

CHES Replacement Technical Committee Minutes

22 February 2023

At its 22 February meeting, the CHES Replacement Technical Committee was updated on:

- Technical Committee charter
- CHES replacement project objectives
- Project scope
- Plan for redesign
- Vendor solutions – RFI update
- Forward work plan

KEY ISSUES DISCUSSED

Key points from the discussion about the CHES Replacement Project included:

- i. Members supportive of the RFI process and its consideration of international options, however there are concerns regarding the feasibility of validating requirements in parallel with the vendor RFI process
- ii. Members supportive of the Technical Committee’s charter and objectives, however greater clarity around the process for dealing with recommendations and the interplay between the Business Committee and ASX Boards is required.
- iii. Members concerned about balancing potential workload between maintaining current CHES for a longer timeframe and CHES Replacement, as well as any potential rework from what has already been developed. Members requested scope to be revisited as requirements may have changed with the passage of time
- iv. Several members have raised concerns on the appropriate representation from their organisations by limiting one delegate per Business Committee member
- v. Members also expressed an interest to extend stakeholder engagement alongside focus groups and other forums; and to have more visibility of project details and input on decision making.

AGREED ACTIONS

Six new actions were raised at the meeting:

1. ASX to provide a project governance chart illustrating relationships and decision making
2. ASX to consider the appropriateness of sharing the RFI with members
3. ASX to consider conducting a ‘Pre-Mortem’ and to proactively identify mitigants
4. ASX to provide a list of requested items from members and ASX’s response for visibility
5. ASX to propose a plan for workshops to scope requirements
6. Introduce role of a meeting observer to help identify improvements into establishing the right level of conversation and outcomes

Minutes from the meeting are attached.

Agenda

CHES Replacement Technical Committee

Date	22 February 2023	Time	2:00pm-4:00pm
Location	ASX offices – Level 1, 20 Bridge Street, Sydney/MS Teams		

1. **Welcome and Introduction**
 2. **Committee charter**
 3. **Project objectives**
 4. **Project scope**
 5. **Project 'define and plan' phase**
 6. **Vendor solutions – RFI update**
 7. **Other matters**
 - a) Forward Work Plan
 - b) AOB
 - c) Next meeting – 8th March 2023
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Action Items

Item number#	Action	Due date	Status	Owner
2023 Feb (1)	ASX to provide a project governance chart illustrating relationships and decision making	8 March 2023	Open	ASX
2023 Feb (2)	ASX to consider the appropriateness of sharing the RFI with members	8 March 2023	Open	ASX
2023 Feb (3)	ASX to consider conducting a 'Pre-Mortem' and to proactively identify mitigants	8 March 2023	Open	ASX
2023 Feb (4)	ASX to provide a list of requested items from members and ASX's response for visibility	8 March 2023	Open	ASX
2023 Feb (5)	ASX to propose a plan for workshops to scope requirements	12 April 2023	Open	ASX/TC Members
2023 Feb (6)	Introduce the role of a meeting observer to help identify improvements into establishing the right level of conversation and outcomes	8 March 2023	Open	ASX

ASX CHES Replacement Technical Committee Members

Company	Name	Job Title	Apologies
ASX	Tim Whiteley	Technical Committee Chair and Project Director, CHES Replacement Project	
ASX	Val Mathews	Business Committee Chair and Chief Customer and Operating Officer	
Clearing and Settlement Participants			
ABN AMRO CLEARING	Matthew McMahon	Head of Operations	
AUSIEX	Mark Pace	Head of Solution Design	
BANK OF AMERICA	Monika Ahrns	Project Manager	
BELL POTTER SECURITIES	Lee Muco	Chief Operating Officer	
BNP PARIBAS	Mark Wootton	Head of Custody Product Aust & NZ	
CITI	Lyall Herron	Program Manager	
CMC	Danny Ng	Senior Project Manager	
COMMSEC	Ryan Jones	Crew Technical Lead	
CREDIT SUISSE	Andrew Norval	Managing Director, Head of Operations	
FINCLEAR SERVICES	Nikki Gleisner	Senior Business Analyst/Client Relationship Manager	
GOLDMAN SACHS	Simon Wyss	COO, Australia/ New Zealand Engineering	
HSBC	*Asri Asat	Operations Manager	Simon Siluk
J.P. MORGAN	Scott Oakland	Executive Director Product Management	
MACQUARIE GROUP	James Indge	Cash Equities Business Manager	
MORGAN STANLEY	Rebecca Hill	Chief Operating Officer	
MORGANS	Daniel Spokes	Director, Client Support Services	
NAB	Rodd Kingham	Head of Investment Service (WealthHub Securities)	
UBS	Scott Hanlon	Head of Operations, Executive Director	
Third party Software Vendors			
BROADRIDGE	Mabel Chow	Product Manager	
COMPUTERSHARE	Leanne Bailey	Senior Business Analyst	
FINCLEAR	David Bowles	Chief Technology Officer	
FNZ	Nick Clarke	Head of Product Management – Capital Markets	
NRI	Diptesh Chakraborty	Data Engineering Analyst	

