

CHES Replacement Technical Committee Minutes

3 April 2024

At its April meeting, the CHES Replacement Technical Committee was updated on:

AGENDA AND KEY TOPICS DISCUSSED

- Open actions and feedback;
- Project status;
- Working group updates;
- Scope objectives updates;
- Industry engagement and consultation; and
- Forward work plan.

AGREED ACTIONS

There were two new actions raised at the April meeting:

1. Review Committee reporting of project risks.
2. Include partners TCS and Accenture in agenda items to increase visibility of their capability.

Minutes from the meeting are attached.

Agenda

CHES Replacement Technical Committee

Date	3 April 2024	Time	2:00 PM-4:00 PM
Location	20 Bridge Street, Sydney NSW 2000		

- 1. Welcome, open actions and feedback**
- 2. Project status**
- 3. Working group updates**
- 4. Scope objectives update**
- 5. Industry engagement and consultation**
- 6. Observer feedback**

Action Items Raised in Meeting:

Item number#	Action	Due date	Status	Owner
2024 March (1)	Provide additional information with relation to Proof of Technology (PoT) use cases.	3 April 2024	Closed	ASX
2024 March (2)	Consider how T+1 considerations can be factored into the Technical Committee Working Group schedule.	3 April 2024	Closed	ASX
2024 April (1)	Review Committee reporting of project risks.	8 May 2024	Open	ASX
2024 April (2)	Include partners TCS and Accenture in agenda items to increase visibility of their capability.	8 May 2024	Open	ASX

CHES Replacement Technical Committee Members

Company	Name	Job Title	Apologies
ASX	Tim Whiteley	Technical Committee Chair and CIO	
Independent Chair	Paul Rayson	Business Committee Chair	
Clearing and Settlement Participants			
ABN AMRO CLEARING	Matthew McMahon	Head of Operations	Apology
AUSIEX	Ashish Jha	Director, Solution Delivery Management	
Merrill Lynch Equities (Australia)	Matthew Gwynn	Project Manager Director, Head of Operations	
BELL POTTER SECURITIES	Lee Muco	Chief Operating Officer	Apology
BNP PARIBAS	Wayne Murphy	Project Manager	
CITI	Lyall Herron	Program Manager	
CMC	Maral Istanbulian	Technical Business Analyst Team Lead	
COMMSEC	* Mick Thompson	Trading System Architect	Ryan Jones, Crew Technical Lead
FINCLEAR SERVICES	Nikki Gleisner	Senior Business Analyst/Client Relationship Manager	Apology
GOLDMAN SACHS	Simon Wyss	COO, Australia/ New Zealand Engineering	
HSBC	Simon Siluk	Senior Product Manager	Apology
J.P. MORGAN	Scott Oakland	Executive Director Product Management	
MACQUARIE GROUP	Paul Bragg	Operations Analyst	
MORGAN STANLEY WEALTH	Andrew Sime	Executive Director	
MORGAN STANLEY SECURITIES	Rebecca Collins	Executive Director	
MORGANS	Daniel Spokes	Director, Client Support Services	
NAB	* Joanne Potts	Senior Manager Investment Services	Rodd Kingham, Head of Investment Service (WealthHub Securities)
UBS	Scott Hanlon	Head of Operations, Executive Director	Apology
Third party software vendors			
BROADRIDGE	Danielle Gerace	Head of Client Service Australia	
COMPUTERSHARE	Leanne Bailey	Senior Business Analyst	
FINCLEAR	Craig Gray	Head of Product for Settlement & Clearing systems	
FNZ	* Sue Schafer	Product Owner	Nick Clarke, Head of Product Management – Capital Markets

