Program Newsletter

CHESS Replacement homepage



CHESS Replacement Project Update

August 2020

On 28 July, the four week consultation period on a revised implementation timetable for CHESS replacement concluded. I am pleased to report that we had responses from all CHESS users, and I would like to thank everyone for taking the time to respond. We published a media release on 5 August, announcing some early, high-level observations. It is important to note that no final decision on the revised go-live date has been made and we continue to work through the constructive feedback CHESS users have provided regarding their specific needs in order to meet the implementation timetable before we issue our formal response.

Our most recent Implementation & Transition working group meeting on 29 July included a demonstration of the CHESS User Interface (UI). A recording of this meeting and all relevant questions and answers continue to be made available on our CHESS replacement webpage. Our next Implementation & Transition working group meeting is scheduled for tomorrow and will include further details on the tool for migration of registration details.

We also continue to publish new content to our documentation portal, including new content for ASX procedures and guidelines and additional scripts for messaging accreditation.

As always, if you have any feedback on the project or the content of this newsletter, please contact the project team at CHESS Replacement@asx.com.au.



Cliff Richards

Executive General Manager Equity Post Trade

Engagement Activities





Documentation Spotlight

This is a new section to provide a spotlight on the information presented in the ASX CHESS Replacement documentation portal.

This month includes a focus on message accreditation scenarios for technical accreditation by software providers.

Read more >



Customer Development Environment Updates

Our seventh release of code (CDE 7) was released on 29 May and work continues on remaining system development.

ASX will publish our next drop of code (CDE 8) by mid-September.

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.

Implementation & Transition Working Group

The last I&T working group webinar was held on 29 July. This webinar included a live demonstration of the CHESS User Interface (UI), the replacement to the CHESS PC desktop application. The next I&T WG webinar will be on 26 August and will focus on inflight transactions, accounts & registration details.

Read more >



Rule Amendment & Public Consultation Timeline

ASX is currently finalising its response to feedback received on the tranche 2 draft rule amendment consultation. Consultation on the tranche 3 draft rule amendments and on a consolidated rules package (across the three tranches) is proposed for early November 2020 with a 15 week consultation period, subject to feedback received through the consultation on the new CHESS replacement timetable released on 30 June 2020.

Read more >

Technical Documentation







Release notes



Forward release plan

Where to next?



Upcoming activities



Useful weblinks

Contact us:

CHESSReplacement@asx.com.au

Follow us on:

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Connectivity & Integration Working Group



Connectivity & Integration Working Group

The Connectivity & Integration meeting held on 13 May 2020 is likely to be the last, with the working group having now completed its stated objectives. The last meeting included an overview of CDE 7 along with a re-cap on ISO 20022 message signing and Ledger API authentication. Additional sessions will be convened if required or requested by stakeholders.

All Connectivity and Integration working group materials will continue to be made available on the CHESS replacement Stakeholder Engagement website.

A list of upcoming project activities can be read 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 **29 July 2020**. This webinar included a live demonstration of the CHESS User Interface (UI), the replacement to the CHESS PC desktop application. Working group members were updated on the key features and were shown how to query information and submit messages using the CHESS UI. Further information on CHESS UI can be found in our documentation portal.

Working group members were provided with an update on Corporate Actions STP, which included Release 2 that went live in early July, as well as an update on Release 3 targeted for March 2021. The webinar also included an update on the corporate action features that follow the initial go-live of CHESS replacement.

If you missed the webinar, or would like to listen to it again, the presentation slides, webinar recording, and answers to all relevant questions are published on the CHESS Replacement website.

The next I&T WG webinar will be on Wednesday, **26 August 2020** and will include inflight transactions, providing a recap on the transaction types previously discussed before looking at those transactions we haven't discussed together with ASX's approach for migrating these inflight transactions over the cutover weekend.

Migration of accounts and registration details is the other topic to be presented. This will also include a summary of changes discussed to date, additional information on the conversion tool and requirements for data cleansing prior to the cut-over event.

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

REMINDER: For your consideration in planning your implementation

For your consideration in planning your implementation.