SECURITEASE	*Chris Werry	Senior Analyst	David Hinkley
AMOs			
ASX	*Ben Jackson	General Manager, Market Operations	Jamie Crank
CBOE	Mike Aikins	Vice President APAC – Operations and Technology	
NSX	Chan Arambewela	Chief Operating Officer	
SYDNEY STOCK EXCHANGE	Rajnish Tiwari	IT & Operations Manager	
Share Registries			
BOARDROOM	Michael Mullins	Chief Information Officer	
COMPUTERSHARE	Scott Hudson	General Manager – Market Liaison	
LINK MARKET SERVICES	Kelvin Chee	Senior Project Manager – CHES Replacement	
AUTOMIC GORUP	Sue Julian	Head of Business Operations	

* Delegate

Observers

Company	Name	Job Title	Apologies
AFMA	Brett Harper	Chief Executive Officer	
	Damian Jeffree	Senior Director of Policy	
ACSA	David Travers	Chief Executive Officer	Apology
AIRA	Ian Matheson	Chief Executive Officer	
GIA	Megan Motto	Chief Executive Officer	
SIAA	*Michelle Huckel	Policy Manager	Policy Manager
ASIC	Nathan Bourne	Senior Executive Leader, Market Infrastructure	Apology
	Dodie Green	Senior Manager, Market Infrastructure	
	Andia Petropoulos	Senior Analyst, Market Infrastructure	
RBA	Kylie Stewart	Senior Manager, Domestic and Payments, Financial Market Infrastructure	
	Tatiana Moiseeva	Lead Analyst, Financial Market Infrastructure, Domestic and Payments	

* Delegate

ASX Management

Name	Job Title	Apologies
Katie McDermott	General Manager, Business Design, CHES Replacement Project	
Nick Wiley	General Manager, Equity Post Trade and Payments	
Sally Palmer	Deputy General Counsel	
Diane Lewis	General Manager, Regulatory Strategy and Executive Advisor	Apology

Triona Quinlan	Delivery Lead, CHES Replacement Project
Bronwyn Wells	Commercial Lead, CHES Replacement Project
Keith Purdie	Senior Manager, Equity Post Trade, Securities and Payments
Chris Boyes	Senior Product Manager, Securities and Payments

* Delegate

AGENDA ITEM 1: Welcome and Introduction

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

Sue Julian (Automatic) was noted as a new share registry addition to the Technical Committee.

David Travers (ACSA) was an apology. Simon Siluk (HSBC), was represented by a delegate, Asri Asat. David Hinkley (SecuritEase), was represented by a delegate, Chris Werry. Jamie Crank (ASX Trade), was represented by a delegate, Ben Jackson. Judith Fox (SIAA), was represented by a delegate, Michelle Huckle.

The Chair reminded members of their obligations under competition law and provided an overview of the agenda. The Chair continued by acknowledging the 17 November 2022 announcement that paused current activities on the previous CHES Replacement project, iterating that this forum will provide the opportunity for stakeholder input and feedback on a broad range of matters relating to the project. The Chair also spoke to the current CHES program of work presented in the ASX half year results, noting existing CHES is a standing agenda item of the Business Committee. Where existing CHES matters have a direct impact on considerations for CHES Replacement, the Chair confirmed these discussions will be tabled in this forum.

The Chair explained the goal of the Technical Committee is to build industry confidence on the solution redesign and the implementation of the CHES Replacement project. The Chair encouraged active engagement from members to facilitate the review, debate and input on project planning, design, assumptions and scope. This enables ASX and Technical Committee members to understand the impact on stakeholders regarding the solution and their readiness activities, while ensuring transparency of key project risks, issues, constraints and diverse industry demands.

Member discussion:

An industry association asked whether observers had the right to speak in the meeting. The Chair confirmed that everyone was welcome to voice their opinions and provide input in the forum.