SECURITEASE	David Hinkley	General Manager	
AMOs			
ASX	Jimmy Halstead	Head of Trading Technology Markets, Technology	
CBOE	Rylan Uherek	VP – Chief Operating Officer APAC	
NSX	Yemi Oluwi	Head of Market Operations and Technology	
SYDNEY STOCK EXCHANGE	Rajnish Tiwari	Head Exchange Technology	
Share Registries			
ADVANCED SHARE REGISTRY	Patrick Gan	IT Manager	Apology
AUTOMIC GROUP	Sue Julian	Head of Business Operations	
BOARDROOM	* Evelyn Cinco	Team Lead BA/QA	Michael Mullins, Chief Information Officer
COMPUTERSHARE	Scott Hudson	General Manager – Market Liaison	
LINK MARKET SERVICES	Andrew Farrell	Senior Project Manager – CHES Replacement	

* Delegate

Observers

Company	Name	Job Title	Apologies
AusPayNet	Luke Wilson	Chief Operating Officer	Apology
AFMA	Damian Jeffree	Senior Director of Policy	
AIRA	Ian Matheson	Chief Executive Officer	Apology
GIA	Simon Pordage	Brand Ambassador for Governance Institute of Australia & Company Secretary for ANZ)	
SIAA	Judith Fox	CEO	
ASIC	Liang Chen	Analyst - Market Infrastructure (Clearing & Settlement Facilities)	
RBA	Jonathan Jones	Lead Analyst, Clearing and Settlement Facilities Supervision, Payments Policy Department.	

ASX Management

Name	Job Title	Apologies
Clive Triance	Group Executive, Securities & Payments (Project Sponsor)	
Steven Hannan	Senior Manager Stakeholder Engagement, Equities	
Triona Quinlan	General Manager, Technology Delivery	
Chris Boyes	Senior Product Manager, Securities and Payments	
Jason Genford	Senior Project Manager	
Peter Jessup	Release 1 Product Owner (SI Business Lead)	

AGENDA ITEM 1: Welcome, open actions & feedback

The Chair welcomed members and delegates to the April meeting of the CHES Replacement Technical Committee (Committee).

The meeting attendance was recorded and is reflected in the Committee member tables provided.

The previous minutes from the 7 March Committee were approved and are now available on the CHES Replacement [website](#).

The Chair reminded members of their obligations under competition law and encouraged active participation, noting the purpose of the Committee was for stakeholders to provide input and feedback.

An overview of the agenda was provided before the Chair introduced the first of two open actions from the 7 March meeting:

Item Number	Action	Discussion
2024 March (1)	Provide additional information with relation to Proof of Technology (PoT) use cases.	Action addressed and closed as part of agenda item 1. Details below.
2024 March (2)	Consider how T+1 considerations can be factored into the Technical Committee Working Group schedule.	Action addressed and closed as part of agenda item 3.1. Details below.

2024 March (1) - Proof of Technology (PoT)

The ASX Program Architect provided further detail on the PoT, confirming that the technology stack has been proven to performant and resilient and noted that it has been previously deployed on AWS cloud.

The ASX Program Architect stated that the proof of technology is for ASX to verify scenarios on an un-customised version of TCS BaNCS MI to mitigate scaling and operational risks. More formal non-functional testing on the ASX specific solution is planned during the life of the project.

The ASX Program Architect elaborated on two key scenarios:

1. Peak volume test – assessing novated trade volume in a one-hour period.
 - The objective is to understand how the application works under load and to ensure ASX size the infrastructure correctly for a typical day on AWS. The other part is to verify the failover testing to make sure the solution fails over with no interruption to the customer.
2. System performance - measuring the system performance to process a 15 million novated trade day.
 - Involves running a number of days of trades throughout a period of time and monitoring the system's capacity management and throughput. It also enables the ASX to confirm that all trades and netting are completed in time by end of day.

