



CHESS Replacement Project

**Implementation & Transition
Webinar**

27 May 2020

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Next steps

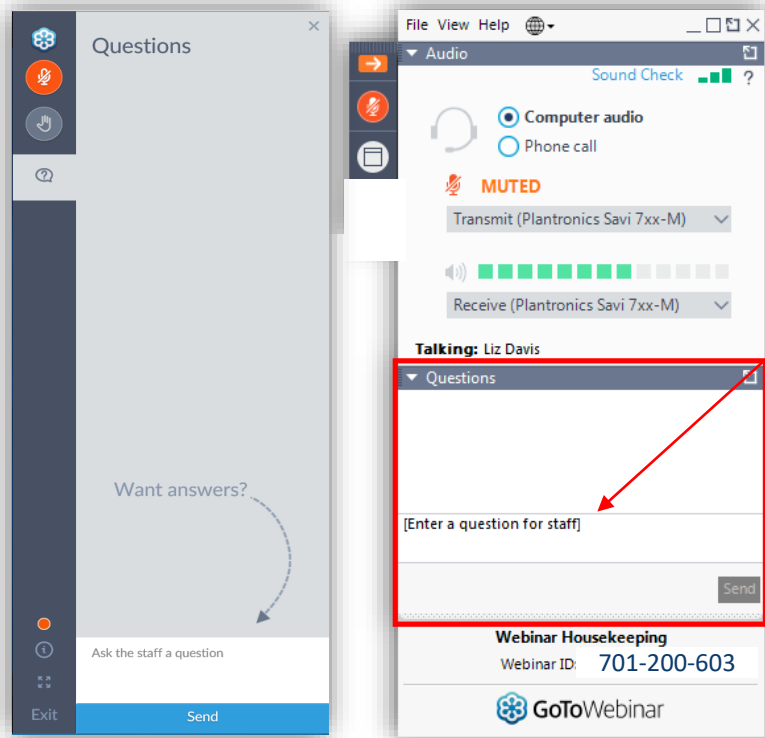


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Housekeeping: how to submit questions



Your Participation

- To submit your text questions and comments use the Questions panel
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For more information - refer to the webinar tips published on the ASX [CHESSE Replacement web page](#)

Agenda

-
- Project update
 - Response to tranche 1 rule amendments
 - Consultation on the revised implementation timeline
 - Functional delivery
-
- Technical documentation updates - ASX Procedure Guidelines (APG)
-
- ITE
-
- Corporate actions
-
- Q&A
-
- Next steps
-

Presenters and introductions

Keith Purdie, Senior Manager, Equity Post Trade

Frederik Van den Weghe, Head of Product, Equity Post Trade

Karen Hamilton, Manager, Business Analysis, Delivery

Fraser Moodie, Senior Manager, Connectivity & Integration, Equity Post Trade

Sue Julian, Manager, CHES Replacement, Equity Post Trade

Project update

Response to tranche 1 rule amendments

- ASX released its [response to consultation feedback](#) on the tranche 1 (of 3) rule amendments on 22 May 2020
- Tranche 1 covered accounts, participants, securities and pre-settlement aspects
- The response to consultation feedback contains:
 - a summary of the feedback received in stakeholder submissions;
 - ASX's response to such feedback; and
 - the draft rule changes made to the ASX Settlement Operating Rules and Procedures and ASX Clear Operating Rules and Procedures, which take into account feedback received
- The closing date for written submissions on the second tranche is Friday, 29 May 2020
- Public consultation on the tranche 3 rule amendments is suspended, pending consultation on the implementation timeline

Consultation on the revised implementation timeline

- ASX is planning to consult in June on the revised implementation timeline
- The consultation paper is focused on the timing of the revised go-live date and the key testing, accreditation, operational and customer readiness milestones
- The timing of the further consultation on rule changes will also form part of the consultation
- Consultation questions are targeted around your organisation's ability to meet the revised timeline
- We will hold a separate I&T working group webinar during the consultation period to respond to any questions you may have on the consultation

Functional delivery

CODE DROP	MONTH RELEASED	SCOPE	
1	April 2019	- Open up CDE - Unilateral & Bilateral Demand Transfers	Bilateral Demand Settlement Instructions
2	June 2019	Market Trade – Capture, Registration, Novation and Confirmation	Batch Settlement – Payment Facilities
3	August 2019	- Account Management (updated) - Netting and Netting Reversal	- Transfers and Conversions - SRN Enquiry
4	October 2019	- Unilateral & Bilateral Settlement Instructions - Batch Settlement – Funds Obligation, Movement of Units, Settlement Confirmation, Cancellation	Corporate Actions (initial features)
5	December 2019	- Change of Controlling Participant - Settlement Locks on HIN holdings	Issuer's Agent Transfers (Warrants)
6	February 2020	- Give-ups, Take-ups - Corporate Actions (continued features) - Collateral Management (ETO & CMM)	- Batch Settlement – Unit Fails - Primary Market Facilities – Placements - Real-Time Settlement – Payment Facilities

