Program Newsletter



CHESS Replacement Project Update

February 2020

On Friday 21 February ASX released a consultation paper inviting feedback from users and other stakeholders on the second of three tranches of operating rule amendments as well as an updated rule change development and consultation timeline.

Today, Tuesday 25 February, the ISO 20022 Technical Committee will reconvene to discuss the new messaging specifications.

On Wednesday 26 February, ASX will host a webinar for the Implementation and Transition working group which will provide further details on technical accreditation.

On Friday 28 February, we plan to update our Technical Documentation with functional specifications and messaging requirements for mFunds and additional corporate action features.

Next week, we plan to release the sixth drop of code (CDE 6) into our customer development environment. This includes a number of new functions and further details will be published in the accompanying release notes.

Further details on all of these activities can be found by clicking in to the individual sections below.

Finally, if you have any feedback on the content of this newsletter please contact the project team at CHESSReplacement@as x.com.au.



Cliff Richards

Executive General Manager Equity Post Trade

Engagement Activities





Connectivity & Integration Working Group

A Connectivity & Integration working group (C&I WG) was held on 19 February and included an overview on API contracts and details of the upcoming CDE 6 code release.

Read more >



Customer Development Environment Updates

Our fifth release of code (CDE 5) was released on 13 December. ASX will publish the next update of the application in CDE on Tuesday 3 March (CDE 6).

Read more >



Corporate Actions STP

The Corporate Actions STP Phase 2 project continues work on 2020 release schedule.

Read more >

Implementation & Transition Working Group

The latest Implementation & Transition working group was held on 29 January. The webinar focused on ASX's approach to in-flight transactions. The next webinar will be on Wednesday 26 February on the topic of accreditation.

Read more >



ISO 20022 Technical Committee Meetings

ASX will convene one ISO 20022 Technical Committee meeting during this month on 25 February.

Read more >



Rule Amendment & Public Consultation Timeline

The consultation on the second tranche of operating rule amendments was released on 21 February 2020, with feedback requested by 3 April 2020.

Read more >



Customer Frequently Asked Questions

We have established the CHESS Replacement mailbox & CSP Support mailbox as a means of addressing any project related questions. We have highlighted the most recent questions of interest.

Read more >

Technical Documentation



What's new



Release notes



Forward release plan

Where to next?



Upcoming activities



Useful weblinks



Connectivity & Integration Working Group



Connectivity & Integration Working Group

The latest Connectivity & Integration working group (C&I WG) meeting was held on 19 February 2020. The session provided details on:

- CDE update looking forward at the next code drop CDE 6. This release will include the following significant capabilities:
 - Batch Settlement settlement fails & primary market facility
 - Collateral Management ETO & CMM
 - Corporate Action processing, to include takeovers and buybacks, reconstructions, rights, holdings adjustments, bonus and dividends
 - New testing features with CDE 6
- · Summary and update on each of the connectivity options for CDE and also ITE
- · Overview and explanations of previously published API contract documentation
- ISO 20022 XML Message Signing details, including how to 'opt in' when ready to test
- Initial requirements to apply for Industry Test Environment (ITE) access.

Materials from this session can be found here.

ASX will next publish functional documentation in Release 7 (part II) by the end of February 2020. Refer to the Forward Release Plan for details.

ASX will then publish the code and full release notes for CDE 6 on Tuesday 3 March 2020.

The next C&I WG meeting will be held in **May 2020**, topics for discussion include a forward view of the functionality included with CDE 7.

A list of previous meeting topics, future Working Group dates, as well as a copy of all working group presentation materials can be found here.

A list of upcoming project activites can be read here.

Implementation & Transition Working Group



Implementation & Transition Working Group

The latest Implementation & Transition working group (I&T WG) webinar was held on 29 January 2020.

The webinar focused on ASX's approach to in-flight transactions, as well as a re-cap of the activities and timelines, and addressing questions that have been received from the market. The agenda included:

- Approach to managing inflight transactions
- · Categories of inflight transactions
- · Management of transactions not being migrated
- · Migration of inflight settlement obligations

Presentation slides from January are available here, and webinar recording available here on the CHESS Replacement website.

