

ASX CHESSE Replacement Project Webinar

Q3 update

28 September 2017

Presenters and introductions



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Reminder to submit questions

The screenshot shows a webinar interface with three main windows:

- Contact Us:** A form with fields for 'To' (chessreplacement@asx.com.au), 'From', 'Subject' (Query from 28 Sept Project Update webinar), and 'Body'. It includes a security code '60043' and a 'Send' button.
- Slides:** A central slide titled 'ASX CHES Replacement project webinar' with a subtitle 'Q3 update' and the date '28 September 2017'. The ASX logo is in the bottom right.
- Ask a Question:** A window on the right with a large text area, an 'Enter your question' input field, and a 'Submit' button. This window is circled in red.

At the bottom, a navigation bar contains icons for a question mark, a microphone, 'Q&A', and an envelope.

Agenda

Project Overview

Stakeholder Engagement

- Business Requirements

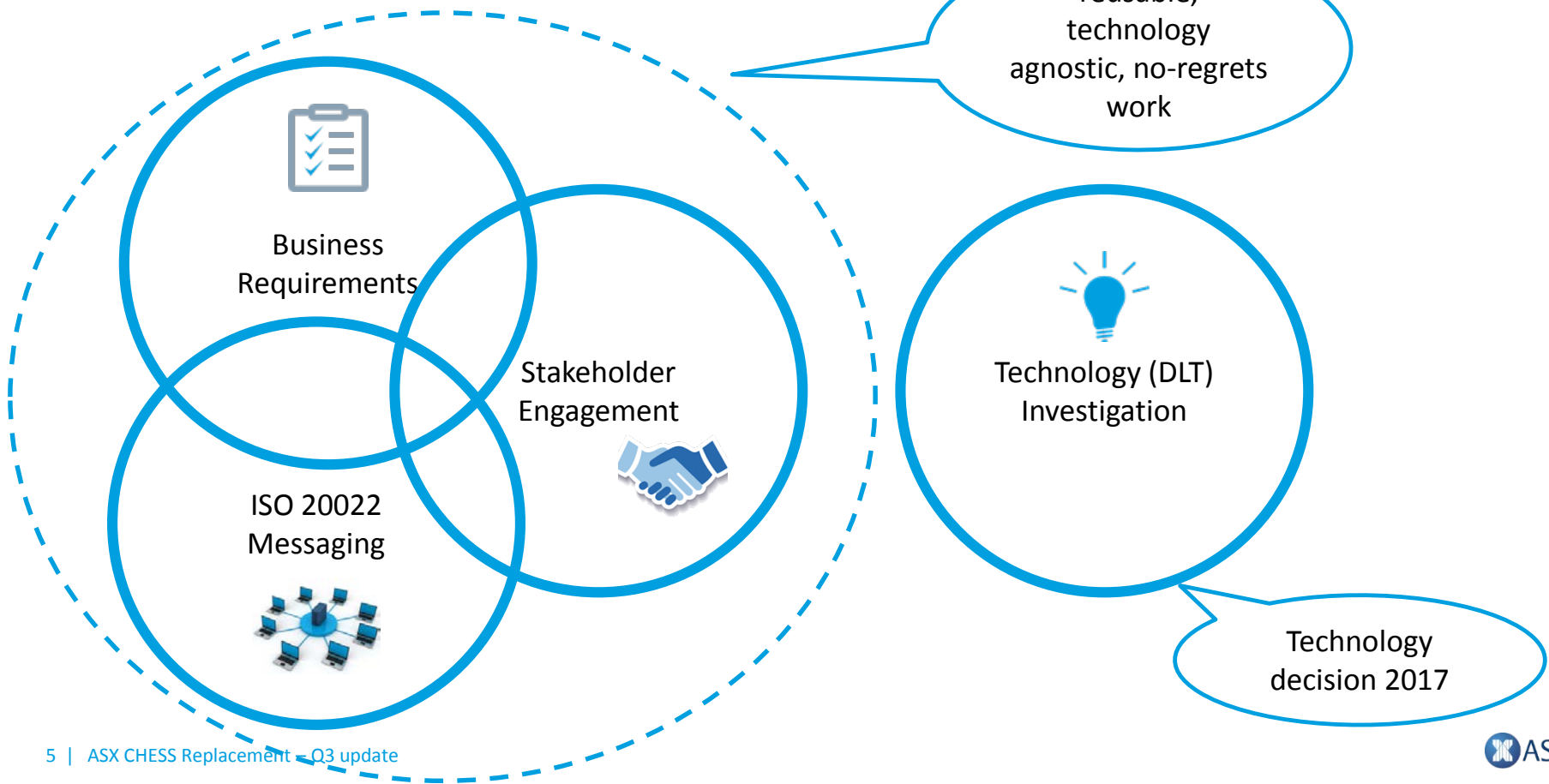
ISO 20022 Messaging

Technology Assessment

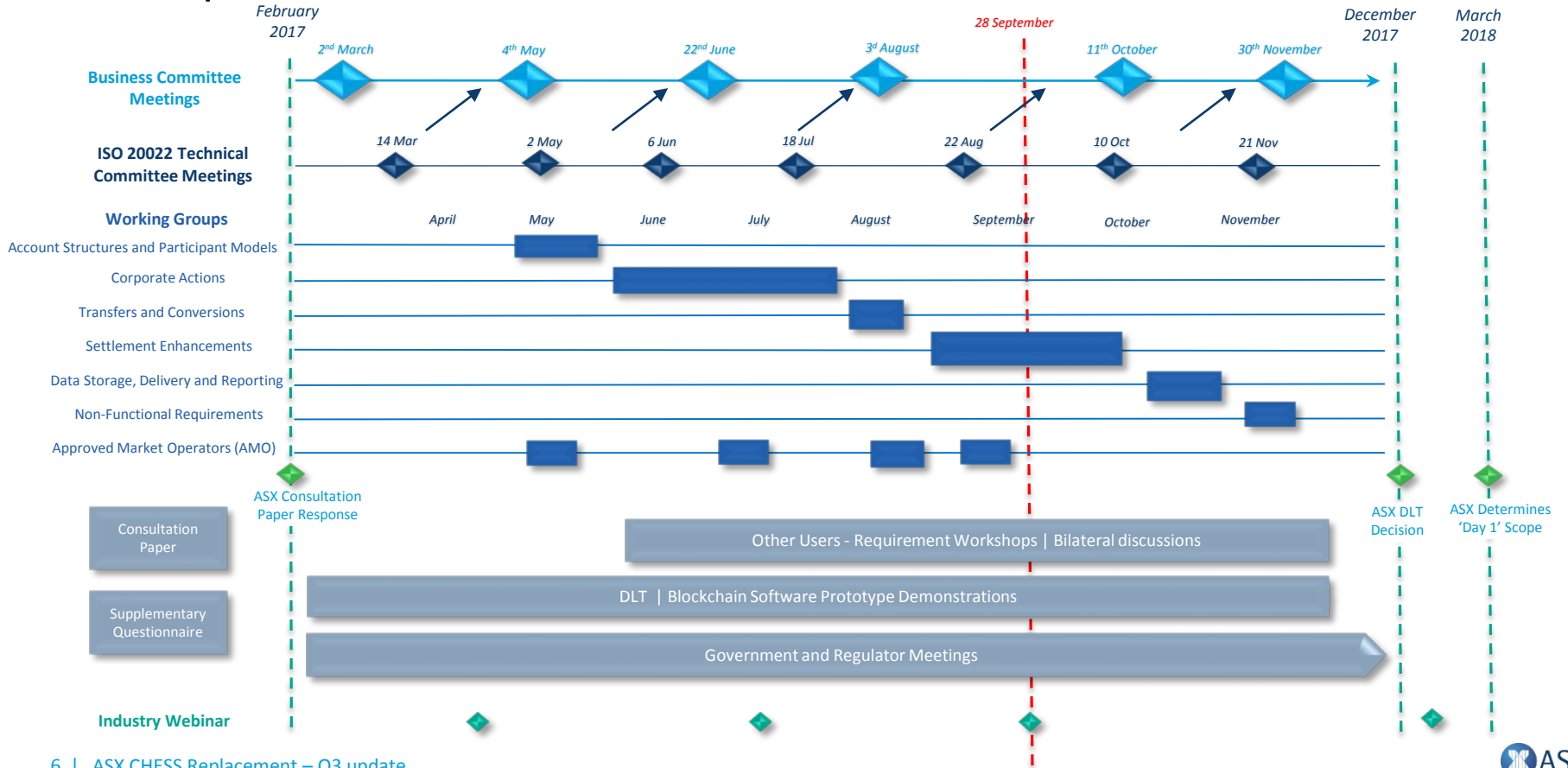
Where to find more information

Q&A

Recap on how we've structured the work...