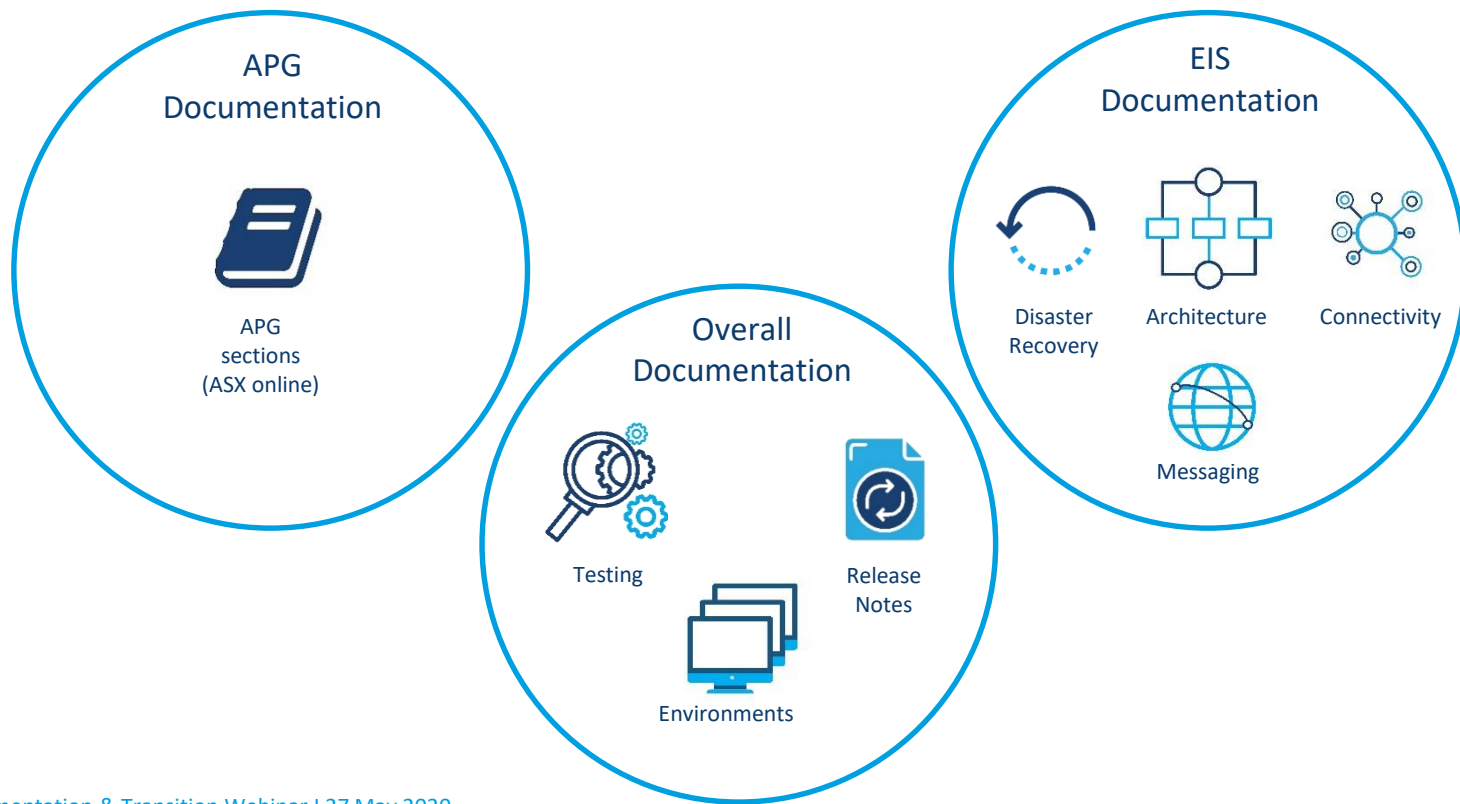
Functional delivery

CODE DROP	MONTH RELEASED	SCOPE	
7	May 2020	Batch Settlement – Failure Levy	Account Management – Cancellation, Locking and Unlocking
8	Date to be advised in the June consultation paper	Settlement: - Isolate counterparty - Payment provider authorisation - Change margin settlement amount	Corporate actions: - Calls, Code change, Class merger, Diary adjustments Reporting: - Issuer end of day reporting (AMQP only)
9	Date to be advised in the June consultation paper	Account management: - Investor data and pass-through information (ABN/ACN, TFN, bank accounts) - Changes for migration purposes (Holder type, 4 and 5 address lines) Settlement: - Default management related messages	Reporting: - Demand reporting - Projected reports - Daily margin settlement advice - Interest earned and collateral statements - Issuer end of day reporting (all applicable connectivity channels)
10	Date to be advised in the June consultation paper	mFunds: Applications	- Redemptions - Settlement