Member discussion

An Approved Market Operator (AMO) suggested that the following 2 matters be considered for testing during the PoT:

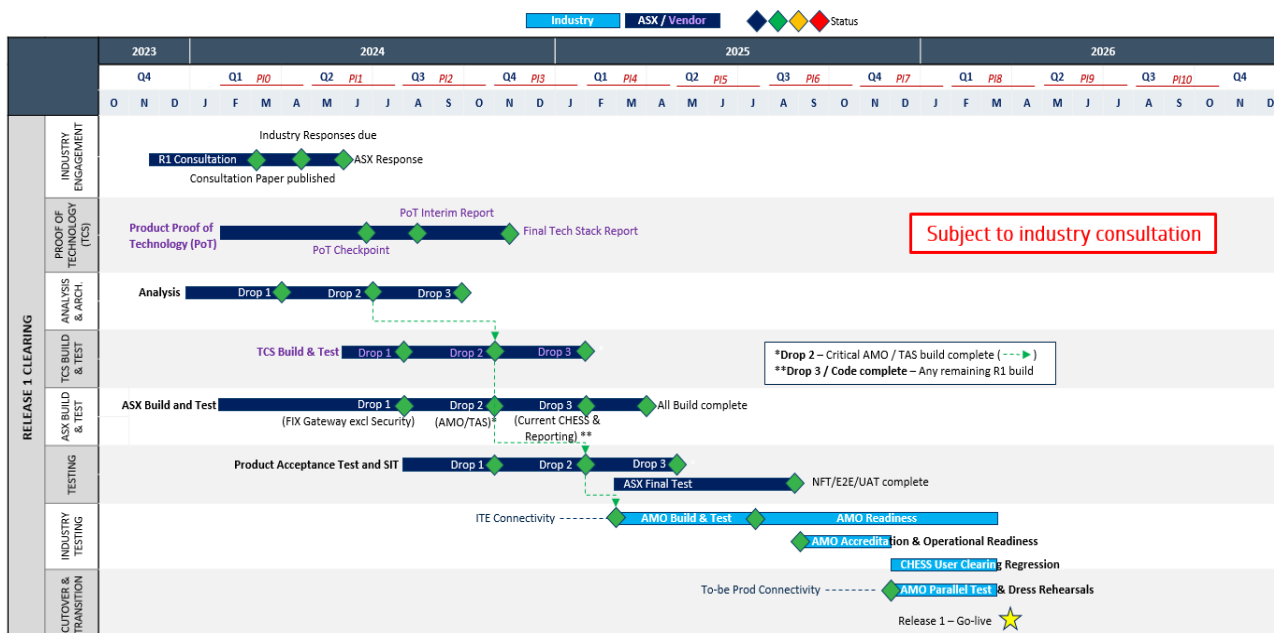
1. The timing of peak volumes, particularly close to EOD; and
2. Consecutive days at peak volume.

The ASX Program Architect confirmed that the above considerations will be addressed in the PoT.

The Chair committed to providing the Committee with ongoing updates as the PoT testing progressed.

AGENDA ITEM 2: Project Status

The ASX General Manager, Technology Delivery provided an overview of activities by work stream within the indicative Release 1 project timeline.



Indicative Release 1 timeline as at April 2024

Project Status

The project status remains green with all project streams on track.

Key updates included:

- **Industry Engagement:** R1 consultation was released in mid-March with work now transitioning to the collation of industry feedback in addition to the preparation of the consultation paper on Release 2.
- **Proof of Technology (PoT):** Environment set up is in progress and due to complete on 15 April 2024 with cycle 1 testing beginning late April.
- **Analysis and Architecture:** Majority of detailed requirements for Drop 1 have been sent for sign off and drop 2 solution analysis has begun.
- **TCS Build and Test:** TCS build will commence around June/July once detailed requirements have received sign off.
- **ASX Build and Test:** The base version of TCS BaNCS has been installed on ASX’s AWS cloud landing zone. The ASX project team also deployed the FIX gateway in ASX’s AWS cloud landing zone and included trade submission tools enabling end-to-end testing.

