

CHES Replacement Technical Committee Minutes

10 July 2024 Meeting

At the July meeting, the CHES Replacement Technical Committee Agenda and Actions were:

AGENDA AND KEY TOPICS DISCUSSED

- Welcome, open actions and feedback
- Project status
- Options for staging Release 2
- Working Group updates
- Scope objectives update
- Release 1 Consultation Response themes
- Interoperability update
- Industry engagement & consultation

AGREED ACTIONS

There were three new actions raised at the July meeting:

1. ASX to provide the proposed approach to technical & functional specification document delivery
2. ASX to provide guidance as to how R2 Implementation Risk Management and potential roll back options will be assessed and handled through the I&TWG and TC
3. Members to revert with any initial feedback on Cum Entitlement Approach presented in July Committee Meeting

Minutes from the meeting are attached.

Agenda

CHES Replacement Technical Committee

Date	10 July 2024	Time	2:00pm – 4:00pm
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Location	Microsoft Teams Meeting
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1. Welcome, open actions and feedback

2. Project status

3. Options for staging Release 2

4. Working Group updates

5. Scope objectives update

6. Release 1 Consultation response themes

7. Interoperability update

8. Industry engagement & consultation

9. Observer feedback

Action Items Raised in Meeting

Item number #	Action	Due date	Status	Owner
2024 May (1)	Schedule ETF WG	6 June 2024	Closed	ASX
2024 April (2)	Schedule ISO Design WG	6 June 2024	Closed	ASX
2024 April (3)	Schedule Transaction Basis matching forum	6 June 2024	Closed	ASX
2024 June (1)	ASX to revert to the Technical Committee with the Assurance activity schedule, once it is available	7 August 2024	Open	ASX
2024 June (2)	Members to revert to the AFMA Representative and / or ASX with input on the SRN enquiry scope objective	10 July 2024	Closed	Members
2024 June (3)	ASX to follow up on member query regarding testing timelines with a bilateral meeting	10 July 2024	Closed	ASX
2024 June (4)	ASX to capture industry requirements and use cases for the API solution planned for Holding Balances	10 July 2024	Closed	ASX
2024 July (1)	ASX to provide the proposed approach to technical & functional specification document delivery	7 August 2024	Open	ASX
2024 July (2)	ASX to provide guidance as to how R2 Implementation Risk Management and potential roll back options will be assessed and handled through the I&TWG and TC	7 August 2024	Open	ASX
2024 July (3)	Members to revert with any initial feedback on Cum Entitlement Approach presented in July Committee Meeting	7 August 2024	Open	Members

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	
BANK OF AMERICA MERRILL LYNCH	Monika Arhns	Project Manager	
BNP PARIBAS	Wayne Murphy	Project Manager	
CITI	Lyall Herron	Program Manager	
CMC	Maral Istanbulian	Technical Business Analyst Team lead	
COMMSEC	Ryan Jones	Crew Technical Lead	
FINCLEAR SERVICES	Nikki Gleisner	Senior Business Analyst/Client Relationship Manager	
GOLDMAN SACHS	Simon Wyss	COO, Australia/ New Zealand Engineering	
HSBC	Simon Siluk	Senior Product Manager	
INTERACTIVE BROKERS AUSTRALIA	Darren Halse	Managing Director	
J.P. MORGAN	Scott Oakland	Executive Director Product Management	
MACQUARIE GROUP	Paul Bragg	Operations Analyst	
MORGAN STANLEY SECURITIES	*Justin Clarke	Vice President	Rebecca Collins, Executive Director
MORGAN STANLEY WEALTH	Andrew Sime	Executive Director	Apology
MORGANS FINANCIAL	Daniel Spokes	Director, Client Support Services	
NAB	Rodd Kingham	Head of Investment Service (WealthHub Securities)	
THIRD PARTY PLATFORM	Lee Muco	Chief Operating Officer	
UBS	Scott Hanlon	Head of Operations, Executive Director	
Third Party Software Vendors			
BROADRIDGE	*Mabel Chow	Product Manager	Danielle Gerace, Head of Client Service Australia
COMPUTERSHARE	Leanne Bailey	Senior Business Analyst	
FINCLEAR	Craig Gray	Head of Product, Clearing and Settlement	
FNZ	*Bianca Paton	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	Vice President – Chief Operating Officer	
NSX	Yemi Oluwi	Head of Market Operations and Technology	
SYDNEY STOCK EXCHANGE	Rajnish Tiwari	Head of Market Control & Exchange Technology	
SHARE REGISTRIES			