Technical documentation updates

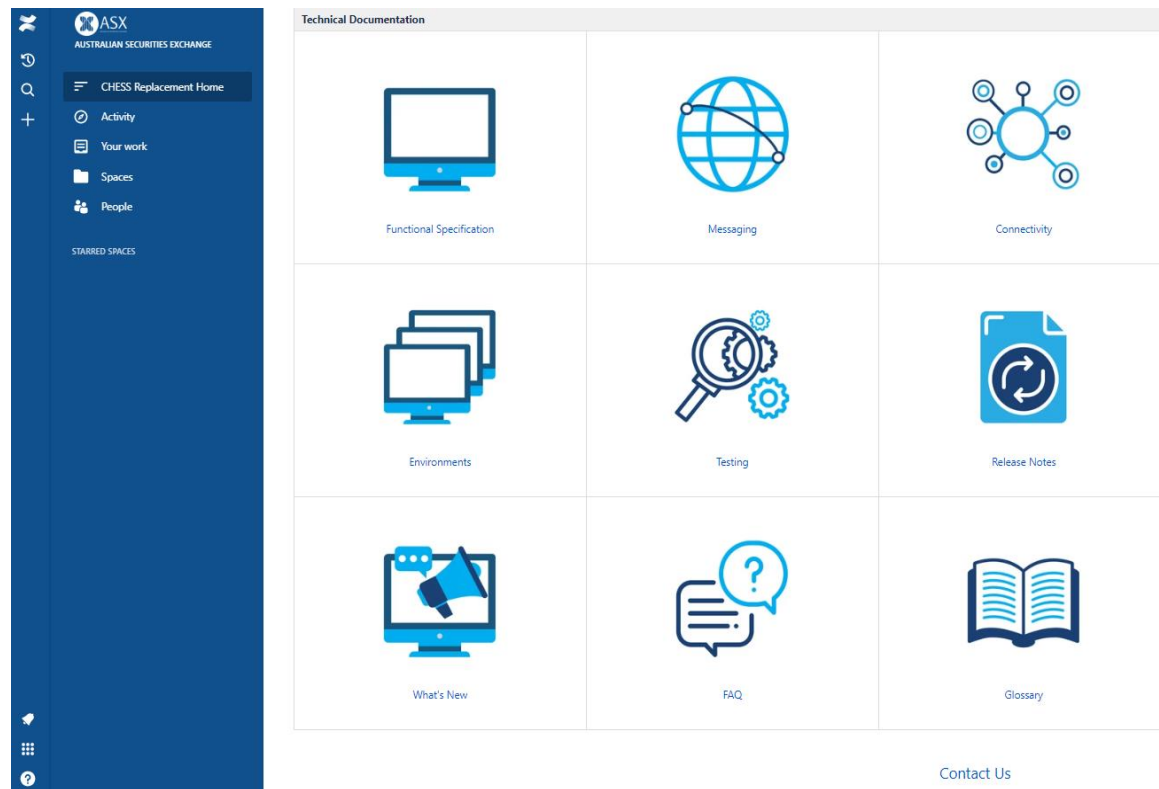
Overview of technical Documentation

Current CHESS documentation



Overview of technical documentation

CHESS Replacement documentation environment – Dec 2018 Initial Release



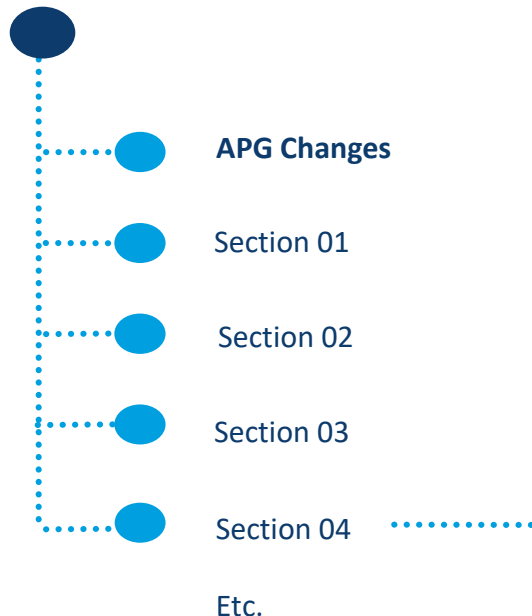
- Documentation
 - On-line
 - One stop shop
 - Fully searchable
- Includes
 - Functional Specifications
 - Messaging
 - Connectivity
 - Environment details
 - Testing
 - Release Notes
 - What's New
 - FAQ
 - Glossary