The next I&T working group webinar will be on **Wednesday 26 February 2020**, 2pm - 3pm, and will focus on accreditation and ASX response to market feedback.

Implementation & transition questions have been published in the Technical Documentation portal, in line with this session.

REMINDER: For your consideration in planning your implementation

CHESS Changes:

 If you have any migrations or other significant changes to your CHESS configuration planned between July 2020 and April 2021 please contact the Participant Transitions team at participant.transitions@asx.com.au

Materials from previous I&T WG meetings can be accessed here on the CHESS Replacement Stakeholder Engagement website

A list of upcoming project activites can be read here.

ISO 20022 Technical Committee Meetings



ISO 20022 Technical Committee Meetings

ASX will convene one ISO 20022 Technical Committee meeting during this month. The meeting will be held on **25 February 2020** and provide an overview of various topics including the proposed ('to-be') ISO 20022 messages for Demand Reporting, Change of Controlling Participant notifications, Isolate Counterparty, Account Cancellation, Updates to account creation for migration purposes, Payment Provider - Fund Transfer, and updates to the Business Application Header (BAH). ASX will also provide members with a summary of member feedback on the previously published draft messages regarding Corporate Action Refund and mFund Redemptions.

A list of previous meeting topics and materials as well as future ISO 20022 Technical Committee dates can be found here.

A list of upcoming project activites can be read here.

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Customer Development Environment Updates



Customer Development Environment Updates

Our fifth release of code (CDE 5) was released on 13 December 2019. ASX will publish the next update of the application in CDE on Tuesday 3 March 2020 (CDE 6).

CDE - Release 5

Within the Release Notes for CDE 5, ASX advised that they will refresh environments every two weeks for internal CDE maintenance. Our last refresh was completed successfully, then opening CDE to users from **Friday 14 February 2020**. Dates of future resets in CDE will be published in the Technical Documentation pages at the end of February 2020.

CDE - Release 6

ASX will publish the next application code release in to CDE by **Tuesday 3 March 2020** (CDE 6). Features associated with this code drop were published in our Release 6 notes - September 2019, November 2019 and January 2020. New capabilities planned to be introduced with this drop will include:

- · Batch Settlement settlement fails & primary market facility
- Collateral Management ETO & CMM
- Corporate Actions processing, to include takeovers and buybacks, reconstructions, rights, holdings adjustments, bonus and dividend
- Payment Facilities for facilitation for the payment or receipt of funds on a RTGS basis

With the CDE 6 code release notes ASX will provide details of updates to testing documentation (including Auto-responder) as well as any known issues or observed behaviours in the development environment.

Details of remaining CDE capability releases are published on our Forward Release Plan on our Technical Documentation portal.

CDE reminders:

The CDE supports early access development and low volume transaction and functional testing, following iterative development of the technical solutions.

- We have published for users details of CDE constraints and any known limitations.
- ASX may refresh the CDE environment periodically, ASX will always notify the CDE Subscribers prior to any
 environment refresh
- Details of how to request access to the CDE are available in our Technical Documentation portal.

A list of upcoming project activites can be read here.

Corporate Actions STP



Corporate Actions STP

Corporate Actions Straight Through Processing Phase 2 project

The STP project team continues to work with the CHESS Replacement team and industry working group on a number of activities. The project is working to finalise the specifications and development for the ISO 20022 notification service for all in scope corporate action events. The CHESS Replacement system will consume the ISO 20022 corporate action event notifications. The availability of the ISO 20022 notification service for all corporate action events is expected to be mid-2020. The team is also continuing work to develop and build additional online forms for the use of listed entities to announce certain events.

More information is available on the ASX website here.