Company	Name	Job Title	Apologies
ADVANCED SHARE REGISTRY	Patrick Gan	IT Manager	
AUTOMIC GROUP	Marcelo Dantas	Chief Information Officer	
BOARDROOM	Michael Mullins	Chief Information Officer	
COMPUTERSHARE	Scott Hudson	General Manager – Market Liaison	
LINK MARKET SERVICES	Blanca Valle	Senior Technical Business Analyst, Corporate Markets	

* Delegate

Observers

Company	Name	Job Title	Apologies
AFMA	Damian Jeffree	Senior Director of Policy	
AIRA	Ian Matheson	Chief Executive Officer	
GIA	Simon Pordage	Brand Ambassador for Governance (Institute of Australia & Company Secretary for ANZ)	Apology
SIAA	Judith Fox	Chief Executive Officer	
ASIC	Dodie Green Liang Chen Derek Scott	Senior Manager, Market Infrastructure Analyst, Market Infrastructure (Clearing & Settlement Facilities) Senior Specialist, Market Infrastructure Markets	
RBA	Kylie Stewart Elizabeth Kandelas	Senior Manager, Domestic and Payments, Financial Market Infrastructure Manager, Financial Market Infrastructure, Domestic and Payments	
AUSPAYNET	Luke Wilson	Chief Operating officer	Apology

* Delegate

ASX Representatives

Name	Job Title	Apologies
Clive Triance	Group Executive, Securities and Payments (Project Sponsor)	Apology
Andrew Jones	General Manager, Equities, Securities and Payments	
*Max Bondorovsky	Senior Project Manager	Triona Quinlan – General Manager, Technology Delivery
Russell Eyre	Enterprise Architect, Technology Delivery	
Steven Hannan	Senior Manager, Stakeholder Engagement, Equities	
Chris Boyes	Senior Product Manager, Equities, Securities and Payments	
Jason Genford	Head of Technology Delivery, Technology Delivery	
Peter Jessup	Release 1 Product Owner (SI Business Lead)	

* Delegate

AGENDA ITEM 1: Welcome, Actions and Feedback

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

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

The previous minutes from the 6 June 2024 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 three open actions from the 6 June meeting:

Item Number	Action	Discussion
2024 June (1)	ASX to revert to the Technical Committee with the assurance activity schedule when it is available	Proposed to be presented in August Technical Committee meeting
2024 June (2)	Members to revert to the AFMA Representative and / or ASX with input on the SRN enquiry scope objective	AFMA representative confirmed that there had been good response to the request for input and engagement on this topic. Agreed to continued engagement to help provide inputs and responses for the Release 2 Consultation Paper
2024 June (3)	ASX to capture industry requirements and use cases for the API solution planned for Holding Balances	Action addressed to be incorporated in the Consultation Paper for Release 2. Proposed to close and agreed with members.

The Chair proposed to close 2024 June (2) and 2024 June (3), and the proposal was agreed.

AGENDA ITEM 2: Project Status

The ASX Technology Delivery General Manager provided key updates on the project’s delivery, noting that:

- The project status continues to track ‘green’
- The Consultation Paper on Staged Implementation and Implementation of Release 1 has been published, feedback has now been received and ASX has issued the response paper
- The Proof of Technology Cycle 3 testing has successfully processed four million trades in 60 minutes and Cycle 4 testing has commenced
- With regard to Release 1:
 - Drop 1 build is in progress to deliver the FIX Gateway connectivity into the TCS BaNCS™ platform

- Drop 2 detailed requirements from ASX has been completed
- ASX has sent a small team of analysts and testers to the TCS offices in India to help review the Drop 1 build before it is handed over to ASX testing
- The Consultation Paper on the Scope and Implementation of CHES Replacement Release 2 is on track with a targeted Q3 2024 publication date
- Planning for Release 2 is still underway incorporating industry input through discussions as part of the Working Groups.

AGENDA ITEM 3: Options For Staging Release 2

The ASX General Manager provided an update on the status of options to stage Release 2:

- Suggestions have been received from the industry and compiled into three categories: Staging by Participant, Staging by Issuer, and Staging by Function noting:
 1. The separation of the clearing and settlement phases (Releases 1 and 2) is the primary staging approach to risk mitigation through staging
 1. Feedback on potential Staging by Issuer has noted that this would require either additional system builds to support staging, or to run both old and new systems in parallel for an extended period. Both of these approaches were considered to be technically challenging and therefore not reducing the overall risk
 1. Staging by Participant would have to be achieved by the build of an additional message translation functionality increasing implementation complexity and length of project completion.

