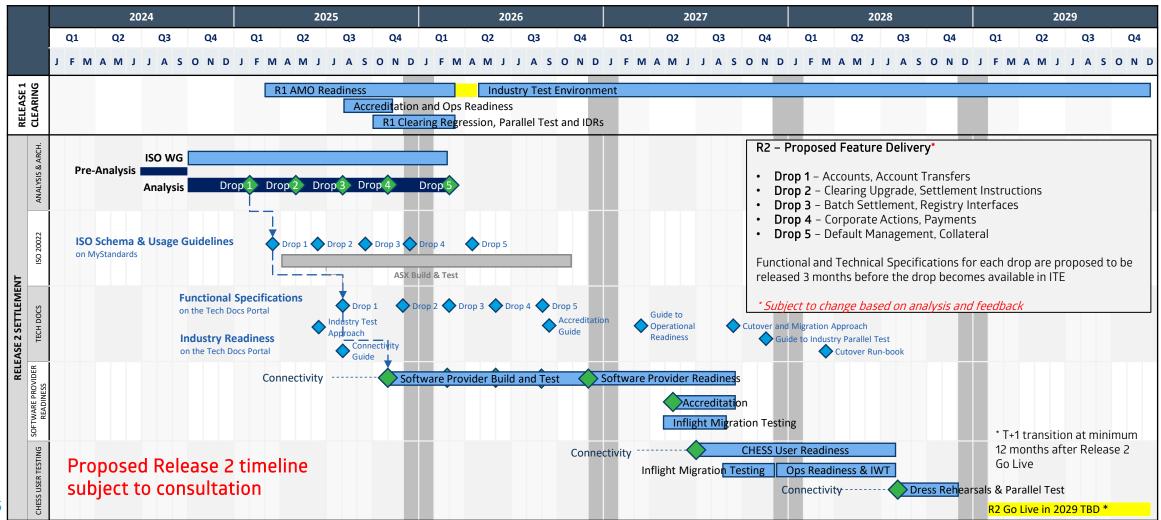
Industry

ASX

24

# O5a – 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:



Kev Milestone

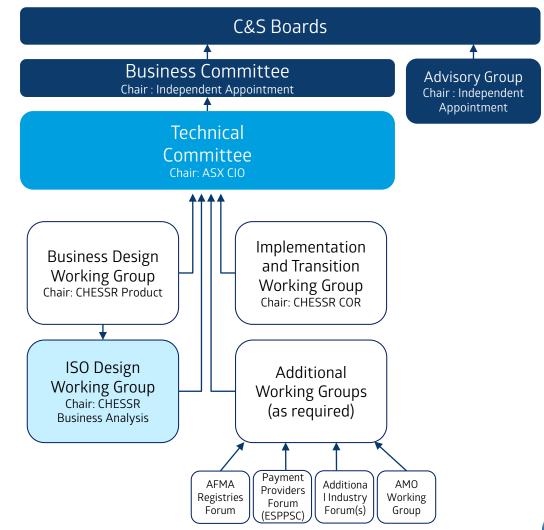
Industry

ASX

## 05a – Stakeholder engagement working groups ISO Working Group forward planning

## In the 8 November Technical Committee, ASX introduced the working group market engagement model.

- Implementation and Transition Working Group (ITWG)
  - o Responsible for implementation planning
  - o Will be consulted on plan, cutover, migration and testing
- Business Design Working Group (BDWG)
  - o Responsible for the design of any new/changing scope
  - Includes Business and Operational SMEs from relevant organisations
- ISO Design Working Group (IDWG)
  - Responsible for the ISO20022 message designs and flows
  - Will be consulted on all messages
  - o Includes Technical SMEs from relevant organisations
- <u>Additional Working Groups</u>
  - o Members and responsibilities as required





## 05a – Stakeholder engagement working groups ISO Design Working Group

The purpose of the IDWG is to ensure the application of the ISO 20022 standard to equity market messages and processes as part of the CHESS replacement project is efficient and compliant.

#### Objectives

- Be the key forum for ASX to communicate with industry stakeholder representatives on the implementation of ISO 20022 in Australia's equity post trade environment.
- Ensure market benefits related to the adoption of ISO 20022 is understood and realised – building industry knowledge of the standard, business areas, process and message detail.
- Provide input to ASX documentation that describes the application of ISO 20022 (e.g. equivalent of CHESS External Interface Specification (EIS) and ASX Settlement Procedure Guidelines (APG)).