Overview of technical documentation

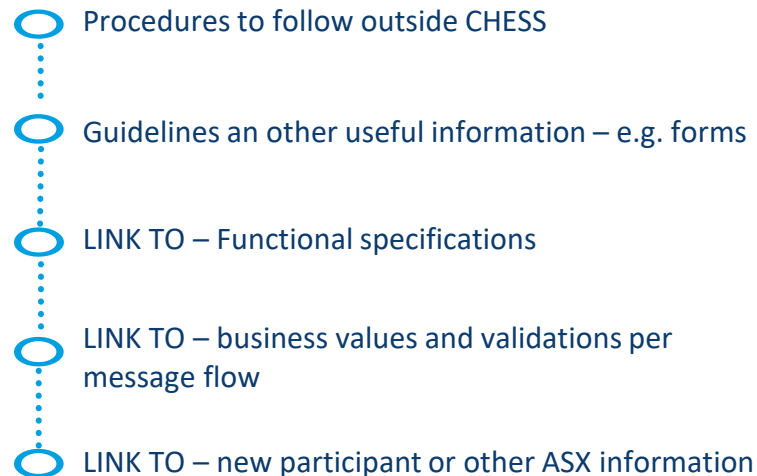
Operational procedures & guidelines - **STAGE 2 from April 2020**



New APG Section(s)



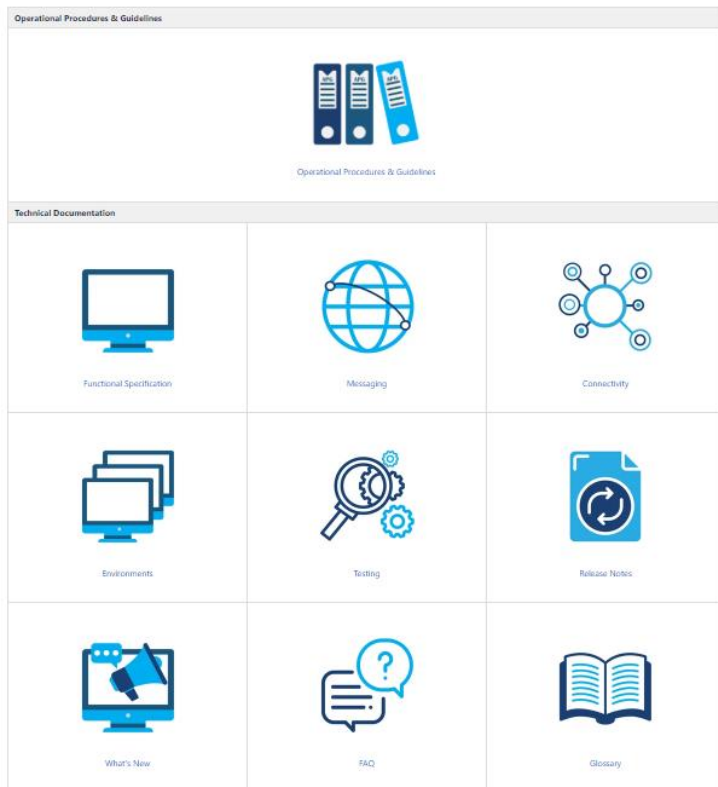
Details included:



CHES Replacement documentation environment – April 2020 APG Initial Release

Overview of technical documentation

CHESS Replacement documentation environment – **FINAL STAGE**



Additional 2 new sections:



For support:

CSPSupport@asx.com.au

Industry test environment

Industry test environment

What is the industry test environment?

As part of the next phase of CHES Replacement ASX is introducing the Industry Test Environment.

This will comprise of two separate environments to support the activities of different user groups.

Phase	Environment	Eligibility
System Development	ITE1	Software Providers
System Testing	ITE1	Software Providers
Technical Accreditation	ITE1	Software Providers
User Testing	ITE2	CHES Users
Operational Readiness	ITE2	CHES Users

Industry test environment (ITE1) – Key phases

Phase	Objective
System Development	This phase allows developers to complete their system build allowing them to complete both their functional and non-functional developments.
System Testing	Either as part of continuous development or completion of full development, developers will be able to implement end to end testing within their environment.
Accreditation	All software providers must undertake technical accreditation, this includes both messaging and connectivity accreditation. All systems connecting to CHES Replacement production must first have successfully completed technical accreditation.

