

# ASX CHESS Replacement

Implementation & Transition Working Group

5 June 2024



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

ARTWORK BY: LEE ANNE HALL, MY COUNTRY MY PEOPLE



# 01 – 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 capturing decision and actions
- > Dial in details (audio only):
  - **+61 2 7208 4607**
  - Phone Conference ID: 596 113 195#
- > Presentation materials were distributed before the meeting and will be published on the website

# 01 – 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.

# Agenda

01 – Welcome and housekeeping

02 – Release 1 Scope Changes

03 – Release 2 Timeline

04 – Opportunities for Staged Implementation

05 – Forward Engagement and AOB

# 02 – Release 1 Scope Changes

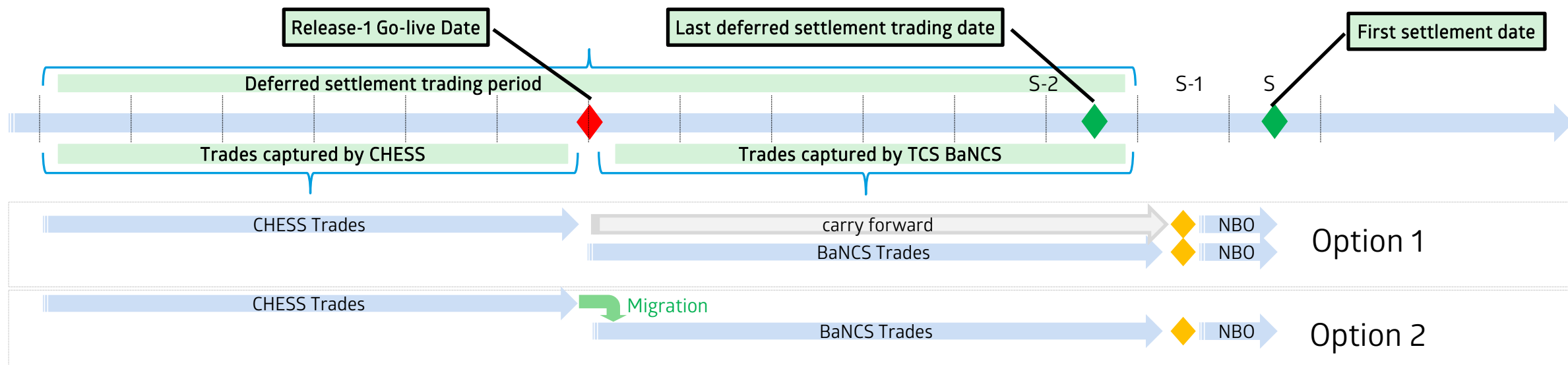
## Un-netting

- > Un-netting is used to correct for operational errors i.e. where trades are incorrectly netted which should have been held gross
- > Un-netting is applied to a selected Security. It is applicable to all trades that were netted into a Net Broker Obligation (NBO) and results in the reinstatement of the trades as gross settlement and the cancellation of the NBO
- > Clearing Participants are notified of the un-netting results with EIS 136 and 140 messages listing the reinstated trades and cancelled NBOs
- > The last time un-netting was used by an ASX Clearing & Settlement Participant was 2015, where a deferred settlement date was not set, consequently trades had to be un-netted
- > Reference data changes are operationally more robust under the current ASX systems and the likelihood of an un-netting scenario arising is minimal
- > Given the unlikelihood of un-netting, we are proposing the removal of this functionality
- > Eliminating the un-netting process would have the following benefits:
  - Removal of two backward compatibility EIS messages from CP regression testing
  - Reduction of project technical risk
- > Once CHES Replacement is live, should the need to remove trades from a net position arise for any reason, there will be manual work-around options that can be deployed to unwind and reinstate netted trades

# 02 – Release 1 Scope Changes (contd.)

## Deferred Settlement

- > 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. CHESSE vs BaNCS) with two resulting sets of settlement instructions (either net or gross)
  - Option 2: Migrate trades captured in CHESSE to TCS BaNCS to allow them to net all deferred settlement trades on S-1