#### Key Topics

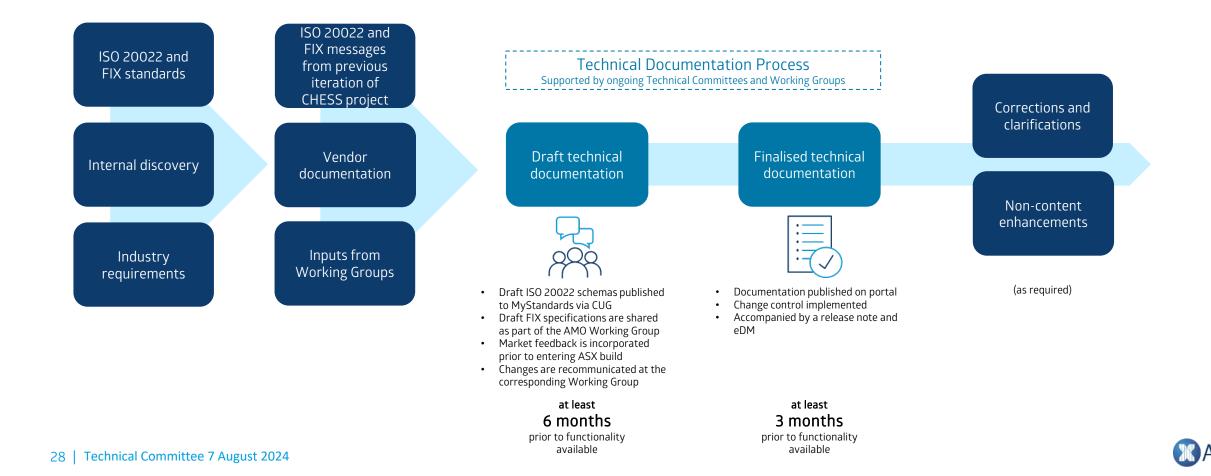
- Using the previous project's messages as a baseline, review and discuss any changes in the ISO message resulting from:
  - Differences resulting in changes to the messages (e.g. different field data types, enumerations, structures, etc.)
  - Technical workflow changes (e.g. changes to the UMLs)
  - Changes in relation to upgraded schemas
  - Changes requested through the review process by working group committee members
- Review and provide input to ISO 20022 schemas and usage guidelines for CHESS replacement

#### Next Steps

- Agree membership. Committee members are asked to nominate up to two primary representatives to participate in the working groups.
- Meetings will be up to 2 hours in duration and will be held monthly. Invitations will be shared closer to commencement.
- Nominated members should have the appropriate ISO 20022 messaging skills and business responsibilities to actively contribute to the objectives of the group.



## 05a – Stakeholder engagement working groups Technical Documentation workflow





# 05b – AMO Industry Working Group

Next Meeting 15 August 2024



# 05c – Business Design Working Group

Cum entitlement balance design review & settlement design (cont...)

Next Meeting 22 August 2024



## 05c – Business Design Working Group Upcoming and completed sessions

#	Proposed Topic	Objectives	Proposed Date	Applicable Users
-	Kick-off and Planning	-	11 December 2023	Technical Committee Members
1	Clearing Design – Trade Acceptance and Netting	4.1, 5.3	31 January 2024	AMOs, Clearing Participants, Software Providers
2	SRN Enquiries & Issuer Sponsored Holdings	1.3, 1.4	28 February 2024	Settlement Participants, Share Registries, Software Providers
3	Data & Connectivity	1.6	27 March 2024	Software Providers, Settlement Participants, Share Registries
4	T+1 Considerations for CHESS Replacement	NEW	2 May 2024	Settlement Participants, Software Vendors, Share Registries, Payment Providers, AMOs
5	Settlement Design (Matching, Batch Settlement, Non-Batch DVP & Related Payments)	4.2, 5.3, 2.1, 2.2, 3.2	29 May 2024	Settlement Participants, Payment Providers, Software Providers
6	Registration Details & Investor Information	1.1, 3.6	20 June 2024	Settlement Participants, Share Registries, Software Providers
7	Corporate Actions – DRP, Entitlements, Distribution Information & Related Payments	3.2, 3.3, 3.5, 3.7, 3.8, 4.5	11 July 2024	Settlement Participants, Share Registries, Software Providers, Payment Providers
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	Software Providers, Settlement Participants, Share Registries
10	Market Claims (Diary Adjustments)	3.1	September 2024	Settlement Participants, Software Providers
11	ETFs Creation/Redemption Process Deep Dive	1.5	October	Share Registries, Custodians (impacted firms)
12	Transaction Basis Process Deep Dive	2.5	November	Settlement Participants (impacted firms)