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Rule Amendment & Public Consultation Timeline



Rule Amendment & Public Consultation Timeline

On 21 February 2020, ASX released a consultation paper on the second of three tranches of operating rule amendments required to facilitate the implementation of the new system that will replace CHESS. These relate to corporate actions, mFund and RTGS payment aspects for 'Day 1' implementation of CHESS replacement system functionality. RTGS will support payments for corporate actions involving entitlement acceptances as well as payments for bilateral demand settlement instructions (addressed in the tranche 1 rule amendments). The consultation paper invites feedback from users and other stakeholders on the operation of the draft tranche 2 rule amendments, including any unintended consequences. Written submissions are requested by 3 April 2020.

The consultation paper on the first tranche of operating rule amendments was released on 15 November 2019, and related to accounts, participants, securities and pre-settlement aspects for Day 1 CHESS replacement system functionality. The consultation paper invited feedback from users and other stakeholders on the operation of the draft tranche 1 rule amendments, including any unintended consequences by 17 January 2020.

ASX expects to provide a response to consultation for the tranche 1 draft rule amendments in mid-April 2020 and a response to consultation for the tranche 2 draft rule amendments in early-June 2020. ASX also expects to provide a response to consultation for the tranche 3 draft rule amendments and a combined draft rules package (including the draft rules from each of the three tranches), at the end of July 2020.

Timeline Overview

ASX has been engaging with regulators in relation to the rules and other relevant regulatory aspects that need to be addressed to support any new or changed services and functionality, including our indicative timeline.

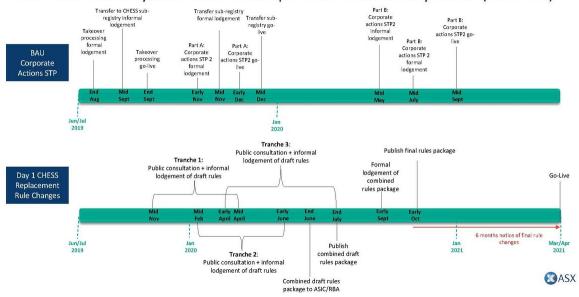
The rule change development and consultation timeline for the CHESS Replacement project was updated on 21 February 2020. The key changes to the timeline relate to:

- The publication of a response to consultation for each tranche of draft rules changes. The time frames for providing a
 response to consultation on each tranche of draft rule changes have been extended given the more comprehensive
 nature of what is being provided compared to what was originally anticipated in the form of the exposure of material
 changes to the rules.
- Moving back the date for the commencement of consultation on the tranche 3 draft rules changes to after consultation has closed on the second tranche of draft rule changes to remove the overlap between the two processes.
- The publication of the combined draft rules package (including the draft rules from each of the three tranches), together with the response to consultation on the third tranche of draft rules changes, at the end of July 2020.

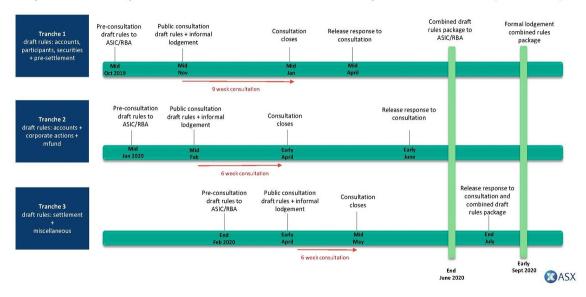
The timeline covers rule amendments required for Day 1 changes in the new system, including new business requirements, re-engineering of solutions for existing CHESS functionality and the decommissioning of existing CHESS functionality. ASX plans to release these operating rule amendments for public consultation in three tranches.

The timeline also covers rule amendments that address new business requirements generated through industry consultation but which are not dependant on the new system and are being progressed through ASX Business as Usual (BAU) processes or the Corporate Actions STP Phase 2 Project. These will be delivered prior to the replacement system going live.

New Post Trade System Rule Development Timeline: Key Dates (2019-20)



Day 1 CHESS Replacement: Detailed Rule Development Timeline (2019-20)



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Upcoming Activities



Upcoming Activities

DATE	ACTIVITY
Friday 21 February 2020	Public Consultation - operating rule amendments - Tranche 2 (refer here)
Tuesday 25 February 2020, 3pm to 5pm	ISO 20022 Technical Committee (refer here)
Wednesday 26 February 2020, 2pm-3pm	Implementation & Transition working group (refer here)
Friday 28 February 2020	Technical Documentation publication - release 7 Part II (refer here)
Tuesday 3 March 2020	CDE 6 code release (refer here)
Wednesday 25 March 2020, 2pm-3pm	Implementation & Transition working group (refer here)

Refer to the CHESS Replacement Project Milestones.