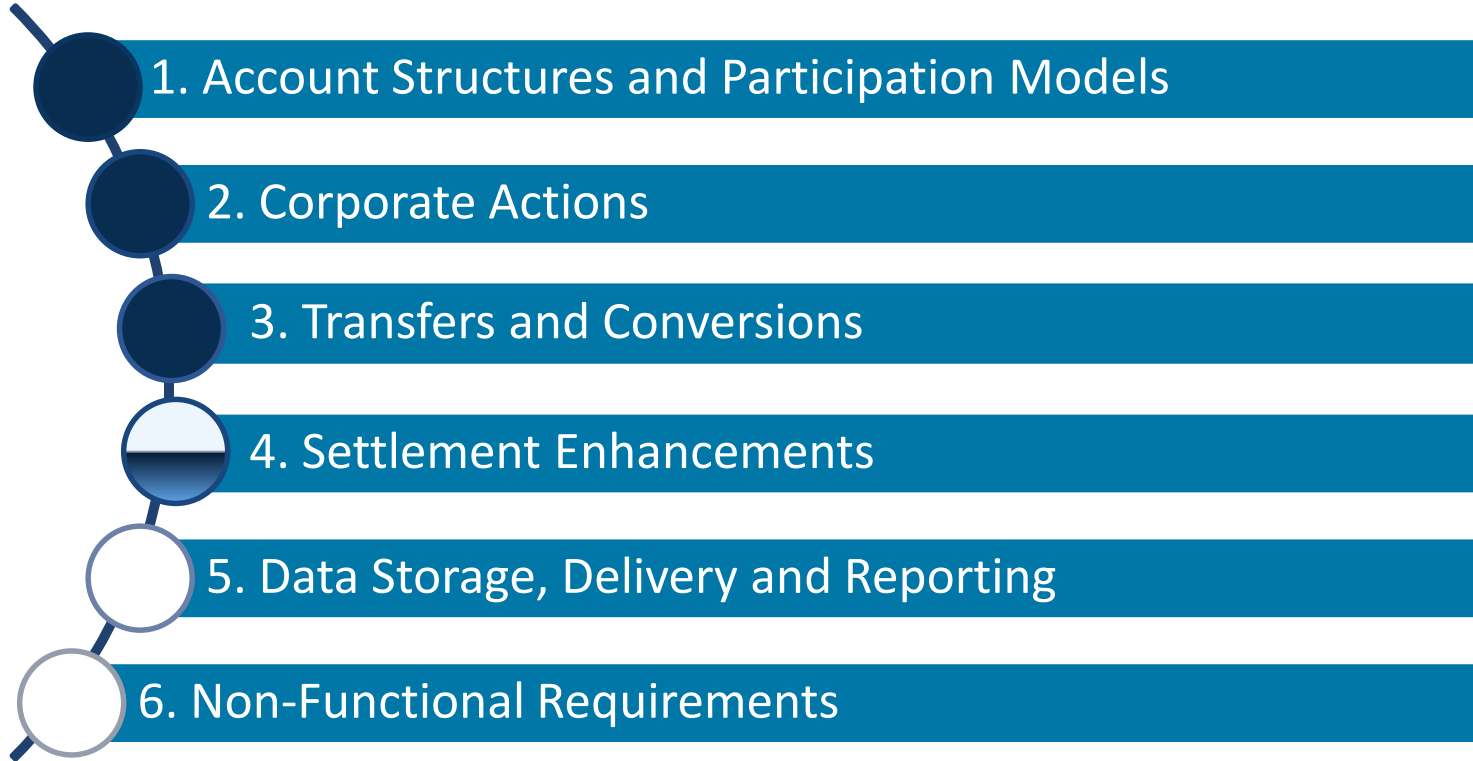


Roadmap 2017



Stakeholder Engagement

The 6 Working Groups Overview – Business Requirement Topics



Update on the input to Stakeholders' Business Requirements

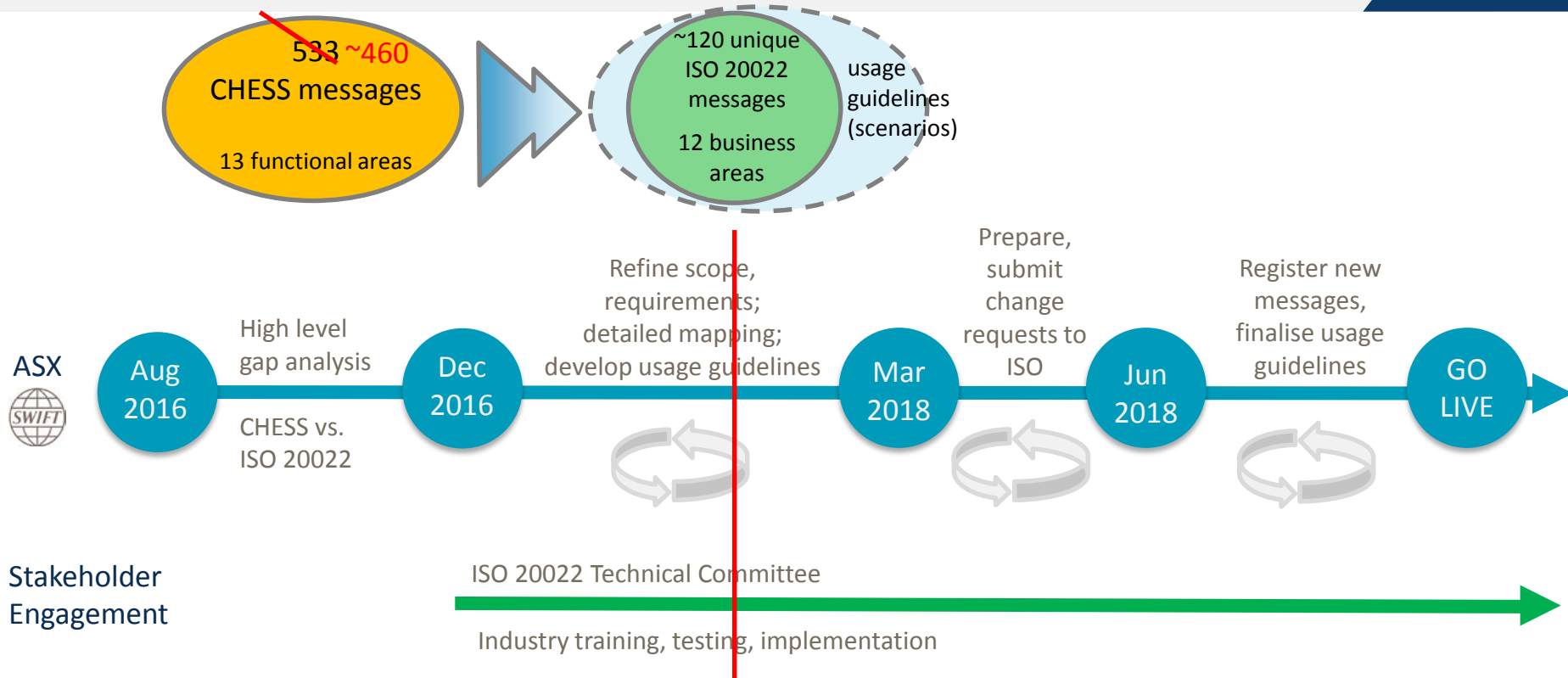
- Broad cross section of stakeholders with strong engagement levels
- 32 high level draft Business Requirements captured to date
- Review and feedback continues to be an iterative process
- Transfers and Conversions Working Group:
 - 4 draft Business Requirements identified including “Standardisation of Registration Details”
- Settlement Enhancements Working Group:
 - 11 draft Business Requirements identified including “Issuer Sponsored SRN Transparency” & “Bilateral DvP Settlements Post the Daily Settlement Cycle”

Next Steps for the input to Stakeholders' Business Requirements

- Complete the remaining Working Groups and identify any additional Business Requirements
- Seek stakeholder prioritisation of Business Requirements
- Consultation paper on the scope for ASX CHESS Replacement
- Announce the scope and plan for ASX CHESS Replacement