Key Risks

Key risks include:

Description	Mitigation	Impact Date	Residual Exposure	Recommendation / Progress	Status
T+1 impact to 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	28.06.24	Medium	Being managed via industry consultation.	Open
Dependency on cloud controls delivered by the Cloud Foundations project meeting the requirements for CHES replacement, including the regulatory expectations for the migration of licensed cash equities clearing and settlement services to Cloud	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	31.07.24	Medium	Detailed timing being added to the schedule (tasks, milestones and dependencies)	Open
Implementation of the solution on Cloud technologies	TCS will execute a prioritised set of use cases to give an early indication if any changes in the design are required	30.06.24	Medium	Finalisation of target technology stack and validating use cases for Proof of Technology.	Open
Delay to TCS resources relocating to Sydney	<ol style="list-style-type: none"> ASX are having a team of six people travel to India to limit impact on the solution analysis phase Hours of cross-over between ASX and TCS (2pm-5pm) are being prioritised for TCS/ASX meetings 	29.03.24	Medium	<p>3 of 7 resources approved – onshore in early April</p> <p>Extended overlapping hours between Sydney and Chennai agreed</p>	Closed
Insufficient Number of CHES Legacy Test Environments to support current CHES and CHES Replacement.	<p>Re-assess the number of test environments required:</p> <ol style="list-style-type: none"> Capture inventory of current environments and usage (Complete) Revisit planned number of functional test environments (including peak) based on CHES R delivery sequence into test (Complete) Prioritise current environment availability based on CHES program of work (Complete) 	1.08.24	Medium	Current CHES environment contention has been resolved and the required environments have been allocated to CHESR.	Closed

Disclaimer: Relevant high-risk items have been included. Medium risk items are included where the inherent risk was high prior to mitigation.

Member Discussion

A share registry requested an exhaustive list of risks and risk mitigation strategies related to CHES replacement. The ASX General Manager, Technology Delivery responded stating only high-risk items with mitigation strategies resulting in medium risk classification were included in the project risk table. The Chair added that low level risks are constantly cycled as ongoing mitigation strategies are implemented. An action was taken to further review the risk reporting to the Committee.

An industry association requested a face-to-face connect with TCS to engage directly with their team. The purpose of the request is to learn how TCS operate and seek insight into their prior learnings. The ASX General Manager, Technology Delivery recorded this as an action.

AGENDA ITEM 3: Working Group Updates

3.1 Consider how T+1 considerations can be factored into the Technical Committee Working Group schedule.

The ASX Senior Product Manager acknowledged feedback from the prior Committee meeting on 7 March regarding how T+1 can be factored into the Technical Committee Working Group schedule.

The ASX Senior Product Manager reiterated that despite no decision being made to move to T+1, there was a need to consider and analyse the impact to both CHES and CHES replacement. Potential topics could include batch timing, the operational hours of the system, improvements to priming or matching processes.

The ASX Senior Project Manager noted that the 3 May Implementation and Transition Working Group (I&TWG) plans to present on Release 1 consultation paper themes and discussion on what the Release 2 timeline looks like in terms of industry testing and timing and the considerations around a T+1 transition.

Member Discussion

An industry association questioned the priority of CHES replacement and T + 1. The ASX Group Executive S&P stated that ASX are still in the process of ascertaining information on T + 1. It is planned that this information will then be presented to the Advisory Group and the Business Committee to determine the implementation timeline of T + 1, subject to any requisite regulatory approval.

3.2 Business Design Working Groups

27 March Data and Connectivity BDWG

The ASX Senior Product Manager provided a summary of the 27 March Business Design Working Group. Based on market feedback, a key outcome was the removal of SWIFT as a connectivity channel for the CHES Replacement solution.

The ASX Senior Product Manager advised the current CHES messaging system advises users of unit quantity change and new holding balance. This goes against ISO standard and however the benefit of the current process is that it enables users to automatically reconcile account balances. Further information will be shared on this topic as the team continues investigative work.

