Program Newsletter (Sept'19)



CHESS Replacement Project Update

Since our last update we have refreshed our Customer Development Environment (CDE) with an additional drop of code at the end of August. This is our third code upgrade to introduce additional functionality to facilitate functional testing by the market, and for the first time we have included features for issuers and their share registries. The release notes are available in our Technical Documentation portal - What's New - 30 August 2019, as well as CDE 3 code release notes.

The Forward Release Plan has also been updated this month to include features to be made available in the remaining CDE drops. This now gives a complete view for users on all day 1 features and when they will be released for testing in CDE.

We issued a letter on 3 September 2019 updating customers on the indicative access pricing for the CHESS Replacement system. Access pricing includes prices for participants and other users (including issuers, investors, share registries and service providers such as back office system vendors) for the wider use of the distributed ledger access option. The information is being provided to assist users' investment decisions well in advance of the 2021 go live date.

Below you'll find updates on our variety of stakeholder engagement forums, links to reference materials, upcoming milestones, as well as an additional update on BAU Project progress.

And finally, ASX is once again pleased to be a part of Sibos being held in London from 23 to 26 September. This year we are hosting a panel with a range of industry experts discussing DLT in 2019: Unlocking the potential for DLT to transform market infrastructure. If you are in London, come and join us at the session on Thursday, 26 September 2019 (14:30 – 15:15), Conference North, Conference Room 2.

It is my hope that our team provide you with information that you find useful. If you have feedback please contact the project team at CHESSReplacement@asx.com.au



Cliff Richards

Executive General Manager Equity Post Trade

Engagement Activities



Connectivity & Integration Working Group

A Connectivity & Integration (C&I) working group was held on 4 September for Product Issuer Settlement Participants (PISPs). The next C&I meeting will be held on 9 October and will be on security & Ledger API updates.

Read more >



Implementation & Transition Working Group

The next Implementation & Transition working group will be a webinar and is being planned for October. The webinar will include a timeline for industry transition and cutover to provide greater transparency on the key activities and milestones.

Read more >



BAU Project Updates

Two business requirements, identified as part of the 2017 CHESS Replacement Business Requirements Working Groups, are being progressed by ASX outside of the CHESS Replacement project, as Business-As-Usual activities, as neither are dependent on the new system.

Read more >



Focus Groups

Focus Groups were held on 27 August related to settlement for Payment Providers and 6 September looking at Corporate Actions for registries & market participants. The next Focus Group will be held on 15 October on Investor information.

Read more >



ISO 20022 Technical Committee Meetings

The latest ISO 20022 Technical Committee meeting was held on 27 August with a focus on Collateral Removal and Transfer of Novated Equities Transactions (Give-ups) messages. The next committee meeting will be held on 1 October, focused on mFund Applications..

Read more >



Customer Development Environment Updates

Our third release of code (CDE 3) was released on 30 August, which introduces features that would be used by all Clearing & Settlement Participants (such as Account and Holder creation) and Share Registries. The CDE 5 Technical Documentation release is on track for publication end of September.

Read more >



Rule Amendment & 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, including our indicative timeline.

Read more >

Technical Documentation



What's new



Release notes



Forward release plan

Where to next?



Upcoming activities



Project milestones



Useful weblinks





Connectivity & Integration Working Group



Connectivity & Integration Working Group

The latest Connectivity & Integration Working Group meeting was held on 4 September and was a session held specifically for Product Issuer Settlement Participants (PISPs) and software vendors.

The session provided updates on;

- Overview of the connectivity options available to PISPs in the new solution
- Spotlight on the key comparisons between the current CHESS PC application and it's Browser replacement (noting specifically the Browser could not be used as a message gateway)
- ISO 20022 overview
- Introduction to the new message collections and access to SWIFT MyStandards
- Technical Documentation overview
- Noteworthy points for PISPs (Account and Holder Creation and real time cash settlement for mFund transactions)
- Customer Development Environment (CDE) overview
- PISP entry points for CDE 6
- CDE application process
- · Forward Plan for PISPs.