Industry test environment

Characteristics of ITE

The following characteristics are shared across both ITE1 and ITE2 environments and these build on CDE and provide a number of additional features:

- Implements end state architecture
- Single dedicated integrated environment
- Production authentication model
- Third party certificate signing authority
- CHES User Interface
- End of day and demand reporting
- Multi-site/multi-node topology across ASX's data centres

Industry test environment

Characteristics of ITE – connectivity

All connectivity channels and access methods will be supported in ITE1 and ITE2

- Network options
 - ASX Net*
 - SWIFTNet
- Access methods
 - Ledger API (Node Access)
 - Messaging (AMQP and SWIFT)
 - CHES User Interface
 - FIX Gateway (Approved Market Operators)

* Including IPSec VPN, Switch in cabinets and ALC cross connects

Industry test environment – testing

Testing in ITE1

- Each software provider will be provided their own test kit, much like current CHES test kits today.
- Each kit will contain a list of dedicated UIC's that will allow developers to test any CHES role, along with a unique set of test securities
- The test tooling in CDE (auto-responders and self-serve) will be carried forward which includes the auto-responders for bilateral testing as well as the trade ingest tool which allows clearing and settlement participants the ability to upload their own suite of test trades
- ASX will standardise on the self – serve tool for trade registration (superseding daily canned trades)
- The environment will provide the ability to provide full end to end settlement testing, from a corporate action perspective ASX will publish a list of corporate action ex-periods for each test kit
- The CHES UI will be available and since each test kit provides UICs for each CHES user group, this may be a useful tool for some to simulate and test specific test cases
- ITE1 will allow ASX Trade and Chi-X to implement their own internal testing before opening up to the broader market in the ITE2 environment

Testing in ITE1

- A list of unique UICs will be allocated to a given test kit
- Each test kit will have UICs for the following CHESS Users:
 - AMO (1) – with unique MIC assigned
 - Trade only Participant (2) and clears and settles through another party
 - Account Participants (2), trade and sponsors clients, clears and settles through another party
 - Account Participant (1), does not trade, sponsor clients, but settles through another party
 - Trading, Clearing and Settlement Participants (6)
 - Settlement only Participants (4)
 - Payment Providers (6)
 - Bidder Offerors (10) for Takeover and Buy Back events

Testing in ITE1

- Payment Facilities will be created on the opening of ITE1 for all UICs that require a Payment Facility
- 'Payment Facility Details Report' (acct_004) messages will be queued for Participants and Payment Providers
- Issuer's & Securities will be unique for each given test kit. Considerations given for the security data:
 - Types: Ordinary, ETF, Allocation Interests, Warrants, Company Options & Rights for example
 - Security (1) where Issuer Sponsored sub-register set to No, provides negative testing of transfers / conversions across sub-register
 - Allocation Interest, provides for testing of correct / incorrect transaction basis testing (e.g. Bilateral Scheduled Settlement Instruction)
 - ALMO security, provides for testing of correct / incorrect transaction basis testing (e.g. Bilateral Scheduled Settlement Instruction)
 - AMO specific test stocks

Testing in ITE1

- Corporate Action events will be created for each test kit. The current list of Corporate Action events are:
 - Dividends (cash)
 - Bonus Issue
 - Rights Issue (Renounceable Issue & Non Renounceable Issue)
 - Reconstruction (Stock Split & Reverse Stock Split)
 - Takeover & Repurchase Offer
- Multiple Corporate Actions for the same security, with same ex-period and/or record date
 - Dividend (cash)
 - Bonus Issue
 - Reconstruction (Reverse Stock Split)

Testing in ITE1 – Auto Responders

TEST TOOL	DESCRIPTION
Bilateral Demand Transfer Auto Responder	To enable testing of bilateral demand transfer by a single party, an Auto-Responder feature is provided in ITE. The Auto-Responder will generate a matching response for Bilateral Demand Transfer requests.
Bilateral Demand Settlement Auto Responder	To enable testing of bilateral events by a single party, an Auto-Responder feature is provided in ITE. The Auto-Responder will generate a matching response for Bilateral Demand Settlement Instruction requests.
Conversions and Transfers Auto Responder	To facilitate testing of Issuer to Participant Conversions and Transfers by Participants, an Auto-Responder feature is provided in ITE to act as a Share Registry.
SRN Enquiry Auto responder	To facilitate the testing of all types of SRN Enquiry Requests by a Participant, an Auto-Responder feature is provided in ITE to act as the Registry.
Account Notification Auto-Responder (Acting as share registry)	For eligible requests by a Participant, the Auto-Responder will: 1- Generate an Account Modification Instruction Acknowledgement message (with status : Accepted/Rejected) acting as the Share Registry; 2- Not respond to some Bank Account Notifications, so that pending notifications can be cancelled by ASX Housekeeping (*available when associated functionality becomes available)