# 02 – Release 1 Scope Changes (contd.)

## Deferred Settlement

Approach	Pros	Cons
Option 1 (separate settlements)	<ul style="list-style-type: none"> <li>&gt; Eliminate need for trade migration - lower overall effort and risk for ASX and the industry</li> <li>&gt; Would utilise existing messages and processes supported by participant systems</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Non-typical scenario that may require regression testing in participant systems.</li> </ul>
Option 2 (migration)	<ul style="list-style-type: none"> <li>&gt; No change to the existing process, would appear to be least impactful from a participants backward compatibility viewpoint</li> </ul>	<ul style="list-style-type: none"> <li>&gt; A more complex solution requiring more effort, testing and carrying more risk.</li> <li>&gt; Trades registered in CHESSE would need to be removed and loaded into BaNCS.</li> </ul>

Option 1 could be handled by either:

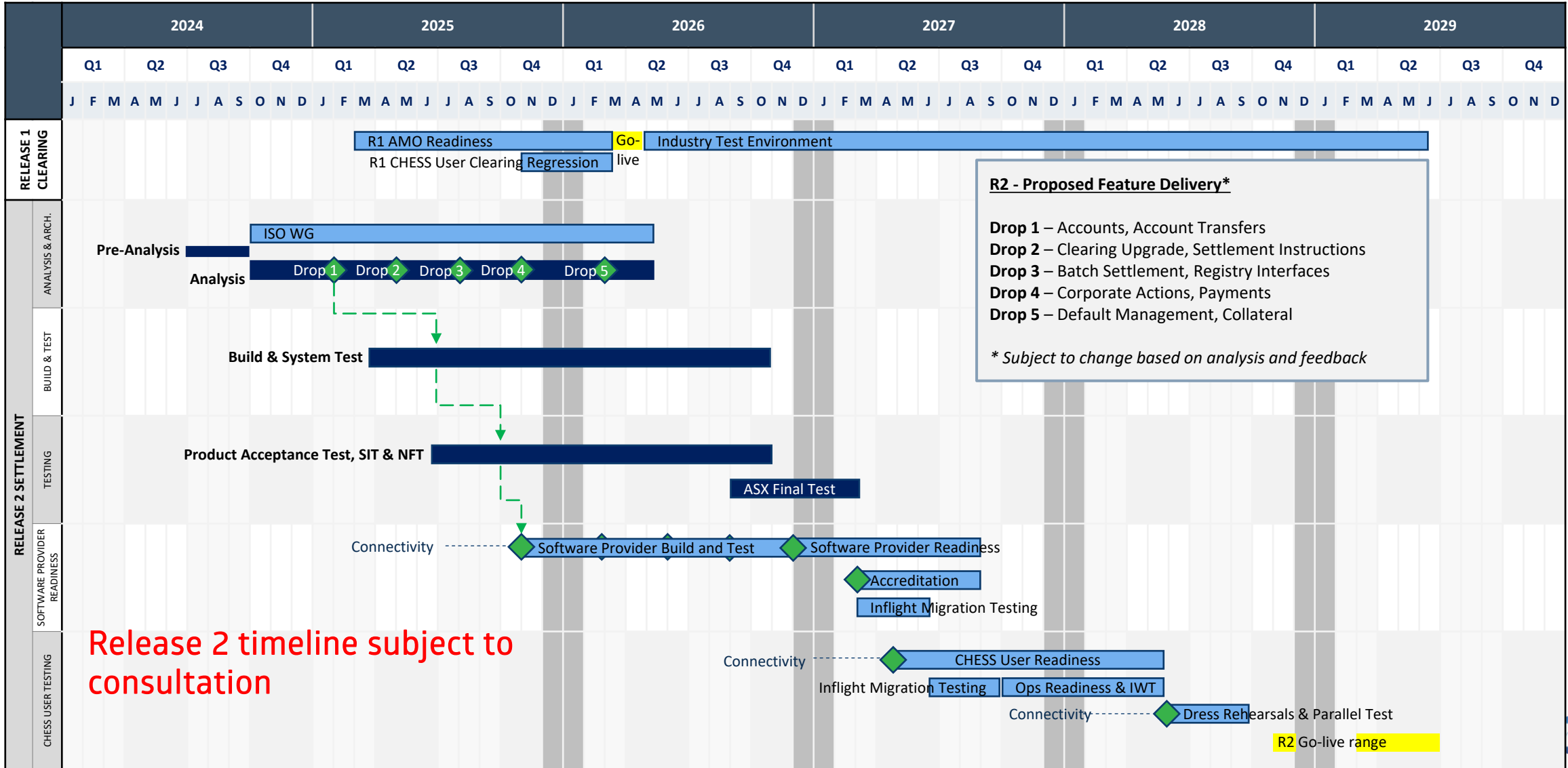
- > Net trades separately in CHESSE & BaNCS resulting in two NBOs for the settlement date
- > Leave trades gross in CHESSE, net those registered in BaNCS resulting in an NBO and gross settlements for the same settlement date.
- > Disable netting and settle all deferred transactions on a gross basis.