The General Manager, Equities, Securities and Payments noted that ASX is still open to discussions and ideas and will continue to seek feedback from industry on the topic

The Enterprise Architect, Technology Delivery noted that several of the staging scenarios we are exploring require the development of a message translation function between EIS messaging and the ISO 20022 standard message translation function which, due to the amount of change in the messaging structures, would add significantly to the delivery risk of the project, assuming it was even possible to build a fully backwards compatible solution. This option would help mitigate the risk of overall Industry readiness but not the implementation risk of the new system. Other interim operating models would be needed for other options under review, for example, the staging by issuer scenario would require banks and the RBA to create an additional settlement batch to support the two systems running in parallel.

The Enterprise Architect, Technology Delivery reiterated that the key opportunity to mitigate risk through to staging by function has been captured primarily through the separation of the Clearing and Settlement functions into Release 1 and Release 2.

The Enterprise Architect, Technology Delivery noted the suggestion by one member related to an early migration of customer accounts was one of the options under consideration, in addition to a suggestion from another member to implement a non-settlement day as a means to deliver risk mitigation benefits. The Chair noted that work was underway to assess the viability and degree of industry support for any of the options.

The Chair reiterated the body of work undertaken by the Committee in [April 2023] resulted in the current plan for a staged approach for Clearing followed by Settlement, and that additional staging approaches need to be assessed for the introduction of any new risks requiring mitigation, and considering whether they provided any decrease in the overall implementation risk.

Member discussion

A member sought information on whether ASX could provide a gap analysis of the amount of customisation required for the TCS BaNCS™ for MI platform. The Chair confirmed the customisation required is a relatively small part of the project, with one of the key challenges for the project being the migration from customised EIS messaging to the ISO 20022 standard.

A member noted their concerns on the planned cutover for Release 2 and the potential interruption to the market as a result and sought clarification on the test approach to mitigate the risk. The Chair noted an action for ASX to provide an update on when the detailed testing plans would be available for the committee to review.

Another member complimented the ASX's work to date on Release 2 risk mitigations and suggested that any potential changes need to be incorporated into the timeline for Participants to be able to have sufficient time to plan for the agreed approach. The Chair noted an action to review options under consideration with industry and their impacts against the current timeline through the upcoming Working Groups, and to revert with how that will be undertaken.

A member sought information on any potential candidates with similar implementations who had considered rollback as part of the cutover plan. The Chair noted that rollback options would be considered and detailed planning and testing of rollback plans would be part of each release. An action was noted to document rollback approaches as part of each of the topics under consideration.

A member noted the number and complexity of options means that it is important to work through risk mitigation options over multiple sessions to provide the market with more confidence that risks related to Release 2 are being appropriately mitigated. The Chair noted that any proposed scenarios will be incorporated as part of ASX's Working Group approach and documented in the upcoming Consultation Paper on the Scope and Implementation of CHES Replacement Release 2, planned for Q3 2024. The outcomes of these Working Groups and Consultations will ensure all feedback or potential changes will be explored and incorporated into the plan.

The Head of Technology Delivery noted that options under consideration will be included in the Consultation Paper on the Scope and Implementation of CHES Replacement Release 2.

A member raised a question regarding the length of time that is proposed for Software Providers to undertake development.

The Head of Technology Delivery noted that ASX is sharing the timeline as part of the process to capture feedback from Software Providers on the proposed timelines, including the proposed milestones for ISO 20022 and the Functional and Technical Specification delivery, which are enablers for Software Providers to commence their build processes.

A member sought clarification on when the ISO 20022 specifications are planned for release. The Senior Product Manager, Equities noted that finalised ISO 20022 documents are planned for release no later than three months prior to each scheduled drop to the Software Provider build and test timelines.

The Head of Technology Delivery noted an action to provide further detail on the delivery timelines for technical documentation and reiterated the intent from ASX to garner feedback on the timelines either in the Committee and Working Groups, or ultimately via the Consultation Paper on the Scope and Implementation of CHES Replacement Release 2.