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Customer Frequently Asked Questions



Customer Frequently Asked Questions

We have established the CHESS Replacement mailbox & CSP Support mailbox as a means of addressing any project related or functional questions. We have highlighted the most recent questions of interest.

Connectivity - ISO message signing

Which access channels require ISO message signing?

Customers wishing to access the CHESS Replacement system via AMQP will be required to use ISO message signing for production. During the development phase customers can opt-in to use ISO message signing.

Further details can be found in the Technical Documentation Connectivity - Message Connectivity pages.

When will ISO message signing be available?

ISO message signing will be available from CDE 6 (from Tuesday 3 March 2020) and customers can opt-in to use it within CDE. Release notes will be published to accompany CDE 6. To opt-in to ISO Messaging signing in CDE, click here to send an email to the ASX CTS team

Implementation & Transition questions - click for details

Questions relating to the approach to transition, cutover and accreditation will be published in our Technical Documentation portal under Frequently Asked Questions. We will continue to highlight any common questions in our regular newsletter.

Functionality - Locking & Unlocking - click for details

Can you please provide further information around Settlement Locks?

Please find the following detailed description for Settlement Locks:

On Request – Mandatory - is available for "Bilateral Demand Transfer" and the new "Bilateral Demand Settlement Instruction". The lock is mandatory and is applied immediately because ASX considers the nature of these movements is "demand" so units must be locked otherwise when the counterparty submits its message and the units are not in the delivering HIN the movement will fail. This defeats the purpose of the movements being "demand".

On Request – Optional - is available for "Unilateral Settlement Instructions" and "Bilateral Settlement Instruction". The lock is optional and will only be applied if the original message is submitted with the optional lock set to true. ASX considers the nature of these movements to be "scheduled into the future" (not "demand") so the delivering participant is allowed time to receive units in to cover the movement after the original message is submitted. There is an exception to this workflow for a Unilateral Settlement Instruction where the delivering Account (HIN) in the Accumulation Entrepot of the participant and the receiving Account (HIN) is the Settlement Entrepot of the participant. In this case the CSP will apply a lock on request and if insufficient units are unavailable in the delivering Account (HIN) the

On Match - Is available for "Bilateral Settlement Instructions". The lock can be set to "on Match" on the original message so that if the participant does not have sufficient units in the delivering account at the time of the original message but believes that units will arrive prior to the counterparty submitting its matching instruction then on match the units will be locked. The participant can rely on the lock for movements that match.

Settlement Lock - is available for "Unilateral Settlement Instructions" and "Bilateral Settlement Instructions". This

particular feature allows the participant to apply a lock at any time for an instruction that had not already be set to Lock on Request or Lock on Match. The lock can be set regardless of whether the instruction is matched on unmatched and at any time after the original message was sent and before the commencement of Batch Settlement. Settlement Lock Descriptions.

For further information refer to Settlement Locks Overview in our Technical Documentation portal.

Can you confirm the Account and Holder Locking and Unlocking process?

The Lock and Unlock can happen in the following scenarios:

- 1. Lock a holder in case of Notification of death (NODE) and Notification of bankruptcy (BKRP)
- 2. Unlock a holder which was locked following a notification of death.

Holder update reason:

- Grant of Probate or Letters of Administration (GPLA)
- Small Estate Statement (SEST)
- Transfer Indemnity Bond (TIBD)
- No holdings (NHLD)
- 3. Unlock a holder which was locked following a notification of bankruptcy.

Holder update reason:

- Legal Trustee Request (LTRQ)
- Annulment (ANNT)
- 4. Unlock a holder which was locked in error

Holder update reason:

- Error (ERRO)
- 5. Lock and Unlock an account for a non-specific reason

Account update reason:

- Non-specific (NOSC)
- 6. Lock and Unlock an account following a court order.