This applies to deferred settlement securities that span the go-live weekend only.



# 03 – Release 2 Timeline

Indicative timeline subject for further consultation and assessment



**R2 - Proposed Feature Delivery\***

- Drop 1** – Accounts, Account Transfers
- Drop 2** – Clearing Upgrade, Settlement Instructions
- Drop 3** – Batch Settlement, Registry Interfaces
- Drop 4** – Corporate Actions, Payments
- Drop 5** – Default Management, Collateral

\* Subject to change based on analysis and feedback

Release 2 timeline subject to consultation

# 03 – Release 2 Timeline

## What we have heard

Key feedback points considered as part of proposing an indicative Release 2 timeline:

- > Minimise overlapping industry activities between Release 1 and Release 2.
- > Allow for early access to stable code.
- > Perform accreditation on the final ASX code base.
- > Provide optionality for CHES users to commence testing with or without accredited software.
- > Consider parallel testing and peak volume IWT as part of industry testing.
- > Avoid overlap of mandatory industry test activities (IWT and dress rehearsals).
- > Avoid scheduling critical test activities over holiday periods.
- > Consider T+1 as part of planning Release 2

# 03 – Release 2 Documentation

## Additional information

We will provide a suite of Release 2 documentation at least 3-6 months prior to the commencement of the corresponding industry test phase, with the aim of providing adequate time for CHESSE users and Software Providers to prepare.

Document	Purpose of Document	Audience
Functional and Technical Specifications for CHESSE Users	Provide a detailed specification of all ISO messages including message structures, rules, message flow diagrams etc. ASX intends to provide this documentation via five drops.	CHESSE Users and Software Providers
CHESSE Replacement Release 2 Industry Test Approach	Describe the detailed approach and responsibilities, timing, entry and exit criteria and expected test outcomes for each Industry Test phase.	CHESSE Users and Software Providers
Release 2 Connectivity Guide	Detail the technical connectivity requirements to connect to the CHESSE replacement system including connectivity method(s), network details and security details.	CHESSE Users and Software Providers
Failover and Recovery Guide	Provide information on failover testing, covering what components ASX will simulated-fail and proposed frequencies.	CHESSE Users and Software Providers
Release 2 Technical Accreditation Guide (with detailed accreditation scenarios)	Provide an overview of the CHESSE replacement Technical Accreditation phase, expectations regarding conduct and expected results including the accreditation process, connectivity scenarios and message scenarios.	CHESSE Users and Software Providers
Release 2 Guide to Operational Readiness Phase (with ASX mandated Operational Readiness scenarios)	Outline the Operational Readiness scenarios including mandatory success criteria.	CHESSE Users
Release 2 Cutover and Migration Approach	Details the cutover and migration approach, key activities, responsibilities and milestones across the cutover window and dress rehearsal windows.	CHESSE Users and Software Providers
Cutover Runbook	Provide CHESSE Users with key tasks and milestones with an outline of detailed steps including planned timing. The runbook will be used in dress rehearsals and refined as required ahead of the final go-live event. Note that the cutover runbook will also include the steps required to backout.	CHESSE Users

# 04 – Opportunities for Staged Implementation

## Introduction

- > Whilst the market welcomes the introduction of Release 1 as a sensible way to break the project up, many are looking for additional opportunities to derisk Release 2.
- > ASX proposals were presented to the Technical Committee in March 2023 for feedback
- > Participant feedback and suggestions were provided in April 2023 and in response to CP1
- > Review of proposals carried out with reference to market feedback, program objectives, CHES characteristics, and case studies
- > Potential proposals are subject to impact assessment and consultation