31 | Technical Committee 7 August 2024





# 06 – Scope objectives backlog update



## 06 – 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	BDD Complete	Business Design Document prepared, feedback received and incorporated.
	SRN enquiry and validation	1.3	Implement a faster and more efficient SRN enquiry process	BDD Complete	Business Design Document prepared, feedback received and incorporated.
	lssuer sponsored improvements	1.4	Reduce settlement risk in relation to issuer sponsored sales	BDD Complete	As above
0	Interoperability	5.3	Ensure the solution is designed to enable potential future interoperability between CCPs, SSFs and/or sub-registers	July TC	Approach presented in July TC
5	Payments	2.8	Payment processes for corporate actions, batch and non-batch DvP settlement processes	July/August BDWG	Ongoing discussions in the Settlement and Corporate Actions BDWGs, additional engagement with the Payment Providers via ESPPSC
5	Continuous holding balance	1.6	Provide more efficient, reliable and faster access to holding information	BDD Complete	BDWG completed, draft BDD completed, and feedback is being accepted. Final draft to be shared following the TC.
) - ) )	Registry HIN Validation	1.7	Provide the ability for Share Registries to validate account details to facilitate CHESS allotment of investor accepted offers	BDD Complete	As above, captured in requirement CD_4.6 in the Interfaces and Data BDD.
- - 	Changes to settlement process	4.2	Review the design for settlement in the context of the solution	Draft BDD circulated	May BDWG held, draft BDD complete and feedback is being accepted. Further discussions in August.
1	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)	Draft BDD circulated	May BDWG held, draft BDD complete and feedback is being accepted. Further discussions in August.
	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	Draft BDD circulated	May BDWG held, draft BDD complete and feedback is being accepted. Further discussions in August.
	Non-batch DvP Bilateral Settlement	4.5	Bilateral Non-Batch DvP Settlement – review and evaluate in the context of payment processes	Draft BDD circulated	May BDWG held, draft BDD complete and feedback is being accepted. Further discussions in August.



## 06 – CHESS Replacement Scope Objectives (cont...) Prioritised backlog (2/2)

#### Proceed to CHESS replacement design evaluation and consultation Scope Objectives:

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

	Functionality	Ref	Scope Objective	Status	Update
	Linking Bilateral Settlements	4.3	Settlement Linking – review and evaluate solution design	Draft BDD circulated	May BDWG held, draft BDD complete and feedback is being accepted. Further discussions in August.
design	Settlement Lock for CHESS Holdings	4.4	Settlement Locking – review and evaluate solution design	Draft BDD circulated	May BDWG held, draft BDD complete and feedback is being accepted. Further discussions in August.
ement c	Registration details and investor information	1.1	Standardise, improve and better synchronise the data sharing between participants and share registries	BDD in drafting	June BDWG held, BDD in drafting.
replacement	Corporate action election and acceptance processing	3.2	Provide standardised straight through processing capability for corporate action elections and cost- effective associated payments	BDD in drafting	July BDWG held on corporate actions (DRP, entitlements and distribution information). Additional engagement on Payments via ESPPSC in August.
CHENN	Corporate action election and acceptance processing	3.3	Reduce operational risk in relation to DRP standing instructions	BDD in drafting	July BDWG held on corporate actions (DRP, entitlements and distribution information)
2	Electronic notification of payment advice	3.5	Provide standardised electronic transmission of corporate action distribution information to create opportunities for automation and process improvement.	BDD in drafting	July BDWG held on corporate actions (DRP, entitlements and distribution information)
רוסרפפט	Bid Offeror Automation	3.10	Provide an electronic Bid Offeror finalisation process in relation to Takeovers & Buybacks.	BDD in drafting	July BDWG held - Corporate Actions (DRP, entitlements and distribution information)
	Cum entitlement balances	5.4	Review use cases for Cum Entitlement balances and assess its continued effectiveness for the Australian market	August BDWG	New objective to evaluate opportunities to improve or re-design the current entitlement transfer process in context of the solution.
	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.	September BDWG	Planned for September BDWG on market claims (diary adjustments)