AGENDA ITEM 2: Technical Committee charter

The ASX General Manager, Business Design, CHES Replacement Project provided an update on the Technical Committee draft charter and the input sought to date. This included feedback and opinions following engagement from external legal counsel, King & Wood Mallesons, and earlier input from AFMA and SIAA.

The Technical Committee acts as a subcommittee of the Business Committee. It maintains the same structure as the previous Technical Committee on ISO 20022 to ensure a clear line of reporting to the Business Committee, and the Boards of ASX Clear and ASX Settlement.

Membership of the Technical Committee is intended to be representative of impacted stakeholders while maintaining a manageable size to facilitate robust discussions. It consists of one nominated individual per Business Committee member, and one nominated individual per invited third party software vendor. Observers on the Technical Committee consist of industry associations who are members of the Business Committee (invited to nominate one individual per organisation) and regulatory agencies. Membership will be continually assessed to ensure the right balance of impacted stakeholders.

The ASX General Manager, Business Design, CHES Replacement Project requested any feedback specific to drafting changes of the charter be made via a members' respective Business Committee representative before 22 March, the date of the next Business Committee meeting. Software vendors who do not have Business Committee representation were requested to email through any feedback to the CHES Replacement mailbox.

Member discussion:

A member requested clarification on the decision-making power of the Technical Committee. The Chair advised that the Technical Committee produces inputs and recommendations to the Business Committee for discussion. The Business Committee provides endorsed recommendations to the boards of ASX Clear and ASX Settlement information

will be shared with the Technical Committee. The Chair confirmed a project governance chart will be noted as an action.

A member requested clarification on the practical knowledge required of representatives. The Chair confirmed discussions on topics occurring in the Technical Committee will focus on business capabilities and impacts rather than technologies to ensure CHESS replacement meets market expectations, including future needs, and standards. The ASX General Manager, Business Design, CHESS Replacement Project added that agendas will be confirmed one week prior to Technical Committee meetings, providing members the opportunity to send a delegate with expertise in the confirmed topics should they prefer.

A member enquired whether there were opportunities to request further information or provide recommendations in the periods between Technical Committee meetings. The ASX General Manager, Business Design, CHESS Replacement Project clarified ASX will acknowledge and expect to receive feedback offline, should a Technical Committee member need to liaise internally before providing feedback. However, where possible, members are encouraged to provide feedback during Technical Committee discussions.

A member asked for clarification on the number of working groups to be held to redefine project scope. The ASX Senior Manager, Equity Post Trade, Securities and Payments referred to Agenda item 6, and clarified that various forms of engagements will be employed to ensure the deep-dives on relevant items are tested and discussed with the appropriate stakeholders.

A member requested if the RFI can be shared with the Technical Committee. The Chair confirmed an action will be noted for ASX to review the appropriateness of sharing the RFI outside of experienced global providers of clearing and settlement software.

A member questioned which committee, Business or Technical, will have line of sight on project progress and challenges. The ASX Business Committee Chair confirmed the Technical Committee will have real-time visibility of project progress conveyed in the monthly meetings. The Chair added that project information and status will be reported to the Business Committee by the Technical Committee.

An observer recommended a pre-mortem assessment as a helpful exercise in planning or foreshadowing potential future issues. The Chair confirmed ASX will consider this as an action.

A recommendation was raised for someone independent [of ASX] to act in the role of meeting observer, to provide commentary on how the meeting progressed, whether there was an appropriate level of engagement as well as suggest improvements for future committees. The Chair agreed that this should be actioned in future meetings.

AGENDA ITEM 3: Project objectives

The ASX General Manager, Business Design, CHESS Replacement Project provided the update on revised project objectives:

- Implement a CHESS Replacement system that meets the requirements of our Clearing and Settlement (CS) facility licences
- Deliver a supportable technology solution that is enterprise grade and capable of sustaining the Australian financial market
- Implement a robust plan for CHESS Replacement prior to existing CHESS becoming out of risk appetite
- Consider the impact of ASX actions on stakeholders
- Create opportunities for industry efficiencies and growth
- All previous guiding principles of the CHESS Replacement Project have been incorporated into the new objectives

AGENDA ITEM 4: Project Scope

The ASX General Manager, Business Design, CHES Replacement Project provided an update on current CHES scope and CHES replacement scope.

The ASX General Manager, Business Design, CHES Replacement Project explained the current scope leverages work from the previous replacement project, where extensive consultations with the market were completed. The ASX General Manager, Business Design, CHES Replacement Project continued by acknowledging information from these past consultations may be dated, and in consideration of new project objectives, only acts as a starting point for the new CHES Replacement project. Consequently, stakeholders will have the opportunity to amend the scope for the benefit of issuers, investors, market efficiency and market risk.