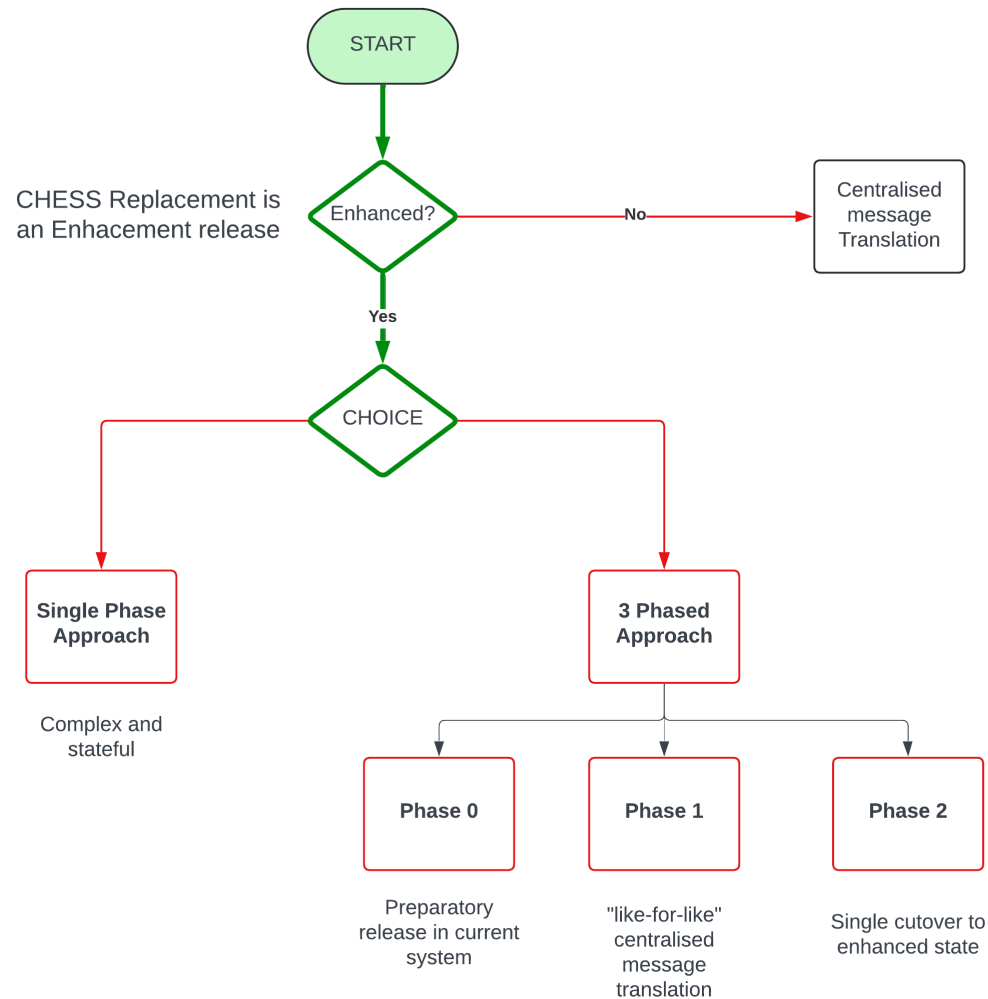
# 04 – Opportunities for Staged Implementation

## Centralised Message Translation – Definition & Role

- > Market infrastructure provides a capability to automatically translate messages from one format to another so that a user can use either the old interface or the new interface.
- > This allows users of market infrastructure to transition individually or in groups over a multi-month transition window
- > The project has previously stated that it will consider centralised message translation where it:
  - is risk reducing, and
  - aligns with project objectives, and
  - is technically viable
- > A simplified version of centralised message translation for a small number of "like-for-like" messages is being used to enable backwards compatibility in R1

# 04 – Opportunities for Staged Implementation

## Centralised Message Translation - Two Approaches for Enhanced Target States



The SWIFT information paper "ISO 2022 Implementation Strategies" describes two possible approaches when considering message translation for an enhancement project as shown in the diagram:

- Single Phase Approach
- 3 Phased Approach

CHES Replacement considerations:

- CHES Replacement is an Enhancement project, not a "like-for-like" project
- Large number of business domains (12) and ISO 2022 message types (106) relative to case studies
- Business processes that span multiple stakeholder types making it difficult to isolate a single stakeholder type - it's all or nothing

The **Single Phase Approach** requires a complex and stateful translation service, that also requires changes to existing systems to support enhanced data delivered through an alternate means. Given the diversity of business processes, message types, message volumes, and process enhancements this approach would be highly complex and therefore not risk reducing.