ISO 20022 messaging

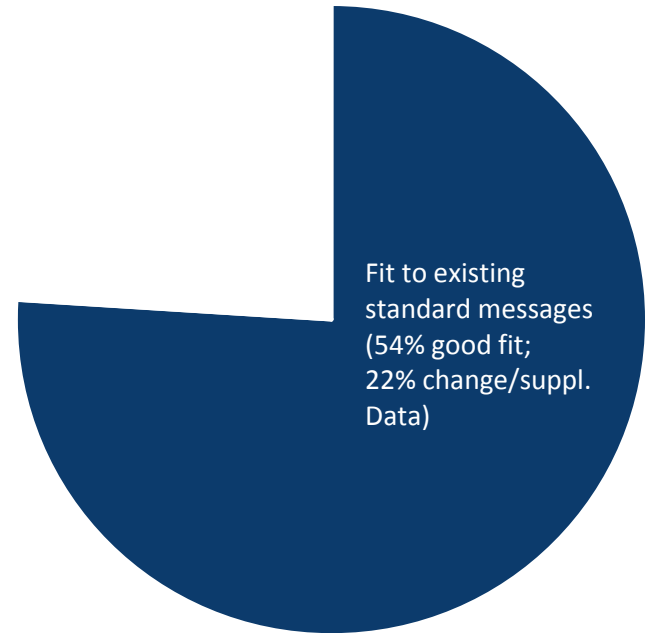
The ISO 20022 adoption process



Mid year checkpoint – ASX/SWIFT

7 day workshop July/August – key topics:

- Review of 1H 2017 mapping, checks for consistency at message and field level
- Review of transaction id model
- Review change request profile
- Review new message candidates and modelling
- Review scope and planning for 2H 2017 detailed mapping
- View of ISO 20022 documentation from other markets
- Review ISO 20022 best practice

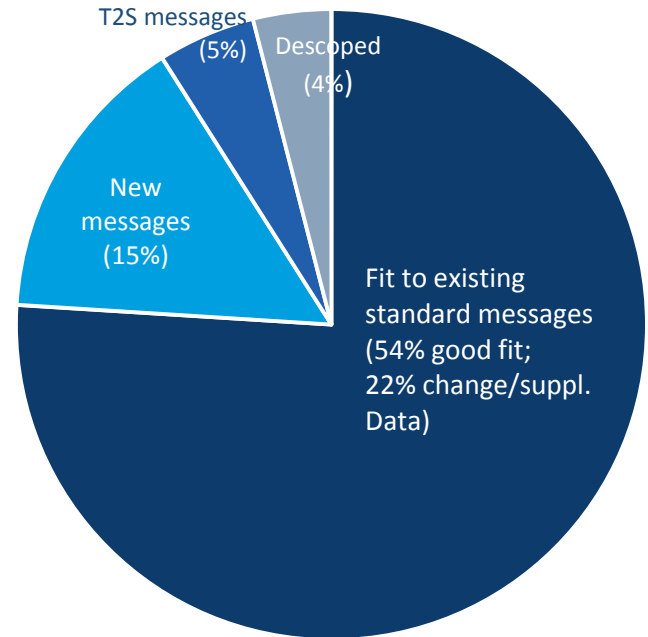


Make-up of draft ISO 20022 message set – 130 messages mapped during 1H 2017

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Make-up of draft ISO 20022 message set – 130 messages mapped during 1H 2017

Key themes from ISO 20022 Technical Committee

- 7 meetings held to date with great engagement

Additional themes discussed in Q3:

- Achieving ISO 20022 compliance
- Further opportunities to descope current messages such as report related messages
- Adopt universal date and time format
- Further circumstances to de-scoping functionality where there may be alternate processes/methods in CHES, not easily mapped
- Tracking transaction flows – transaction ids
- Adopt minimum standard or utilise data depth available

What's next?