CHESS Changes:

• If you are planning any migrations or other significant changes to your CHESS configuration please contact the Customer Readiness team at participant.transitions@asx.com.au

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. ASX is currently finalising its response to feedback received on the tranche 2 draft rule amendment consultation which closed on 29 May 2020. Consultation on the tranche 3 draft rule amendments and on a consolidated rules package (across the three tranches) is proposed for early November 2020 with a 15 week consultation period, subject to feedback received through the consultation on the new CHESS replacement timetable released on 30 June 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, with the period for feedback closing on 29 May 2020 (extended from 3 April). The content related 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). ASX is currently finalising its response to feedback received on the tranche 2 rule amendments and proposes to release its response to consultation feedback received on those rule amendments in mid-September 2020.

ASX suspended consultation on the **third** tranche of operating rule amendments until after the consultation on the new CHESS replacement timetable released on 30 June 2020, which sought feedback from users on the timetable for the revised process for further consultation on the rule amendments. That proposes that the tranche 3 rule amendments and a consolidated rules package across all the rule amendments for the new system (as covered by the three tranches) be incorporated into a further public consultation ASX intends to undertake commencing early November 2020, with a 15 week consultation period to apply for providing feedback. Further information on the revised public consultation process referred to above is set out in section 5 of the consultation on the new CHESS replacement timetable released on 30 June 2020.

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Corporate Actions STP

Corporate Actions Straight Through Processing (STP) Phase 2 project

The STP project team successfully implemented the project's second release on 18 July 2020. This release includes

- the availability of the ISO 20022 notification service for all in scope corporate actions events, available via SWIFT or FTP for subscribers.
 The same notifications will be consumed by CHESS Replacement.
- a number of enhancements to the online or word forms used by issuers to announce certain corporate action events.
- the introduction of an ISIN to represent the entitlement in a non-renounceable offer. The ISIN and security details are available in the ISO 20022 notification and ReferencePoint Master List. This was a new business requirement from the CHESS Replacement working group consultation agreed for delivery by the STP project.
- enhancement to the Dividend online form and ISO 20022 notification to include additional tax information (based on ATO Annual Investment Income Report (AIIR) fields), as agreed with the Distributions sub-group of the STP industry working group.

This release is a significant milestone for the project, working in collaboration with industry stakeholders and the CHESS Replacement project team.

The team are now focused on delivering the project's remaining scope of work with a target release date of March 2021. The work includes upgrading and introducing additional online forms for the use of issuers to announce certain events, with full straight through processing of that event information from the issuer announcement through to ASX reference products including the ISO 20022 real time corporate actions notification service.

More information on the project is available on the ASX website here.

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Customer Development Environment Updates



Customer Development Environment Updates

Our seventh release of code (CDE 7) was released on 29 May and work continues on remaining system development. Details of recent code updates and fixes are listed below.

CDE - Release 7

ASX published the latest application code release in to CDE on **Friday 29 May 2020** (CDE 7), code release notes are here. Features associated with this code drop were previously published in our documentation release notes - December 2019, May 2019 and February 2020.

Capabilities introduced with this drop included:

- · Batch Settlement settlement failure levey workflow
- · Controlling Participant ability to cancel an account
- · Account Management ability to lock and unlock accounts due to reasons such as deceased or bankrupt holder
- Issuer (Registry) Reporting ability for Issuer (Registries) to receive reports on a daily basis from the CSP.

And since the release of CDE 6 customers are able to use ISO message signing (details here) and now from CDE 7 mutual TLS secure connectivity direct to the Ledger is available (details here).

CDE - Release 8

ASX will publish the next code release to CDE by mid-September 2020.

New capabilities introduced with this drop are indicated in our Forward Release Plan on our Technical Documentation portal with previous and upcoming releases.

Technical Documentation

Since the last project update ASX has continued to publish documentation to the market to support development and testing. See the newsletter section 'Documentation Spotlight' for further details.

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



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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?

On 30 June, ASX released our consultation paper on the CHESS Replacement Revised Implementation Timetable. The paper sets out key project activities and milestones including system development and testing, user testing, technical accreditation, operational readiness, and operating rule amendments. The revised timetable has a new go-live date of April 2022, 12 months beyond the original target go-live. The consultation was open for four weeks and ASX is requesting all CHESS users respond by 28 July 2020 on their ability to meet the revised implementation schedule.

▼ 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.

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 addional 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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Documentation Spotlight



Documentation Spotlight

A new section to provide a spotlight on the information presented in the ASX CHESS Replacement documentation portal.