The alternate **3 Phased Approach** aims to address the complexity of the Single Phase Approach by ensuring translation is only "like-for-like". It introduces schedule and cost increases for the market, delaying introduction of change in services, and ultimately requires a single cutover anyway.

***".....like-for-like does have some serious pitfalls..... if the aim is to introduce significant new functionality using ISO 2022, like-for-like should be handled with care"*** - SWIFT information paper ISO 2022 Implementation Strategies,

# 04 – Opportunities for Staged Implementation

## Centralised Message Translation - Assessment for use in R2 not positive

Approach	Risk Reducing	Alignment	Technical Viability
3 Phased ("like-for-like")	<b>No</b> - Introduces schedule risk that results from needing a 3 phased approach, which ultimately <b>requires a single cutover anyway</b> (refer Insights from Case Studies)	<b>Poor</b> - Increases schedule and cost for the market, delaying introduction of change in services	<b>Viable</b> <ul style="list-style-type: none"> <li>&gt; like-for-like</li> <li>&gt; stateless</li> <li>&gt; simple rules</li> </ul> <b>but</b> <ul style="list-style-type: none"> <li>&gt; very large number of message types (&gt;500) would mean significant build</li> </ul>
Single Phase (Enhanced)	<b>No</b> - Requires large and highly complex technical implementation for both ASX and the market (refer Insights from Case Studies)	<b>Poor</b> - Increases schedule and cost for the market, delaying introduction of change in services, and introduces significant technical risk through complex translation component	<b>Not Viable</b> <ul style="list-style-type: none"> <li>&gt; not like-for-like</li> <li>&gt; stateful</li> <li>&gt; complex rules</li> <li>&gt; very large number of message types (&gt;500) would mean significant build</li> </ul>

**CONCLUSION:** Centralised message translation is not risk reducing or aligned to project objectives. In addition, the Single Phased Approach would not be technically viable due to need to be stateful and contain complex business rules.

# 04 – Opportunities for Staged Implementation (contd.)

## ASX and CHES user proposals - Part 1

General Opp.	Specific Opp.	Description	Enablers Required	Assessment
Staging by Issuer	N/A	Migrate Issuers (and all associated activity) to the new system in tranches	<ul style="list-style-type: none"> <li>&gt; Second Settlement Batch</li> <li>&gt; Participants and registries would need to interact with CHES EIS and ISO 20022 concurrently</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Split support by the market</li> </ul>
Staging by Function	Clearing	Optional receipt of ISO 20022 clearing messages in parallel with EIS or exclusively	<ul style="list-style-type: none"> <li>&gt; CHES Replacement would need to support EIS and ISO 20022 version of clearing messages</li> <li>&gt; Clearing Participants wanting to leverage this would need to run either:                             <ul style="list-style-type: none"> <li>• a parallel environment containing their new system to receive the ISO 20022 messages for testing purposes only</li> <li>• a modified version of their current system that could handle the ISO 20022 version of the clearing output</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>&gt; Potential support from some Participants</li> <li>&gt; Impact assessment pending</li> </ul>
Staging by Function	Clearing	Optional early access to UI to see net positions in real time	<ul style="list-style-type: none"> <li>&gt; CHES Replacement would need to support early access to the TCS BaNCS customer user interface</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Potential support from some Participants</li> <li>&gt; Impact assessment pending</li> </ul>