Testing in ITE1 – Self Serve Tools

TEST TOOL	DESCRIPTION
FIX Trade Capture Tool - Participant Self Serve	This tool enables non trading participants to submit trades using a CSV File
Self Service Tool-Removal & Release Request for CMM & ETO by Collateral Manager	The 'Self-Service Tool' will be provided to the Participants to act as the Collateral Manager (ASX Clear)
Self Service Account Management Tool (To enable share registry testing)	This 'Self-Service Tool' will be provided to Share Registries to act as a Participant to perform the following initiated requests : 1- Locking/unlocking a holder following a notification of death 2- Locking/unlocking a holder following a notification of bankruptcy 3- Investor Data & Foreign Tax Status Advice - Adding TFN resulting in Investor Details and Foreign Tax Status Advice to the Share Registry 4- Adding of a Bank Account resulting in Bank Account Notification to the Share Registry
Self Service Tool to support Holding Adjustments (To enable share registry testing)	This tool covers requirements related to 'Self-Service Tool' for Holding Adjustments, will be provided to the Participants to act as the Share Registry to perform upload 'CSV' file to process Holding Adjustments

Testing in ITE1 – Auto-injectors & ASX supported actions

TEST TOOL	DESCRIPTION
Auto Injector for Bid finalisation of Takeovers and Buybacks (Action as ASX Ops)	To facilitate testing of 'Bid finalisation of Takeover and Buybacks', an Auto-Injector feature is provided in ITE1 Environment.
Payment Provider settlement	Automatic settlement to generate payment provider authorisation.

- ASX supported actions
 - Holding Administration Lock & Unlock
 - Security Unnetting

Testing in ITE1 - CHESS User Interface

- CHESS User Interface available from ITE1
- Software developers can use the CHESS User Interface to initiate workflow for any role within their test kit
- Allows users to view 'state' on the Ledger, for example accounts and holdings
- Provides test capabilities for multi-channel support

Create Message

Message Type *
Hold_201 Demand Transfer Request

Transaction ID
If this is left blank, a transaction id will be generated for you.

Transaction Basis *
FNRT - Facility for Non-Reportable Transaction
IPOO - Initial Public Offering
MRKT - Market
SECL - Stock Lending Activity
XOFF - Off-Market

Security Code

ISIN

Unit Quantity *

Account Identifier HIN

Industry Test Environment – Availability

Industry test environment

Environment availability

ITE1 opening – targeting July 2020

Software providers, those actively developing in CDE should apply now for access to ITE1 (order forms available on ASX's technical documentation website)

- Developers can maintain connectivity to both CDE and ITE1 until such time they have fully migrated across
- ITE1 will open with code drop 7 (the same code line as CDE7)
- ITE1 implements full security and authentication
 - AMQP clients will be required to enter ITE1 with ISO 20022 message signing enabled
 - Ledger API users will be required to enter ITE with token authentication

Corporate actions

Introduction

- Sourcing Corporate Action event information
- Corporate Actions STP Phase 2 and CHESS Replacement Corporate Action election adjacencies
- High level end-to-end process flow example – Non-Renounceable Rights Issue
- Appendices - other Corporate Action Events supported by ASX, partially in CHESS

Corporate action events supported in CHESS

Event	Listing Rule timetable provision	Event Information announcement/ data capture	Notification via: Ref Point Daily Diary / Weekly summary	Notification via: Ref Point: csv/E34 event type code	Notification via Ref Point: ISO 20022 event type code	Supported in CHESS Replacement
Dividend / Distribution	✓	Appendix 3A.1	✓	✓ DV	✓ DVCA / DVOP / DRIP / DVSC	Diary Adjustment CEB DRP/BSP election DRP/BSP enquiry
Non-renounceable	✓	Appendix 3B	✓	✓ NR AO XR	✓ RHTS Sub type: NRNI, AOPT EXWA Sub type: EXRE	Diary Adjustment CEB Offer application Scaleback/Refunds
Renounceable	✓	Appendix 3B	✓	✓ RR AO XR	✓ RHTS Sub type: RENI, AOPT EXWA Sub type: EXRE	Diary Adjustment CEB Offer application Scaleback/Refunds
Accelerated entitlement offers	✓	Appendix 3B	✓	✓ NR or RR AO	✓ RHTS Sub type: NRNI, RENI, AOPT Accelerated offer type: JMBO; AREO; SREO; RPDS; PTRO	Retail Offer: Diary Adjustment CEB Offer application Scaleback/refunds
Security purchase plan	✓	Appendix 3B	✓	✓ SP	✓ PRIO Sub type: SHPP	Offer application Scaleback/Refunds