- 2 more Technical Committee meetings in 2017 and planning for 2018
- Attendance at SIBOS mid October, ASX representation on panels, Market Infrastructure forums

Technology Assessment

Distributed Ledger Technology Assessment

- ASX selected Digital Asset to develop DLT based clearing and settlement functionality to enable ASX to assess the suitability of the technology and the vendor for the replacement of CHES
- The system being delivered in 2017 will not be complete
- The delivered system contains significant functional complexity arranged in real world end-to-end scenarios allowing ASX to perform a suite of rigorous functional and non-functional tests
- Testing results will provide ASX with data input to the December 2017 technology decision

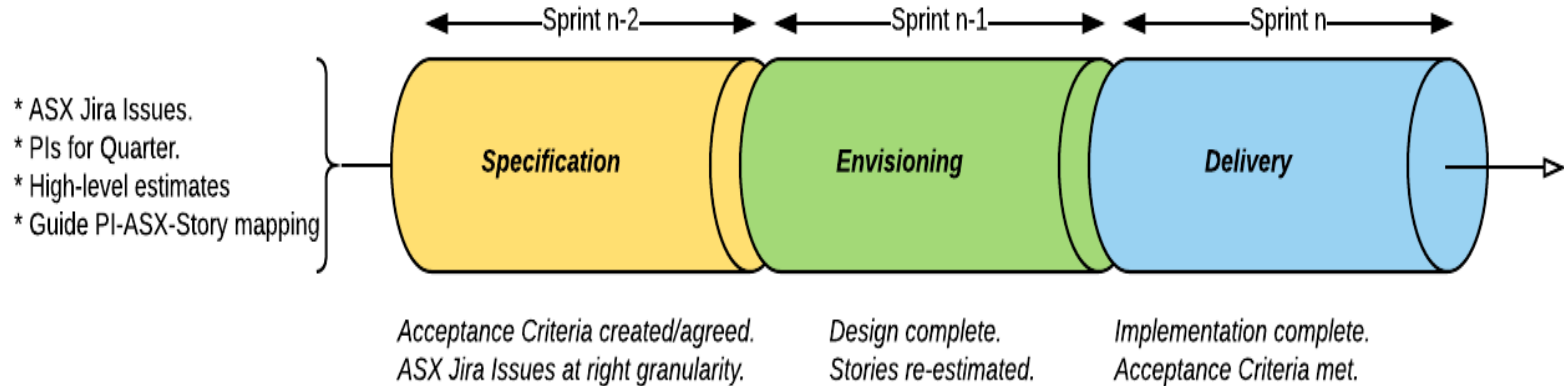
Requirements Generation

➤ The requirements being developed and tested are contained in the following categories:

- Actor (Users)
- Asset (Securities)
- Trade Registration
- Netting
- Settlement Preparation
- Settlement
- Corporate Actions
- Clearing
- Holding Management
- Default Management
- mFund
- Billing
- Reference Data
- Administration
- Technical Requirements
- Non Functional Requirements

Software Delivery Model

- A lean delivery model
- Requirements are prioritised and specified for build



Assessment Process

- Based on working software
- Running on ASX production equivalent specification infrastructure in the ALC (Australian Liquidity Centre)
- High quality documentation and releases
- Automated regression and manual exploratory testing
- Defect resolution quality and speed
- Repeatability of processes
- Behave as though we are in a production environment

Achievements to Date

- Over 50 requirement generation and software development sprints completed
- 8 system software releases delivered to ASX
- 2 unplanned patch releases successfully delivered
- Low defect (bug) counts notwithstanding increasing functional requirement complexity
- Automated test scripting and development is progressing well
- All vendor SLAs have been met

3rd Party Security Review

- In addition to ASX's assessment of Digital Asset's technology, two independent 3rd party technology assessment specialists have been selected to review the system
- The reviews will be performed by:
 - A cyber security and risk mitigation specialist firm; and
 - A global technology audit and assurance firm
- These reviews will assess the parts of Digital Asset's technology that relate to the security and integrity claims of the software
- Areas of assessment include the platform architecture, component technologies and cryptographic methods used in the ledger layer
- Reviews will be completed by November and will be another input to ASX's technology decision

Next Steps

Next steps and where to find more information

- Ongoing engagement throughout 2017 (quarterly webinar, ISO 20022 Technical Committee meetings, working groups, DLT demonstrations and bilateral opportunities)
- The presentation and recording of this webinar will be available on the above webpage shortly
- Next date for Q4 webinar will be advised in due course and published on the above webpage
- More information available on the ASX CHES Replacement website:
www.asx.com.au/chessreplacement
- Or email the ASX project team: CHESReplacement@asx.com.au



Please use
webinar facility to post questions

Thank you.