# 04 – Opportunities for Staged Implementation (contd.)

## ASX and CHES user proposals - Part 2

General Opp.	Specific Opp.	Description	Enablers Required	Assessment
Staging by Function	Settlement	Perform batch settlement in new system	<ul style="list-style-type: none"> <li>&gt; Participants would need to interact with CHES EIS and ISO 20022 concurrently</li> <li>&gt; Requires access to holdings/obligations still located on current CHES implying data synchronisation requirement</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Split support by the market</li> <li>&gt; Data synchronisation complexity</li> </ul>
Staging by Function	Settlement	Demand instructions	<ul style="list-style-type: none"> <li>&gt; Participants would need to interact with CHES EIS and ISO 20022 concurrently</li> <li>&gt; Requires access to holdings data still located on current CHES implying data synchronisation requirement</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Split support by the market</li> <li>&gt; Data synchronisation complexity</li> </ul>
Staging by Function	Settlement	Scheduled instructions	<ul style="list-style-type: none"> <li>&gt; Participants would need to interact with CHES EIS and ISO 20022 concurrently</li> <li>&gt; CHES Replacement would need to extend R1 capability of submitting obligations for settlement in current CHES to include non-novated</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Split support by the market</li> </ul>
Staging by Function	Settlement	More complex variation of Scheduled Instructions that supports Issuer and Participants migration tranches (referred to by proposer as CHES Replacement as a PID in CHES)	<ul style="list-style-type: none"> <li>&gt; Participants would need to interact with CHES EIS and ISO 20022 concurrently</li> <li>&gt; Requires centralised message translation and complex routing</li> <li>&gt; CHES Replacement would need to extend R1 capability of submitting obligations for settlement in current CHES to include non-novated</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Split support by the market</li> <li>&gt; NOTE: Also relies on CMT</li> </ul>
Staging by Function	Settlement	Migrate RITS interface to ISO 20022	<ul style="list-style-type: none"> <li>&gt; CHES Replacement and RBA support ISO 20022 for net batch settlement in RITS</li> <li>&gt; Message translation from 15022 to 20022</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Low value opportunity (no market benefit)</li> </ul>

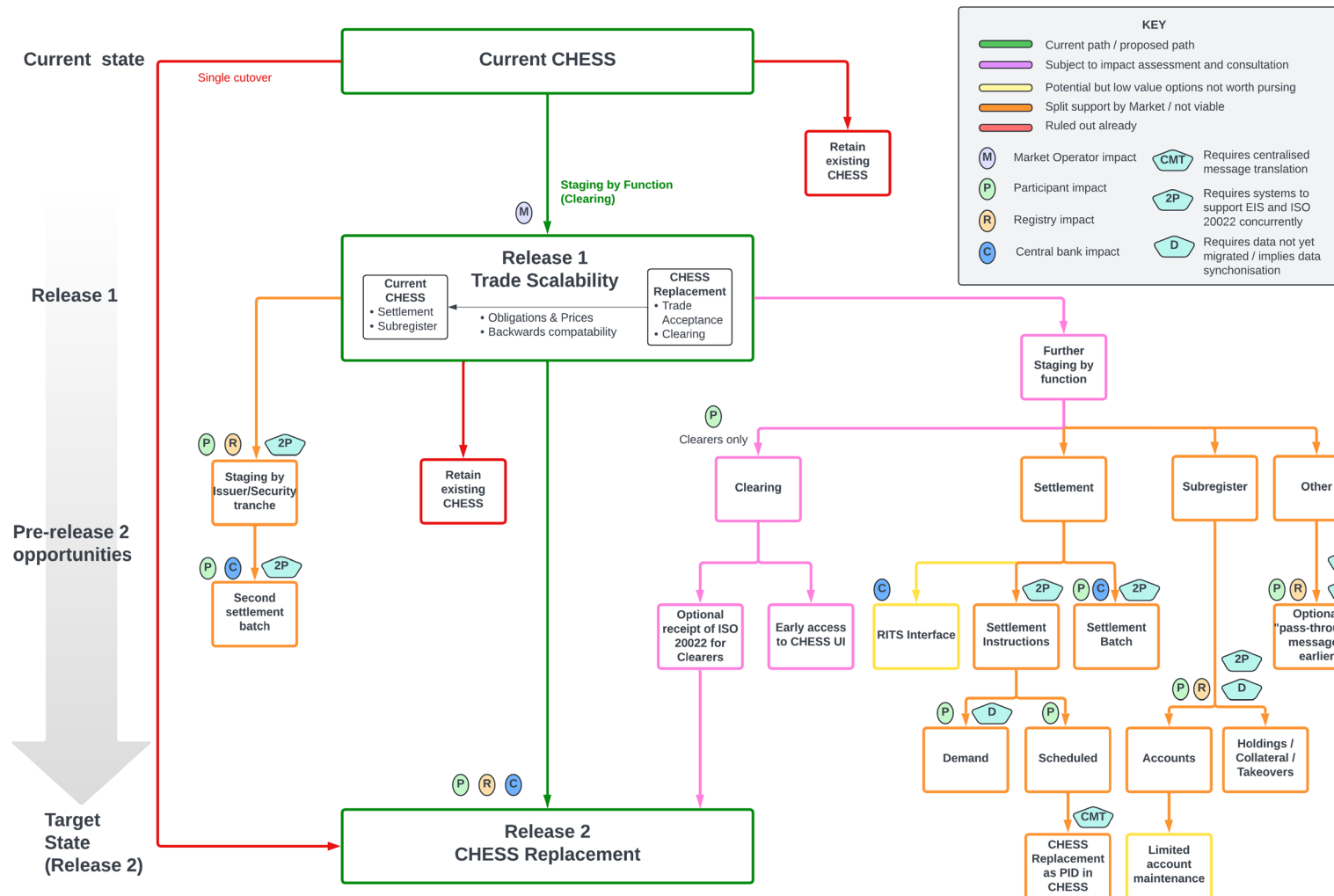
# 04 – Opportunities for Staged Implementation (contd.)