Member Discussion

No member feedback recorded.

3.3 Upcoming Working Groups

The ASX Senior Product Manager highlighted the upcoming working sessions below. To accommodate the 1 May 2024 T +1 Business Design Working Group, the cum entitlement balance session was rescheduled from April to July. Additionally, an Equities Settlement Payment Providers Sub Committee (ESPPSC) session dedicated to payments will occur in April.

Member Discussion

No member feedback recorded.

	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 CHES Replacement	NEW	2 May 2024	Settlement Participants, Software Vendors, Share Registries
-	Payments - to be continued via ESPPSC and BDWGs 8 and 9	3.2, 4.5	April 2024	Payment Providers, Settlement Participants, Share Registries
5	Settlement Design (Matching, Batch Settlement, Non-Batch DVP & Related Payments)	4.2, 5.3, 2.1, 2.2, 3.2	27 May 2024	Settlement Participants, Payment Providers, Software Providers
6	Registration Details & Investor Information	1.1, 3.6	June 2024	Settlement Participants, Share Registries, Software Providers
7	Corporate Actions - Cum Entitlement Balance Design Review	3.4, 5.5	April 2024- July 2024	Software Providers, Settlement Participants, Share Registries
8	Corporate Actions – DRP, Entitlements, Distribution Information & Related Payments	3.2, 3.3, 3.5, 3.7, 3.8, 4.5	July 2024	Settlement Participants, Share Registries, Software Providers, Payment Providers
9	Settlement Design cont... (Matching, Linking, Locking)	1.5, 2.1, 2.2, 2.6, 4.3, 4.4, 4.5	August 2024	Clearing Participants, Settlement Participants, Software Providers
10	Market Claims (Diary Adjustments)	3.1	September 2024	Settlement Participants, Software Providers

AGENDA ITEM 4: Scope objective backlog update

The ASX Senior Product Manager provided the following key updates:

- The business design document (BDD) for SRN enquiry and validation has been shared and the working group and is in the process of receiving feedback. There was a request for market participants to continue sharing feedback ahead of the final release.
- Bank account information in relation to bid offers will be covered in 8 May Committee meeting.
- Discussion on bilateral matching improvements will be deferred to 8 May Committee meeting to allow additional time for ASX legal & compliance review.

4.1 Holding Adjustment Codes

The ASX Senior Product Manager requested share registries to advise the purpose of miscellaneous codes and help identify new codes required to achieve the target above. Updates relating to this matter will be shared with the Committee as they arise.

Issue: Solving for the volume of holding adjustments that occur with a miscellaneous code.

Target: Reduce then eventually remove usage of miscellaneous codes.

Member Discussion

No member feedback recorded.

AGENDA ITEM 5: Industry engagement & consultation

The ASX Senior Product Manager provided the following key updates:

- Consultation Paper 1 (CP1) has been released with responses due 24 April 2024.
- Consolidated feedback to CP1 responses will be provided by late June in conjunction with briefing the Industry Advisory Group.
- Consultation Paper 2 is scheduled for public release in Q3 2024.
- T+1 consultation will continue to run in parallel and inform this Committee.

- Partnership Program consultation on future Development Incentive Pool milestones aims to be released by the end of the month.

Member Discussion

No member feedback recorded.

AGENDA ITEM 6: Observer Feedback

The independent meeting observer recognised the Committee's strong virtual attendance, noting that while there were limited questions, questions were raised and addressed appropriately. The independent observer also echoed a prior request for pre-read material to be shared further in advance, particularly around public holidays.

Lastly, the independent observer sought clarity on the timing of T+1 activities ahead of the ASX Clear Board in November. The Chair clarified that the project aims to understand the impact of T+1 on release 2 timelines for the November board.

The meeting closed at 2:54 PM

Signed as a correct record of the meeting.

A handwritten signature in black ink, appearing to read 'G. White', written over a horizontal line.

Chair

8 May 2024

Date