The next Connectivity & Integration Working Group meeting will be held on 9 October 2019 and will be focused on security updates required for CDE 4 and general connectivity updates.

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.

Focus Groups



Focus Groups

Focus Groups were held on 26 August, 6 September and 18 September (facilitated as part of the ACSA Working Group) on Corporate Actions related topics. Two additional Focus Groups were also held on 27 August with Payment Providers on the topics of Batch and RTGS settlement, and 17 September on the topic of mFunds settlement service.

The Focus Groups held on 26 August, 6 September and 18 September were follow-up meetings from the previous corporate actions related Focus Groups, with a specific discussion on the processing of payments required to support the Electronic Acceptance and Payment of Entitlement Offers solution. This was in response to feedback received on the potentially high volume of gross line-by-line payments required to support the solution.

ASX and Focus Group members explored the feasibility of processing multiple HIN elections in a single payment as an alternative to line-by-line payments for each individual election. The proposed payment solution includes the following high-level workflow steps:

- 1. The Participant submits one or multiple elections for a single or multiple HINs
- 2. The Participant, at a given point in time, submits a payment instruction, with reference to previous submitted elections
- 3. CHESS will perform validations to confirm that the payment instruction and elections referenced are correct
- 4. A payment request over CHESS RTGS is initiated.

These Focus Groups also discussed some aspects of the previously proposed DRP solution design, specifically the ability for the CHESS replacement system to support electronic instructions to receive dividends in a currency other than Australian Dollars where the issuer provides this as an event option.

The Focus Group held on 27 August was on the topic of batch settlement and RTGS processing. Invitees were Equity Settlement Payment Providers Sub-Committee members. The primary focus of the session was to provide further details on RTGS payment workflows to support settlement of mFund, Corporate Actions, and Bilateral Demand DvP transactions. Bilateral meetings to continue discussions on how this change affects each Equity Settlement Payment Provider individually are ongoing and will continue into October 2019.

The Focus Group held on 17 September was on the topic of the ASX mFund Settlement Service. Invitees included Product Issuer Settlement Providers (PISPs), fund managers and participants that currently settle mFund transactions via CHESS.

The Focus Group discussed a number of topics, which included:

- Removal of mFund Application and Redemption orders from the CHESS batch settlement. These transactions are
 proposed to settle via the CHESS RTGS process on a line-by-line basis in the CHESS replacement system.
- Consolidation of messages and workflows relating to Conversions, Unit Adjustments, Investor and Foreign Tax Status, DRP elections and SRN enquiries, as the utilisation of a global ISO 20022 standard removes the need for asset specific messages for these workflows.

Focus Group attendees were requested to provide feedback to the presented solutions.

A summary of key themes raised through the Focus Groups, as well as ASX's response to stakeholders' feedback, will be published when the technical documentation is released.

The next scheduled Focus Group meeting will be held on 15 October 2019 on the topic of investor information.

A list of previous meetings topics and future Focus Group dates can be found here.

Implementation & Transition Working Group



Implementation & Transition Working Group

The next Implementation & Transition working group is being planned for **October 2019** via webinar. It will include a timeline for industry transition and cutover to provide greater transparency on the key activities and milestones. The date and time will be advised here in due course.

A recording and presentation materials for the Implementation & Transition working group held 20 March 2019 can be accessed/sere

ISO 20022 Technical Committee Meetings



ISO 20022 Technical Committee Meetings

The latest ISO 20022 Technical Committee meeting was held on 27 August in Sydney. The committee members were provided with an update on the Corporate Action Focus Group activities and an overview of the proposed ('to-be') ISO 20022 messages for Collateral Removal and Transfer of Novated Equities Transactions (Give-Ups). ASX also provided a summary of member feedback on the previously published draft messages including Takeover and BuyBack and Collateral Creation.

The next ISO 20022 Technical Committee meeting will be held on **1 October 2019** in Sydney. It will cover Corporate Action and mFund Focus Group activities and an overview of the proposed ('to-be') ISO 20022 messages for the business function of mFund Applications. ASX will also provide a summary of member feedback on the previously published draft Collateral Removal and Transfer of Novated Equities Transactions (Give-Ups) messages.