## 06 – Current CHESS Prioritised backlog

#### Evaluate in current CHESS:

The following Scope Objectives were identified 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 objectives for evaluation in current CHESS	Status	Update
	Corporate actions – holding adjustments	3.7	Ensure holding adjustment reason codes are up to date and being used correctly	Recommendation Provided	Recommendation provided for consideration in May TC.
It CHESS	ETF Creations & Redemptions	1.5	Reduce operational risk in relation to the current ETF creation/redemption workflow	Recommendation Provided	Holding Adjustments recommendation provided for consideration in May TC. Small group ETF session scheduled for October 2024.
in curren	Corporate actions – bank account information	3.6	Evaluate whether ASX can help with the transmission of bank account information in relation to bid offers	Recommendation Provided	Recommendation provided for consideration in May TC.
Evaluate	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	Future TC	Factored into CHESS Replacement scope – to be captured in Data BDD Potential improvements in current CHESS to be presented in future TC (TBD)
	Settlement Improvements	2.6	Scheduled Settlement CHESS to CHESS Transfer Request (MT107) - support usage within a participant group structure	Deferred to CHESS Replacement	Discussed at Settlement BDWG in May, captured in Settlement BDD

## 06 – 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 objectives in backlog for further consideration	Status	Update
House/Client Segregation	*5.2	House/client segregation consultation and potential impacts to the CHESS Replacement Project	June TC update	Presented at June TC, to be included in scope
Standing Instructions	2.3	Reduce operational overhead in relation to payment provider authorisations by allowing for automated approvals in the system within cash limits.	Draft BDD circulated	Considered in Settlement BDD, leveraging TCS out of the box functionality. Further discussions in August.
Preliminary Payment Notifications	2.4	Provide more certainty by enabling more frequent and/or configurable access to preliminary payment data.	Draft BDD circulated	Considered in Settlement BDD, leveraging TCS out of the box functionality. Further discussions in August.
Bilateral Matching Improvements	2.5	Bilateral Matching – use of Transaction Basis (on and off-market)	Recommendatio n Provided	Recommendation provided for consideration in May TC. Small group session scheduled for November 2024.
Registration Details and Investor Information	1.2	Foreign restricted securities - review and simplify the current processes for holdings and transfers	BDD in drafting	Proposed solution discussed in June BDWG – to be included in draft BDD.
Settlement Improvements	2.7	Deferred settlement securities – review process to ensure/improve settlement efficiencies	Future TC	To be presented at a future TC, timing to be advised
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.	On hold	To be assessed based on outcomes of <del>April A</del> ugust BDWG on Cum Entitlement Balances
Proxy voting	3.9	Standardised electronic proxy voting	Future backlog	Improvements in CHESS Replacement to be evaluated at a later stage

\* New objective(s) added since the Business Committee recommendation in Oct 23.

