Program Newsletter



CHESS Replacement homepage

CHESS Replacement Project Update

May 2020

Today we released our response to consultation feedback received on the Tranche 1 draft rule amendments. We received 12 submissions from a range of stakeholders. A summary of these is included in the document released today. Read more in the Rule Amendment and Public Consultation Timeline section of this update.

This month also saw us host our last Connectivity & Integration (C&I) working group meeting. These working group meetings commenced in October 2018 and grew from around 25 members to over 100 by its conclusion. After 19 meetings the working group has met its stated objectives, namely to work collaboratively and provide information to software providers (vendors and in-house developers) regarding connectivity and integration options, test tooling and provide a forum to allow developers to ask technical questions to assist with their own development activities. If further connectivity and integration matters require a re-convening of the working group we will schedule meetings accordingly.

Our engagement continues with the Implementation & Transition (I&T) working group, which meets again next week to talk about ITE and provide an overview on the adjacencies with the Corporate Actions STP project, such as where to source corporate action event information to enable use of new CHESS replacement features.

Also in April 2020 we published to the CHESS Replacement technical documentation portal the first few sections of updated ASX procedures and guidelines (APGs). Further updates will be progressively released over the next several months with the new APGs aligning to the CHESS replacement system.

Looking ahead, we are working to bring our CDE customers the next drop of code, our seventh release, into our customer development environment (CDE 7) at the end of this month. Preparations also continue for the opening of our industry test environment (ITE) for software developers as well as working on publishing a consultation paper to seek feedback on a revised project implementation schedule.

Further details on these activities can be found by clicking on the 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 13 May and included an overview of CDE 7 along with a re-cap on ISO 20022 message signing and Ledger API authentication.

Read more >



Customer Development Environment Updates

Our sixth release of code (CDE 6) was released on 3 March and work continues on remaining system development. ASX will publish our next drop of code (CDE 7) by end of May 2020.

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 (I&T WG) was held on 1 April. The webinar focused on ASX's announcement that it would be consulting on the implementation timetable. The next I&T WG will be on 27 May.

Read more >



Rule Amendment & Public Consultation Timeline

On 22 May ASX released its response to the tranche 1 draft rule amendment consultation. Feedback on the tranche 2 draft rule amendment consultation is requested by 29 May 2020.

Read more >



Customer Frequently Asked Questions

We have established the CHESS Replacement mailbox and 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







Release notes



Forward release plan

Where to next?



Upcoming activities



Useful weblinks

Contact us:

CHESSReplacement@asx.com.au



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Connectivity & Integration Working Group



Connectivity & Integration Working Group

The latest Connectivity & Integration working group (C&I WG) meeting was held on 13 May 2020. The session provided details on:

- The next CDE code drop CDE 7, this release will include the following key capabilities:
 - Account Management (Locking, Unlocking, Cancellation)
 - Settlement Failure Levies
 - · FIX Messaging new message types 'W' and 'AU' for price reporting
 - Mutual TLS for Ledger API users
- It also covered new test tools:
 - Account Locking file upload (for Share Registry testing)
 - Bid Finalisation for Takeovers
- Re-cap on ISO 20022 message signing for AMQP users and steps to test
- Introduction to how Ledger API users would implement token authentication in ITE 1
- Connectivity notes for ITE 1

Materials from this session can be found here.

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.

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Implementation & Transition Working Group



Implementation & Transition Working Group

Implementation & Transition Working Group

The last Implementation & Transition working group (I&T WG) webinar was held on 1 April 2020. The webinar primarily focused on ASX's announcement that it would consult on the implementation timetable. For further information on this webinar, the presentation slides are available here and webinar recording is also available here on the CHESS Replacement website.

The next I&T WG webinar will be on **27 May 2020** and will focus on ITE as well as provide an overview on the adjacencies with the Corporate Actions STP project, such as where to source corporate action event information to enable use of new CHESS replacement features.

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

ITE Connectivity

ASX will use the Industry Test Environment (ITE) for testing during the implementation phase of the project. ITE is split into two separate environments:

- ITE 1 is a new dedicated environment that is being made available to software providers only (vendors and in-house developers) from July 2020.
- ITE 2, indicatively available from October, will be made available to all CHESS users. Details of how to connect and application forms for ITE 2 will be published in due course.

ITE 1 Application Forms

ASX has published ITE 1 application details in the Technical Documentation portal. Software developers are encouraged to review and submit these forms to ensure sufficient time for connectivity to be established in time for the start to ITE 1.

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 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 activities can be read here.

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Rule Amendment & Public Consultation Timeline



Rule Amendment & Public Consultation Timeline

Market Consultation

On 22 May ASX released its response to the tranche 1 draft rule amendment consultation. Feedback on the tranche 2 draft rule amendment consultation is requested by 29 May 2020.

Rule Amendment and Public Consultation Timeline

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 for the new system, including our consultation process on the rule amendments involving three tranches of amendments.

The first tranche of operating rule amendments was released for public consultation on 15 November 2019, with the period for feedback closing on 17 January 2020. The content related to accounts, participants, securities and pre-settlement aspects for Day 1 CHESS replacement system functionality.

On 22 May 2020 ASX released its response to consultation feedback received on the tranche 1 draft rule amendments. 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.

ASX received a total of 12 submissions from a range of stakeholders including participants, registries, industry bodies and vendors.

The **second** tranche of operating rule amendments was released for **public consultation** on 21 February 2020 and ASX has requested feedback by **29 May 2020** (extended from 3 April). The content relates 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 tranche 1 rule amendments). The consultation paper invites feedback from users and other stakeholder on the operation of the draft tranche 2 rule amendments including any unintended consequences.