Corporate action events supported in CHESS

Event	Listing Rule timetable provision	Event Information announcement/ data capture	Notification via: Ref Point Daily Diary / Weekly summary/ ASX Market Notice	Notification via: Ref Point: csv/E34 event type code	Notification via Ref Point: ISO 20022 event type code	Supported in CHESS Replacement
Off market buy back	✓	Appendices 3C, 3D, 3F	✓	✓ BB (equal access)	✓ BIDS Offer type: EQAC	✓ CEB only Offer acceptance
Off market takeover	✗	Market Announcement	✓	✗	✓ TEND Offer type: OFFM, PRPL	Offer acceptance
Bid offer (other inc. re-investment offers)	✗	Market Announcement	✓	✗	✓ OTHR	Offer acceptance
Scheme of arrangement (e.g.: merger)	✓	Market Announcement	✓	✗	✓ MRGR	Offer acceptance

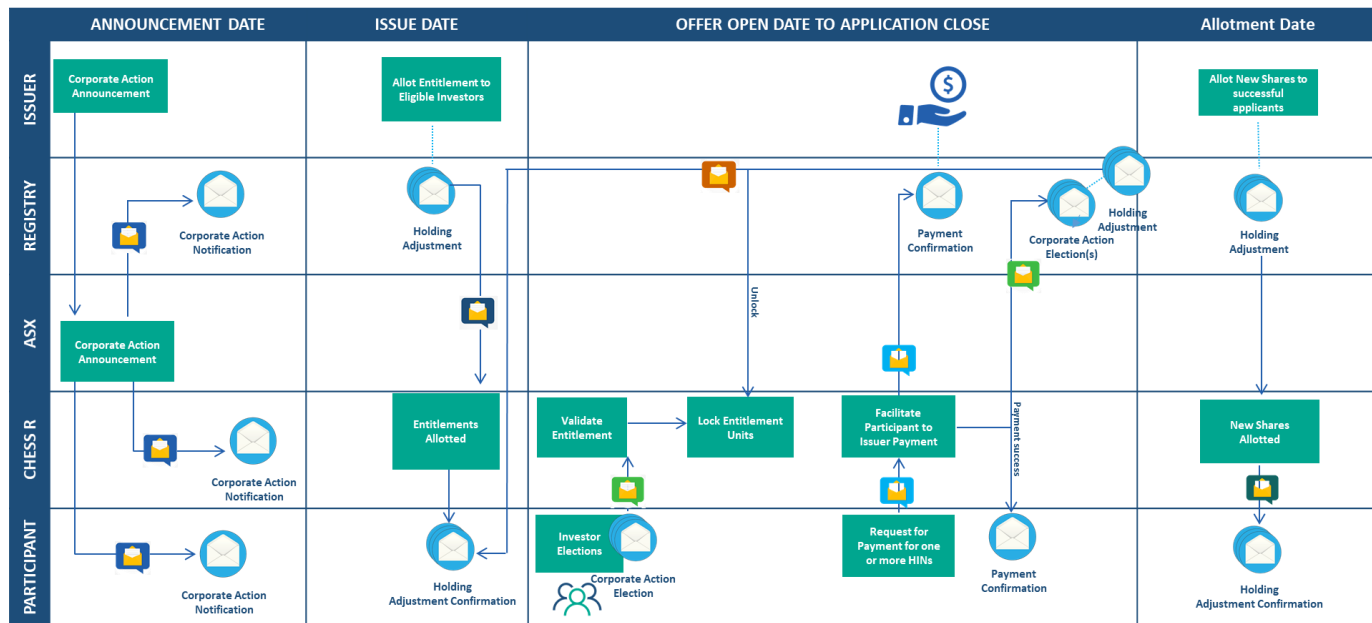
CHES Replacement – new features

Election Type	Identifiers used in CHES Replacement messages				Information Published
	Corporate Action Id	Event Type Code	Option Number	Option Type	
Dividend	<i>As published</i> NONREF	DVOP	UNSO	SECU (DRP election) BSPL (BSP election) CASH (cash election where plan default is non-cash)	• ReferencePoint CSV • ReferencePoint ISO 20022 • Appendix 3A1
Entitlement (non-renounceable and renounceable offers, including accelerated; security purchase plan)	<i>As published</i>	RHTS (rights) PRIO (security purchase plan)	001 - EXER 002 - OVER*	SECU SECU	• ReferencePoint CSV (without option numbers) • ReferencePoint ISO 20022 • Appendix 3B