Member discussion:

A member raised a question regarding the principle of minimising the amount of work for vendors and participants on current CHES. The ASX General Manager, Business Design, and CHES Replacement Project confirmed the Business Committee will establish the scope of potential changes in current CHES that in turn will then be discussed with the Technical Committee.

A member raised a question around how ASX plan to update the scope of requirements for CHES Replacement, to meet new expectations and legislations. The Chair responded that this forum enables discussions to revisit previous CHES Replacement scope. The Chair reiterated scope is not driven by the solution, rather the solution is driven by the scope.

A member asked what assurance the ASX can provide that it will be able to revisit and action changes to the previous scope without restarting the project in its entirety. The ASX Business Committee Chair acknowledged the challenge in finding balance in building upon what has already been completed, whilst ensuring previous work is updated for the new CHES Replacement program to be relevant and meet expectations of the stakeholders and the market.

The Chair asked how members would like to engage with ASX to build on the baseline scope. A member suggested to reinstate workshops to validate project scope. Another member added, due to the complexity of the various business views within the Technical Committee, it will be beneficial to approach businesses separately ensuring all industry views are gathered prior to the development of a whole industry solution. Another member, while acknowledging the input obtained in one-on-one meetings, recommended multilateral level conversations would be preferable to ensure full visibility of suggestions from all cohorts. The ASX General Manager, Business Design, CHES Replacement Project agreed that it is vital to understand the various viewpoints of cohorts, and how they interact with the post-trading system. The ASX General Manager, Business Design, CHES Replacement Project continued by proposing that through focus groups, an element of consensus within similar cohorts on the scope will be identified, and then reported back to the Technical Committee for all to review. Subsequently, to enable these focus groups, it would be useful for members of the Technical Committee to recommend topics for those specialised discussions.

A member suggested impact statements should accompany proposals for the scope, ensuring all members without a technical background are aware of the stakeholder benefit for each proposal. The Chair agreed with the suggestion, adding that it enables a fair discussion to agree on scope.

A member requested a comparison of previous scope and current scope for visibility of new additions and items moved from the current scope. The ASX General Manager, Business Design, CHES Replacement Project referred to slide 14, reiterating what is shown are items under consideration for current CHES. Slide 15 depicts the scope of the CHES Replacement before the project pause next to the items removed from day one scope after consultations.

AGENDA ITEM 5: Project 'Define and Plan' phase

The ASX Delivery Lead, CHESS Replacement Project provided the update on the re-design plan.

The project has been structured into four work streams, with key activities to be completed over the next nine months to reach the solution design. Once solution design is confirmed, ASX will move into the detailed planning of market activities and establish a go-live date. The work streams are:

- Product Definition and Business Case
- Solution Assessment
- Sourcing and Commercial
- Testing and Implementation

The purpose of the Product Definition and Business Case work stream is to define the business strategy, which will in turn define the program objectives discussed in Agenda Item 3, along with the project scope. The output of this work stream is a business case detailing the options considered, the selected option, risks, benefits, market impact, high-level costs and timeline. Once the solution design is confirmed, ASX will move into the detailed planning of market implementation activities and establish a go-live date.

The Solution Assessment work stream is responsible for building out the solution decision framework, evaluation of the current solution and remediation of core issues, reusability of existing features and evaluation of potential vendor products. The solution decision framework is currently being developed and ASX will request Technical Committee member feedback in a future meeting. The key milestone and output of this work stream is the solution design, targeted to be announced in Q4 2023.

The Sourcing and Commercial work stream assesses what vendor solutions are available in the market. An RFI has been sent to potential vendors to assess their capability, as discussed in Agenda Item 6, while recognising there is no 'off the shelf' vendor solution that will meet all the requirements of the Australian market. Vendor responses are expected in mid-March. The output of this work stream will be the identification of a vendor who is available to carry out the assessment of customisation and integration requirements of their solution, and pass ASX's assessment utilising the solution decision framework.

The Testing and Implementation work stream consists of exploring opportunities and minimising risk in the implementation approach, such as a phased approach instead of a single cutover. The recommendations and actions resulting from Accenture's independent report will also be assessed during this phase. The output of the current testing and implementation status will be discussed in future Technical Committee meetings to seek stakeholder feedback.

The Chair noted the risk around the unknowns with a commercial vendor's processes and potential longer lead times than expected and therefore may impact the timeline for a Q4 2023 announcement on a solution design.