## ASX and CHES user proposals - Part 3

General Opp.	Specific Opp.	Description	Enablers Required	Assessment
Staging by Function	Subregister	Account maintenance	<ul style="list-style-type: none"> <li>&gt; Participants would need to interact with CHES EIS and ISO 20022 concurrently</li> <li>&gt; Implies account data synchronisation requirement</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Split support by the market</li> <li>&gt; Data synchronisation complexity</li> </ul>
Staging by Function	Subregister	Limited Account Maintenance (create but not use until R2)	<ul style="list-style-type: none"> <li>&gt; Participants would need to interact with CHES EIS and ISO 20022 concurrently</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Low value opportunity (cannot actually use accounts)</li> </ul>
Staging by Function	Subregister	Holdings/ Collateral/ takeovers	<ul style="list-style-type: none"> <li>&gt; Participants and Registries would need to interact with CHES EIS and ISO 20022 concurrently</li> <li>&gt; Implies account data synchronisation requirement to enable batch settlement</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Split support by the market</li> <li>&gt; Data synchronisation complexity</li> </ul>
Staging by Function	Other	Optional “pass-through” messages (tax/bank advice, SRN enquiries)	<ul style="list-style-type: none"> <li>&gt; Participants and Registries would need to interact with CHES EIS and ISO 20022 concurrently</li> <li>&gt; Requires centralised message translation and complex routing</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Split support by the market</li> <li>&gt; Requires centralised message translation and complex routing</li> </ul>
Retain existing CHES	N/A	Retain CHES EIS, remediate CHES issues	N/A	<ul style="list-style-type: none"> <li>&gt; The case for CHES Replacement was presented to the technical committee in 2023</li> </ul>

# 04 – Opportunities for Staged Implementation (contd.)

## Summary of Opportunities



# 05 – Forward plan and AOB

## CY2024 Schedule

TC Meeting	Date	Time
June meeting	Thursday 6 June	2pm – 3.30pm
July meeting	Wednesday 10 July	2pm – 3.30pm
August meeting	Wednesday 7 Aug	2pm – 3.30pm
September meeting	Wednesday 11 Sept	2pm – 3.30pm
October meeting	Wednesday 9 Oct	2pm – 3.30pm
November meeting	Wednesday 6 Nov	2pm – 3.30pm
December meeting	Thursday 5 Dec	2pm – 3.30pm

BC Meeting	Date	Time
June meeting	Wednesday 26 June	12pm – 2pm
September meeting	Wednesday 18 Sept	12pm – 2pm
December meeting	Wednesday 11 Dec	4pm – 6pm

# Disclaimer

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# Questions

Thank you.