AGENDA ITEM 4: Working Group Updates

a) Implementation & Transition Working Group

The ASX Senior Project Manager and the Release 1 Product Owner provided a summary of the 4 July 2024 Implementation and Transition Working Group (I&TWG), highlighting the key topics discussed:

- Continuous feedback is being sought on the proposed timeline for Release 2, noting that prior to the Working Group the ASX had proposed two timeline options, being a “concurrent” and a “sequential” model
- A proposed sequence that ensures there’s time between ASX final tests and the commencement of accreditation, to allow for final regression for the Software Providers
- The ISO Working Group has been incorporated into the Release 2 timeline ensuring ISO specifications form part of each drop
- The ASX’s proposed approach to Deferred Settlement was supplied as part of the Working Group pre-read materials. Due to time restrictions in the Working Group however, this topic was rescheduled to the next I&TWG meeting, scheduled for August, for further discussion
- The Release 1 Product Owner provided a summary of the two primary options and ASX’s proposed approach to Deferred Settlement:
 1. Manage deferred settlements in the system where they were captured (i.e. current CHES vs CHES replacement) with two resulting sets of settlement instructions (either net or gross)
 1. Migrate trades captured in the current CHES system to the CHES replacement system to allow them to net all deferred settlement trades on S-1
- ASX proposed to proceed with the first option with a view that it may require less build work and was more feasible. Analysis of impacts to Clearing Participants is underway and will be discussed further in the Implementation and Transition Working Group
- The Release 1 Product Owner sought written feedback from members on the pre-read materials ahead of the next Working Group.

b) AMO Working Group

The ASX Product Owner provided a summary of the 3 July 2024 AMO Working Group highlighting the key topics discussed:

- ASX has published the FIX Specification for the AMO TAS interface with improvements to development
- ASX’s proposal for a failover mechanism, noting there will be further discussion in the next AMO Working Group

- ASX will be circulating a paper to AMOs to finalise and agree on the list of Condition Codes as a basis to help determine whether netting or masking should occur.

c) **Business Design Working Group**

The ASX Senior Product Manager provided a summary of the 11 July 2024 Business Design Working Group (BDWG) highlighting the key topics discussed:

- The most recent BDWG was based on Corporate Actions, DRP entitlements, distributions, and associated payments
- A summary of ideas to modernise the format of the registration details and facilitate additional Investor information which will be included in the Business Design Document
- Proposal to simplify the design complexity of the Cum Entitlement Balance is currently underway
- Two sessions have been combined for late August to discuss Cum Entitlement Balances and settlement topics. The market claims diary adjustments will be covered in the September BDWG
- Deep dives on ETFs and transaction basis are scheduled for later in the year
- Once the Consultation Paper for Release 2 has been released, the Business Design Documents will continue to be updated and refined to capture further details and consolidate feedback specifically on the proposed scope and timeline
- All scope objectives will have traceability from these Business Design Documents through to the scope sections in the Consultation Paper for Release 2.

Member discussion

A member enquired if ASX had a view on the extent of changes required to the specifications for Release 2. The ASX Senior Product Manager confirmed the changes will be largely driven by the upgrades to a later ISO version but will not have a substantial impact. It was confirmed that the general functionality design aligns to the TCS BaNCS™ for MI platform.

The ASX Senior Product Manager noted any changes will be tabled for discussion in the Working Groups and highlighted that the ISO Working Group will also provide the opportunity for feedback.

Another member sought information on the development timeframes for Software Vendors building to CHES Replacement specifications and enquired as to whether the Vendors had been engaged to provide feedback on the Release 2 timeline. The ASX Senior Manager confirmed that the provision of the finalised ISO specifications shared at each of the drop milestones, would mean Software Vendors would have approximately 12 months' worth of build and testing before regression and accreditation.

In addition, ASX sought feedback from Software Vendors on the timeline for Release 2. The ASX Senior Product Manager also clarified that Drop 5 in the timeline represents when all ISO work will have been completed.

Another member sought clarification on timelines related to Participants to undertake final in-flight migration testing after Software Providers complete their accreditation. The member expressed concern that the proposed timeline for in-flight migration testing appears to be compressed and may not leave enough time for Participants to prepare for familiarisation and to ensure their systems are fit for purpose following a vendor accreditation process.

The ASX Senior Project Manager noted the feedback and took an action to engage in further discussion with the member to capture additional information about the timelines related to in-flight migration testing and accreditation. The Chair noted that the timeline is an important piece of the upcoming Release 2 Consultation, and it is important for Committee members to agree on the proposed approach.

Another member sought clarification on two items; 1) the seemingly extended CHES user readiness period and 2) whether the ASX could release the final drops of ISO messaging based on the timeline of Drops 1,2,3 and 4 to Participants or Software Providers, in order to undertake testing earlier. The member noted that an issue encountered into the last CHES project was the timing and availability of the final ISO messaging.

The ASX Senior Product Manager noted that the ISO specifications will be issued at the same time they are released to the ASX development teams, considering feedback is of utmost importance when it comes to the build. The ASX Senior Project Manager noted the timing concerns and took an action to schedule a session with members to discuss reducing the CHES user readiness periods whilst balancing the time required for feedback and inputs of ISO specifications.