Member discussion:

A member questioned the feasibility of revalidating and confirming project scope in parallel to a solution option evaluation. The chair reinforced the primary focus of the solution option evaluation process will be on meeting ASX's license and market obligations. All other project scope will be considered, assessed and prioritised on this basis.

A member raised concerns of the potential for change to ASX's timeline should workshops uncover inconsistencies with the chosen option. The Chair agreed, the ASX may require an extensive RFP. However a decision has not been made and the project scope needs to be baselined as soon as possible.

A member asked about change control and potential changes to scope that are expected later in the year. The Chair noted the scale of the project and that areas of concern will be managed as they arise, and are not limited or reliant on one specific phase to be completed. The Chair also noted project scope can be incremental and agnostic to the solution decision.

A member enquired whether using a vendor and outsourcing is the only option for the CHES Replacement Project, or if there is an option to build in-house. The Chair responded that the solution could be either, or a combination of outsourcing and building in-house.

A member asked whether Digital Asset had been included in the RFI process and questioned whether ASX had any conflict of interest given ASX's investment in the company. The Chair noted that Digital Asset has not been included in the RFI process. The ASX Business Committee Chair also added, it does not prevent us from using parts of what has already been built if it is determined that adjustments can be made to the current design. ASX's focus is the consideration of all factors, including addressing the core issues outlined in the independent report, before a decision is made.

AGENDA ITEM 6: Vendor Solutions – RFI Update

The ASX Commercial Lead, CHES Replacement Project provided an update on the RFI process.

Completed work to date included:

- Market scan to review the top global 20 exchanges and their central security depositories (CSD), and assess the technology used in clearing, settlement and CSD's
- Output of scan noted an approximate 50/50 split between proprietary versus vendor products, and identified a list of suitable vendors to receive the RFI
- The RFI, containing approximately 50 functional and non-functional questions, was released to vendors on 20 February with responses due on 13 March. The principles used to formulate the questions included:
 - How the solution will meet the core requirements of CHES?
 - How the solution will meet features unique to the Australian market?
 - How the solution addresses the 6 core issues outlined in the Accenture report?
 - How the information will help inform the solution design and ASX's understanding of the technology fit?
- The evaluation methodology for vendors and suitable solutions will be considered as part of the overall CHES Replacement solution design

Examples of some of the RFI questions were outlined in the presentation slides.

Member discussion:

A member asked how many vendors were sent the RFI. The Chair confirmed the number of recipients is currently 4. It should be noted that other potential vendors may still be included in the RFI process.

A member questioned if there were any trends amongst the 20 exchanges included in the market scan and how the technology leveraged (proprietary build or vendor based) affected their upgrade activities and whether this influenced whether these activities are conducted internally versus externally. The Chair noted that for many exchanges with a proprietary build, that technology upgrades are most commonly made internally. The Chair also noted vendor solutions appear more suitable to clearing and that ASX does not have any additional trend data on recent technology upgrades amongst the top 20 exchanges.

AGENDA ITEM 7: Other Matters

a) Forward Work Plan

The ASX Senior Manager, Equity Post Trade, Securities and Payments provided an update on the forward work plan and future industry and stakeholder engagement activities.

Engagement activities with stakeholders will consist of the Technical Committee meetings, focus groups, market webinars, project update eDMs, updates to the CHES Replacement website, pulse checks with Technical Committee members, and the CHES Replacement mailbox for further queries. Stakeholders are not expected to form dedicated project teams for CHES Replacement in 2023, the current expectation is for stakeholders to engage through the various channels provided by ASX to ensure that their views are considered as the project progresses.

ASX is not planning to reinstate the series of bilateral meetings as there are no designated CHES delivery teams to be re-established this year. ASX remains open to meeting with stakeholders on a case-by-case basis, however the ASX Senior Manager, Equity Post Trade, Securities and Payments encourage queries and feedback to be raised during the Technical Committee forums, to provide visibility of suggestions and feedback for other members.

ASX supplied a list of topics in focus for future meetings and requested members communicate topics they would like to have discussed in future meetings.

Calendar invitations will be sent for the next meeting on 8 March 2023, as well as for future monthly meetings in 2023 thereafter.

b) AOB

No matters raised.

c) Next meeting – 8 March 2023

The next Technical Committee on 8 March 2023 will discuss the opportunities for a staged implementation in addition to the standing agenda items of project status updates, risks and issues and project scope.

The meeting closed at 4.05pm.

Signed as a correct record of the meeting.

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

Chair

12 April 2023

Date