This month we wanted to provide a focus on Message Accreditation scenarios for technical accreditation by software providers. We also have included any recent updates to our documentation and What's New.

Technical accreditation & message scenarios

Technical accreditation is a mandatory requirement for all systems connecting to CSP in the production environment. Technical accreditation is to be completed by software providers, either system vendors or CHESS Users developing their own in-house system.

Technical accreditation comprises of two components, connectivity and messaging:

- Connectivity Accreditation: secure connectivity and resiliency. Connectivity accreditation will apply to the system directly interfacing to CHESS Replacement.
- Messaging Accreditation: demonstrating compliance with new message formats. Messaging accreditation covers ISO 20022 messages,
 FIX messaging and Ledger API commands. As CHESS Users have optionality on how they access CSP, messaging accreditation
 depends on the connectivity choice you make for that functionality. Message accreditation will apply to the system that generates the
 ISO 20022 message construct (either the ISO 20022 messages or DAML commands via the Ledger API).

Message accreditation scripts:

Messaging accreditation scenarios are grouped by CHESS Users. Scripts that have already been published can be read at the Messaging Accreditation Scripts page, as well as a forward plan when remaining scenarios will be published.

Software providers are encouraged to look at the pages on messaging accreditation and also how to perform this activity.

Further details relating to message accreditation objectives and supporting ISO 20022 messages can be found at the Messaging Accreditation Overview page.

Recently updated content

Documentation releases

Since the last project update, ASX has continued to publish documentation to the market to support development and testing. The lastest updates include:

 31 July 2020 - Documentation release included new and updated operational procedures and guidelines (APGs), functional udpates for specifications including Investor Data, mFunds, Default Management, and Settlement Instructions Cancellation. Also included in this release were messaging related updates of ASX Proprietary Code List and Business Message Collection 8.

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

What's New updates

Occasionally ASX will update documentation with minor updates outside of the formal release cycle. These notices are posted on the documentation portal within the What's New area.

On 17 August 2020, ASX published a What's New article to our documentation portal. The update should be read by customers who are currently developing and testing in a Customer Development Environment (CDE).

This update included;

- 1. Minor updates and clarifications to Section 3, 4, 10 and 11 of the APG within the Operational Procedure & Guidelines has been implemented
- 2. General technical documentation updates including clarifications to the Holding Transfers, Collateral Management, Demand Reporting and Class Merger functional specification pages
- 3. In preparation for CDE Code Drop 8, the ISO 20222 Proprietary Code list has been refreshed
- 4. Minor updates clarifications to the Trade Ingest API and self-service sections.

Other topics relating to CHESS Replacement documentation can be found at the following links:

- Documentation portal home page
- ASX Settlement Procedures & Guidelines
- · Documentation release notes
- Documentation What's New updates
- Documentation FAQs

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Upcoming Activities



Upcoming Activities

Date	Activity
Wednesday 26 August 2020, 2pm-3.30pm	Implementation & Transition working group (refer here)
End August 2020	Documentation publication - further sections released on APGs and new messaging accreditation scripts
Mid-September 2020	CDE 8 code drop (refer to Forward Release Plan)
Mid-September 2020	Publication of ASX response to consultation feedback received on Tranche 2 rule amendments
Wednesday 30 September, 2pm-3pm	Implementation & Transition working group (refer here)
November 2020	Public Consultation - operating rule amendments - Tranche 3 consultation period begins (refer here)
November 2020	CDE 9 code drop (refer to Forward Release Plan)
December 2020, subject to consultation feedback	ITE 1 (Industry Test Environment) opens for software developers

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Useful weblinks



Useful weblinks

ASX CHESS Replacement communications (including past newsletters):

Consultation Paper on the CHESS Replacement Revised Implementation Timetable

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:

CHESS Replacement fact sheets: NEW

Digital Asset – DAML (including requesting the SDK):

ASX Response to consultation feedback:

ASX 2018 Consultation Paper:

Recent ASX Webinars:

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

http://www2.asx.com.au/content/dam/asx/markets/clearing-and-settlement-services/chess-replacement-consultation-paper-revised-implementation-timetable.pdf

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

Fact sheet - for participants

Fact sheet - for issuers

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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