Key

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

Further consideration required



# 07 – Consultation Paper on Release 2

For discussion



## 07 – Consultation Paper on Release 2 Overview

#### Summary

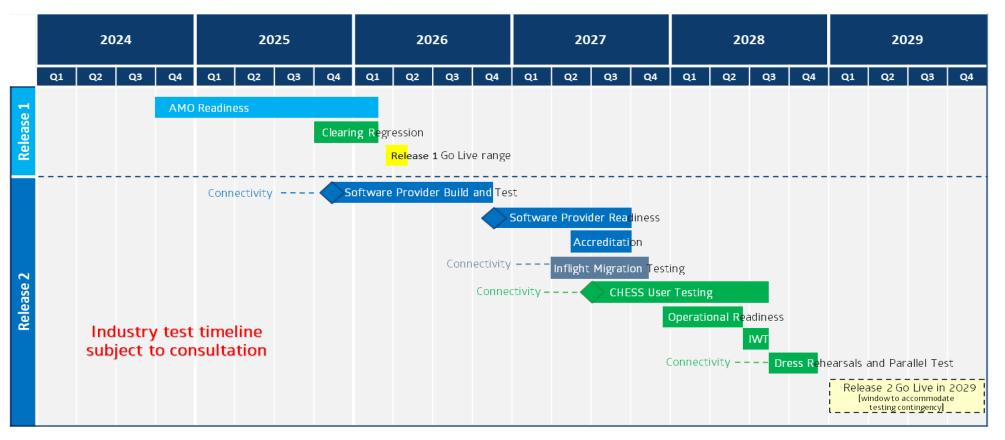
- The Consultation Paper has been informed by industry engagement to date and outlines ASX's proposed approach to Release 2 of the CHESS replacement system
- The paper invites feedback on the proposed:
- **Design, scope, and schedule** for Release 2;
  - **Testing and industry readiness approach** for Release 2
  - Approach to **interoperability** for CHESS 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 CHESS replacement project)
- Responses are due six weeks after publication via one of the following methods:
  - The electronic form via Qualtrics
  - An editable Excel spreadsheet
  - Email to <u>CHESSReplacement@asx.com.au</u> in a format suitable to their organisation
- ASX is targeting a response to feedback in Q4 2024.



## 07 – Consultation Paper on Release 2 Proposed R2 Timeline

#### **Timeline Overview**

ASX expects to communicate the target go-live date to the market with at least 12 months' notice. ASX will continue to provide updates on timelines to allow the industry to plan and prioritise work relating to the CHESS replacement project during the build and test phases of the project.



### 07 – Consultation Paper on Release 2 Overview

### **Key Topics**

- R2 Go Live Date
  - The go-live date for Release 2 and completion of the CHESS replacement project will follow successful industry testing, readiness and accreditation of the CHESS replacement system. ASX is seeking feedback on the proposed timeline for Release 2 which would culminate in a go-live in 2029.
- Interoperability
  - The CHESS replacement project proposes to deliver the technical foundations for interoperability in the Australian cash equities market.
  - ASX will test six specific core scenarios to demonstrate and confirm the technology can support multiple combinations of interoperability models.
- Account Segregation
  - R2 supports the following models:
    - a. Segregated house & omnibus client positions
    - b. Individual client segregated positions
    - c. Segregated positions for third party clearers.



### 07 – Consultation Paper on Release 2 Proposed Approach to transition to T+1 Settlement

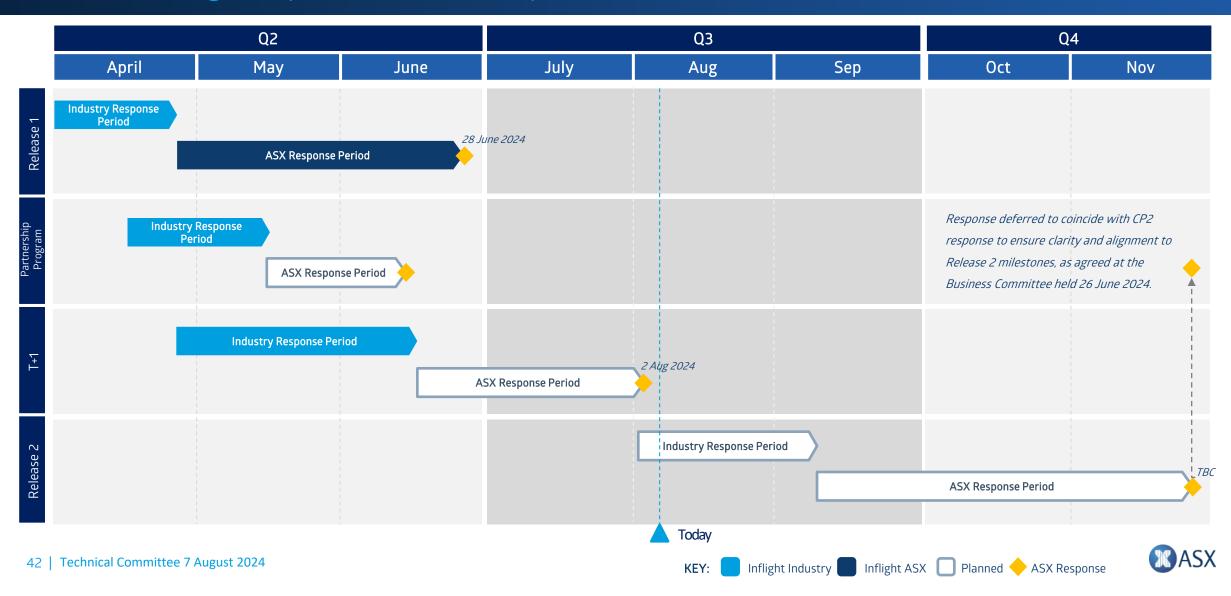
For the avoidance of doubt, a decision to move to T+1 has not been made. If a decision is made to move to T+1, ASX recommends option 4, and proposes that a T+1 go-live date be at least 12 months after the CHESS replacement Release 2 go-live date, and at a minimum 18 months after a decision to transition to T+1.