As a reminder, ASX has suspended consultation on the **third** tranche of operating rule amendments until after the June consultation on the new CHESS replacement timetable, with the process for further consultation on the rule amendments to form part of that consultation.

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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 has now finalised the specifications and development for the ISO 20022 notification service for all in scope corporate action events.

The final corporate action notification usage guidelines were published to MyStandards on 17 April 2020. The CHESS Replacement system will consume the ISO 20022 corporate action event notifications. The ISO 20022 notification service for all corporate action events is expected to be available **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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Customer Development Environment Updates



Customer Development Environment Updates

Our sixth release of code (CDE 6) was released on 3 March 2020. The project continues to develop with the remaining system development. Det ails of recent code fixes are listed below.

CDE - Release 6

ASX published the latest application code release in to CDE on **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 introduced with this drop included:

- 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

In addition to the CDE 6 release notes, ASX also has published the following information and updates which we would like to highlight:

- What's New 3 March information supporting the CDE 6 code release notes
- . What's New 10 March updates relating to Known Issues in CDE 6 and updated connectivity details for Ledger API for CDE 6
- 25 March 2020 CDE 6 environment reset inducted a code fix for a defect relating to 'Identical Business Message Identifier'
- 14 April 2020 a code fix was introducted to the CDE environment, resolving two previously observed behaviours in CDE 6
- 13 May 2020 revisions to the ISO Message Signing pages, plus some minor updates

CDE - Release 7

ASX will publish the next code release to CDE at the end of May 2020.

New capabilities introduced with this drop include are indicated in our Forward Release Plan on our Technical Documentation portal.

Technical Documentation - Release 8

In April ASX published two documentation releases.

- On 2 April 2020, Release 8 (part I) included the first round of technical accreditation scripts for messaging (identifying the required test scenarios by the different CHESS user types).
- Then on 30 April 2020, Release 8 (part II) was published inlcuding the first operational procedures and guidelines (APGs) to accompany
 the CHESS replacement system, FIX specification changes for AMOs and additional messaging accreditation scripts.

Further APG documentation and accreditation details will continue to be published regularly.

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.

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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.

Implementation & Transition

■ When will stakeholders be able to provide feedback on the implementation timeline?

ASX has announced it will consult on the implementation timetable for CHESS replacement, which includes moving the go-live date from April 2021 to a later date.

Consultation on the new schedule will commence in June when we expect everyone will have more time to consider the replan and better assess the implications of COVID-19.

▼ Is a software vendor developing a solution to support CHESS Replacement required to undergo separate Technical Accreditation tests for each clearing and settlement participant client?

A software vendor only needs to accredit software once, so long as the same version of software is used by multiple clients.

Details on Technical Accreditation can be found in our Technical Documentation portal.

Will message content be verified by ASX as part of technical accreditation or will this form part of operational readiness?

Yes, message content will be verified as a part of the messaging component of the Technical Accreditation activity.

Details on Messaging Accreditation can be found in our Technical Documentation portal.

When will test packs and test scripts be available?

The first release of message test scenarios for technical accreditation was made available from April 2020. The first release will be on Account Management. Additional message test scenarios will be progressively released in tranches.

Details on Messaging Accreditation can be found in our Technical Documentation portal.

Further 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 Freq uently Asked Questions. We will continue to highlight any common questions in our regular newsletter.

Connectivity

Do software vendors, and CHESS Users more broadly, need to have CHESS Browser connectivity?

CHESS Users don't need to have access via the new CHESS Browser; it is an optional connectivity channel that replaces CHESS PC software.

Product Issuer Settlement Participants (PISPs) are heavy users of CHESS PC and ASX anticipates this cohort to use the browser. Another potential cohort is an organisation that wants to use the browser as a supplementary connectivity channel for low volume corner cases.

■ When will ASX publish documentation on the ASX Customer Identity Access Management system?

All access channels will be authenticated by ASX, for AMQP users this will be via ISO 20022 message signing and for Ledger API users via Token Authentication. ASX will provide details of Token Authentication in the June publication to the 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.

Functionality & Specifications

Where are details on how the Account locking and unlocking process will work?

The functional process and specification for Account and Holder Locking and Unlocking are published in our Technical Documentation portal. Plus we have some additional information here - FAQs - Account Locking & Unclocking.

✓ Is there a simple guide how the old EIS message formats map to the new ISO standards?

As part of our ISO 20022 Messaging technical specifications that have been published, ASX has provided a useful cross reference page to help users relate from EIS to the new standard. Please see the following page - ISO 20022 Messaging - TM - EIS to ISO 20022 Cross Reference Guide.

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 CDE 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. Releas e 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.

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

General CHESS Replacement questions

• Technical Documentation FAQs

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Upcoming Activities



Upcoming Activities

Date	Activity
Wednesday 27 May 2020, 2pm-3pm	Implementation & Transition working group (refer here)
Friday 29 May 2020	Public Consultation - operating rule amendments - Tranche 2 written submissions due (refer here)
Friday 29 May 2020	Technical Documentation - CDE 7 code drop
June 2020	Consultation on implementation timetable (refer here)
July 2020	Industry Test Environment (ITE) optionally opens for developers

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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:

 ${\tt https://www.asx.com.au/services/chess replacement-communications.} \\ {\tt htm}$

Consultation Paper - February 2020 Consultation Paper - November 2019

Response to Tranche 1 Rule Amendments Consultatoin Paper - May 2020

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

chess-replacement-consultation-reeuback.pui

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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