CHES Replacement – new features

Election Type	Identifiers used in CHES Replacement messages				Information Published
	Corporate Action Id	Event Type Code	Option Number	Option Type	
Bid offer (buy back)	<i>As published</i>	BIDS	001 to 999	CASH (cash)	- ASXS Market Notice - ReferencePoint CSV (without option numbers) - ReferencePoint ISO 20022
Bid offer (takeover)	<i>As published</i>	TEND	001 to 998 999 = no action	CASH (cash) SECU (securities) CASE (cash & securities)	- ASXS Market Notice - ReferencePoint ISO 20022
Bid offer (other inc. re-investment offers)	<i>As published</i>	OTHR	001 to 999	SECU (securities)	ASXS Market Notice STP development currently in progress

Non-renounceable rights offer end-to-end workflow



Corporate Action Event Notification
Corporate Action Event ID – 111111111
Event Type Code – RHTS/NRNI
Option Number – 001



Holding Adjustment Notification
Corporate Action Event ID – 111111111
Adjustment Reason Code – NRNI
Security Code/ISIN: Non Renounceable Rights Issue



Corporate Action Election Notification
Corporate Action Event ID – 111111111
Event Type Code – RHTS/NRNI
Option Number – 001



Corporate Action Payment Notification
Corporate Action Event ID – 111111111
Payment Reference
Number of transactions



Holding Adjustment Notification
Corporate Action Event ID – 111111111
Adjustment Reason Code –NRNI
Security Code/ISIN: Parent security code



Holding Adjustment Notification
Corporate Action Event ID – 111111111
Adjustment Reason Code – NRRA
Security Code/ISIN: Parent security code

Appendix: other corporate action events supported by ASX

Event	Listing Rule timetable provision	Event Information announcement/ data capture	Notification via: Ref Point Daily Diary / Weekly summary	Notification via: Ref Point: csv/E34 event type code	Notification via Ref Point: ISO 20022 event type code	Supported in CHES Replacement
Bonus (including in specie)	✓	Appendix 3B Appendix 3A.5	✓	✓ BN AO XR	✓ BONU (sub type BNUS, AOPT) EXWA Sub type: EXRE	✓ Diary Adjustment CEB
Calls (interim and final)	✓	Appendix 3A.6	✓	✓ CL	✓ PPMT	✓ Diary Adjustment Not CEB
Company option expiry (final)	✓	Market announcement	✓	✓ OP	✓ EXWA Sub type: EXPR	✗
Consolidation/Split	✓	Appendix 3A.3	✓	✓ RC	✓ SPLR/SPLF	✓ Diary Adjustment CEB
Convertible note conversion (final)	✓	Market announcement	✓	✓ CN	✓ CONV	✗

Appendix: other corporate action events supported by ASX

Event	Listing Rule timetable provision	Event Information announcement/ data capture	Notification via: Ref Point Daily Diary / Weekly summary	Notification via: Ref Point: csv/E34 event type code	Notification via Ref Point: ISO 20022 event type code	Supported in CHES Replacement
Interest payment	✓	Appendix 3A.2	✓	✓ IN	✓ INTR / DVSC / PRII	✓ Diary Adjustment CEB
Name/code change	✗	Market announcement ASX approvals	✓	✓ CC	✓ CHAN Change type: INCC, CLSC	✓
On market buy back	✓	Appendices 3C -3F	✓	✗	BIDS Offer type: ONMK	✗
On market takeover	✗	Market Announcement	✓	✗	TEND Offer type: ONMK	✗
Priority offer	✗	Market announcement	✓	✓ PR	✓ PRIO Sub type: PRNP	✓ CEB only

Appendix: other corporate action events supported by ASX

Event	Listing Rule timetable provision	Event Information announcement/ data capture	Notification via: Ref Point Daily Diary / Weekly summary	Notification via: Ref Point: csv/E34 event type code	Notification via Ref Point: ISO 20022 event type code	Supported in CHES Replacement
Return of Capital (cash)	✓	Appendix 3A.4	✓	✓ CR	✓ DECR	✓ Diary Adjustment CEB
Warrant rollover	✗	Market announcement	✓	✓ RC	✓ EXWA Sub type: ROLL	✓ Diary Adjustment CEB

Q&A

Next steps

Next steps

Immediate steps following today's session

Review and feedback:

- Webinar recording, slides and Q&A will be published on the CHESS Replacement webpage
- Provide feedback by contacting CHESSReplacement@asx.com.au – use “*I&T webinar*” as the subject heading
- Feedback welcome by **COB Wednesday, 10 June 2020**

Next meeting:

- Topic: Consultation paper on the revised implementation timeline
- Date: June – date to be confirmed

Thank you.



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