Account update reason:

- Subject to Court Order (SNCO)
- 7. Unlock an account which was locked in error.

Account update reason:

- Error (ERRO)

For further information refer to Account and Holding Locking and Unlocking Overview in our Technical Documentation portal.

✓ Ledger API - click for details

What is a DAML Party?

CHESS Users are represented as a DAML party in the system. A party is identified in the system by its unique DAML Party Identifier. To connect to the CSP via the Ledger API, CHESS Users undergo a formal on-boarding process which grants them one or more DAML Party Identifier(s) and permits them to access a master ingress contract.

For further details on Ledger API connectivity refer to the CHESS Replacement Technical Documentation - Connectivity.

What is a Master Ingress Contract?

The master ingress contract is a non-consuming DAML contract that allows CHESS Users to issue a command to the CSP to start the associated workflow.

Each DAML party in the system is permissioned to execute specific commands and business workflows as set out in the party's master ingress contract. Each command, is a combination of choice with a parameter, which when exercised, sends an instruction to the CSP. A party can initiate a workflow by exercising a choice on the master ingress contract, which triggers a piece of code, representing a workflow, and results in one or more contracts being created or archived on the ledger.

For further information refer to Identify the Master Ingress Contract.

For further details on Ledger API connectivity refer to the CHESS Replacement Technical Documentation - Connectivity.

How do I view exercised events committed to the Ledger?

When developing a Ledger API client application, events can be viewed using the getTransactionClient.getTransactionsTrees() method.

This will produce not just the committed event but the entire transaction in a tree structure. The Transaction Tree structure contains exercised choices, contracts created, and scenarios run among other events. For further information and a full description of all the attributes visible on a transaction tree, refer to the DAML SDK.

For further details on Ledger API connectivity refer to the CHESS Replacement Technical Documentation - Connectivity.

What will be the most likely replacement for CHESS PC?

ASX will be introducing a new secure browser for CHESS Replacement intended for low volume usage allowing users the ability to enter messages in the same way as they can with CHESS PC. Details can be found in the CHESS Replacement consultation paper. Refer to our website for details.

The new browser will provide users the ability to upload and download files on an ad-hoc basis but unlike CHESS PC the solution will not support the scheduling of files.

CHESS users who currently use CHESS PC or CHESS Access as a message gateway need to review which of the three new channels to connect to CHESS Replacement. Please contact CHESSReplacement@asx.com.au if you would like to discuss these options with the ASX.

Further specifications and functionality for the browser will be published and updated in our Technical Documentation under the Connectivity topic.

Many other questions about CHESS Replacement can be found at the following links:

- General CHESS Replacement questions
- Technical Documentation FAQs

Useful weblinks



Useful weblinks

ASX CHESS Replacement communications (including past newsletters):

CHESS Replacement - Tranche 2 Rule Amendments

CHESS Replacement - Tranche 1 Rule Amendments

ASX CHESS Replacement System Access Pricing

Toronto Centre Podcast: Introducing the Newest Technology to Capital Markets: The Industry's Perspective

ASX CHESS Replacement website:

ASX Technical Documentation:

Digital Asset - DAML (including requesting the SDK):

ASX Response to consultation feedback:

ASX 2018 Consultation Paper:

Recent ASX Webinars:

https://www.asx.com.au/services/chessreplacement-commu nications.htm

Consultation Paper - February 2020 Consultation Paper - November 2019

Pricing Letter - September 2019

Podcast - July 2019

https://www.asx.com.au/services/chess-replacement.htm

https://asxchessreplacement.atlassian.net/wiki/spaces/CSP/overview

https://daml.com/

https://www.asx.com.au/documents/public-consultations/response-to-chess-replacement-consultation-feedback.pdf

https://www.asx.com.au/documents/public-consultations/chess-replacement-new-scope-and-implementation-plan.pdf

https://www.asx.com.au/services/webinar-archive.htm

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