	T+1 potential timing		Considerations	Expected impact on CHESS replacement
1	Immediately before CHESS replacement Release 1		Benefits to Australia still uncertain Limited time to 'watch and observe' the North American experience. The timetable for Europe and the UK as well as many Asia Pacific neighbours is still unclear. Substantial change for industry to absorb on top of existing projects.	Delay to Release 1 and Release 2 of <b>18-24 months (2030-2031)</b>
1.	Indicative dates: Late 2025 - 2026	•	Less time for the market to automate back offices, increasing the costs of administration. FX markets have not indicated any change to settlement process in the near term to accommodate T+1 in markets such as Australia. Current CHESS is less flexible and adapting to T+1 will take longer than under the CHESS replacement system Likely requirement to accelerate move to intra-day margining to facilitate T+1	Delaying Release 1 will postpone the removal of CHESS's capacity constraints
	Between CHESS replacement	•	Will have more clarity on benefits to Australia and impact on North America and global T+1 timetable will be more certain (noting there is very little guidance from Asian countries yet)	Delay to Release 2 of <b>18-24</b> months (2030-2031)
2.	Release 1 and Release 2 Indicative dates: 2026-2028	•	Industry change still significant considering overlay of UK and Europe's potential move to T+1 Although Clearing will have been upgraded via Release 1, the benefits of upgrading settlement in Release 2 will not yet be available to assist the move to T+1	Delays new settlement functionality and other foundational changes such as interoperability
3.	At the <b>same time</b> as Release 2 <b>Indicative dates</b> : 2030+	•	Going live with both projects simultaneously increases risk Likely insufficient capacity across industry to handle both projects simultaneously Feedback from Whitepaper that this is not a desirable option	Delay to Release 2 depending on industry readiness
4.	After Release 2 Indicative dates: 2030+	•	Pushes T+1 target go-live beyond current targets for major international markets (noting that European and UK dates are not yet confirmed) Simplifies the move to T+1 in the CHESS replacement system as core enabling functionality will be built into the new system Industry back-office automation will likely be embedded and manual processes to handle T+1 mature	No delay to Release 2 (2029 target go live)



# 07 – Public Consultation Update

### Indicative inflight & planned CY 2024 public consultation





# 08 – Industry Engagement and Forward Plan



## 08 – Forward plan CY2024 Committee Schedule

Month	Date	Time	Upcoming Working Groups	Proposed Topic	Month
echnical Committee			Business Design	Cum entitlement balance design review & settlement	22 August
September meeting	Wednesday 11 Sept	2pm – 4pm		design (cont)	
October meeting	Wednesday 9 Oct	2pm – 4pm	AMO	FIX Actions and Options	15 August
November meeting	Wednesday 6 Nov	2pm – 4pm			
December meeting	Thursday 5 Dec	2pm – 4pm	Implementation & Transition	Industry deep-dives	4 September
Business Committee					
September meeting	Wednesday 18 Sept	12pm – 2pm	ISO 20022 Design	Kick-off, ISO 20022 concepts and MyStandards usage	October
December meeting	Wednesday 11 Dec	4pm – 6pm			

#### Pulse Survey Update

- Published 25 July 2024
- Feedback is requested on the working groups, Technical Committee and Consultation Paper 1
- The survey closes 15 August 2024
- A reminder will be shared the week the survey is due
- Results and next steps will form part of the September Technical Committee Agenda











# **Observer feedback**



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.

© 2024 ASX Limited ABN 98 008 624 691



Thank you.







# Appendix