AGENDA ITEM 5: Scope Objectives Updates

Topic was discussed in conjunction with Working Group Updates.

Member discussion

No member feedback recorded.

AGENDA ITEM 6: Release 1 Consultation Response Themes

The ASX Senior Product Manager provided a summary on the industry consultation process highlighting the key changes discussed:

- To recap, based on feedback received for Release 1 and 2:
 - There was support of the design scope and schedule for Release 1 and for the industry testing approach
 - Industry test duration received a variety of feedback from AMOs
 - Industry sought further clarification required for go-live readiness activities
- As a part of the Release 1 schedule, four out of five phases had key timeline changes:
 - AMO Readiness duration was shortened
 - AMO Accreditation and Operational Readiness duration has been extended
 - Clearing Regression duration has been pushed out
 - AMO Parallel Test has been pushed out

Member discussion

No member feedback was recorded.

AGENDA ITEM 7: interoperability update

The ASX Senior Product Manager discussed the approach to interoperability in the CHES Replacement project, emphasising the importance of early visibility and feedback and noting that the content forms the basis of what will be put into the Consultation Paper around the Scope and Implementation of CHES Replacement Release 2.

The key components discussed:

- The solution design, focused on the technical foundations
 - The TCS BaNCS™ for MI platform was selected for its modular architecture that separates clearing, settlement, depository, and other services. The product has demonstrated interoperability in other markets, such as Euroclear Finland and T2S. It is ISO 20022 compatible and allows for third-party data access via API
- In terms of the project progress, in Release 1, the modular architecture of TCS BaNCS™ for MI platform is being demonstrated by connecting it to an external settlement system, CHES. Release 2 will involve more detailed examination and testing of specific scenarios to ensure the technology meets expectations
- The design and documentation will consider competing services
 - The roles and responsibilities of a Clearing Participant versus a Settlement Participant will be clearly defined. The ASX Senior Product Manager also mentioned potential rule changes to delineate clearing and settlement
- The testing scenarios for the modular architecture
 - These include multi CCP (Clearing Counterparty) settlement, multi CCP clearing, clearing for an external settlement facility, and cross settlement facility settlement. These scenarios are based on different models observed overseas and what is already in the TCS BaNCS™ for MI platform.

The ASX Senior Product Manager then presented the steps needed outside the project to achieve full interoperability, emphasising the need for a clear definition of the competing service, technical interfaces, industry-wide testing, rule changes, operational changes and risk management.

Member discussion

A member sought information on ASX's perspective to undertake CHES as the alternate settlement or depository based on the interoperability testing. The ASX Senior Product Manager confirmed that Release 1 is effectively implementing this scenario already.

The ASX Product Owner also noted that one of the scenarios presented paints interoperability between current CHES for settlement and CHES replacement with the sub-register which would require significant changes to current CHES.

The Chair noted that the interoperability testing is a part of the project Assurance scope and this will ensure testing and outcomes will be reported.

AGENDA ITEM 8: Industry Engagement & Consultation

The ASX Senior Manager provided an update on the upcoming items for consultation and engagement, highlighting:

- ASX was originally planning to release the Partnership Program Consultation Response at the end of June, however that has been delayed until November to align with the confirmed milestones being used in the Consultation Paper for Release 2
- Consultation Paper for Release 2 is on track for an early August issue, followed by a six-week period for the industry to respond
- A high-level plan is also underway for the proposal to address T+1 and interoperability
- The next Technical Committee will be on the 7 August, noting the first ISO Design Working Group is planned for October
- A pulse survey will also be issued in the next couple of weeks.

Member discussion

A member sought clarification on the timeline for the staged implementation decision and whether a conclusion will be confirmed by the end of the year. The Chair reassured the Committee that through the process of the Consultation Paper for Release 2 and the responses, ASX should be able to develop an implementation plan by November.

AGENDA ITEM 9: Observer Feedback

The independent meeting observer was unclear if one of the actions was closed, noting all other actions were future dated, which was quickly remedied through confirmation from the action owner. The independent meeting observer then noted that the chat functionality within Teams was disabled but may provide another mechanism for members to engage. The independent meeting observer noted there was an inconsistency between the timing of the meeting invite scheduled (90 minutes) and what was stated by the Chair in the meeting (2 hours). The independent meeting observer highlighted that the Working Group updates demonstrated good progress, with healthy debate and challenge from members of the Committee, noting that the general consensus leaned against the approach of doing a single cutover, hence any alternatives or mitigation plans to help alleviate this concern will be key going forward.

The meeting closed at 4:02 PM.

Signed as a correct record of the meeting.

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

Chair

10 July 2024

Date