A list of everyous meeting topics and materials as well as future ISP 120032 Jechnical Cosmittee dates on he found be a

Customer Frequently Asked Questions



Customer Frequently Asked Questions

→ How do we know what functionality will be introduced for testing in the Customer Development Environment (CDE)?

ASX published a Forward Release Plan in our Technical Documentation portal to illustrate when features for the new system will be available. This Forward Release was updated recently to include all remaining release dates for the Customer Development Environment (CDE). See - What's New 17 September 2019 - Forward Release Plan.

Is there a bulk download message functionality in the SWIFT MyStandards portal?

The SWIFT MyStandards portal does provide a bulk export of Usage Guidelines or Schema Files.

Usage Guidelines can be selected (multiple) from a collection or collections and by navigating to and clicking on the folder icon (right) the selection is then exported as a single zip file.

Details about MyStandards have been provided in our Technical Documentation and will be updated with further details in the Technical Documentation release scheduled for end of July 2019.

How is ASX receiving feedback on ISO 20022 messages?

The CHESS Replacement project shares details of new functionality and significant change as discussed at Focus Groups, together with draft messages with the ISO 20022 Technical Committee. Where relevant the ISO 20022 messages are compared to the current CHESS proprietary (EIS) messaging. As a result of this engagement ASX receives feedback via the Technical Committee.

In order to review the finalised definition and schemas for the ISO 20022 messages users can access the SWIFT MyStandards portal. Details about MyStandards and how to access have been provided in our Technical Documentation.

What will be the most likely replacement for CHESS PC?

CHESS PC and CHESS Access
As part of the CHESS Replacement project ASX will be decommissioning both the CHESS PC and CHESS Access in terface products on go-live.

Users of these products will need to select a new method of how they to connect to CHESS Replacement.

C H E S S P

CHESS PC supports the manual entry of transactions; additionally it can be used as a message gateway using a scheduled file upload/download mechanism.

C H E S S A c c e s s

CHESS Access provides a message gateway allowing host systems to connect directly with CHESS Access to send and receive transactions.

Background

Both products were developed by ASX to support the proprietary nature of CHESS message formats and protocol.

CHESS Replacement adopts global and simplified standards using ISO 20022 XML message formats and introduces new connection channels using Node integration, AMQP and SWIFTNet.

N e w B r o w s e r

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.

The 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.

Details can be found in the CHESS Replacement consultation paper. Refer to our website for details.

Can I join any of the Working Groups or Committees?

ASX has given careful consideration on how best to engage with industry to elicit the feedback required from all stakeholder groups to develop and implement the system that will replace CHESS. To date, ASX has adopted an approach involving both formal broad-based public consultation, and a range of committee and working group forums. These stakeholder forums are designed to share with, and take feedback from, a cross-section of the market on particular topics.

- Focus Groups are targeted sessions where membership is by invitation, which will vary depending on the topic at hand and particular expertise required.
- ISO 20022 Technical Committee is by invitation.
- · Working Groups are usually presented with online web and teleconference access.

Refer to the Stakeholder Engagement page on the CHESS Replacement website for details of all engagement forums.

Please contact CHESSReplacement@asx.com.au with enquiries about any of the forums.

When is the next Implementation & Transition working group meeting?

The next implementation & transition working group webinar is being planned for October. The webinar will include a timeline for industry transition and cutover to provide greater transparency on the key activities and milestones.

Further details will be provided in due course. This will include updating the Stakeholder Engagement section of the CHESS Replacement website..

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

- General CHESS Replacement questions
- Technical Documentation FAQs

Customer Development Environment Updates



Customer Development Environment Updates

We have recently published the scope for remaining CDE code drops in our Forward Release Plan on our Technical Documentation portal. This includes when the associated technical documentation becomes available. The plan is subject to change as we continue to engage with stakeholders on solution design, and subsequent system development testing.

Our third release of code (CDE 3) was released on 30 August 2019, which introduced features that would be used by all Clearing & Settlement Participants (such as Account and Holder creation) and Share Registries.

The next publication of Technical Documentation (Release 5) is on track for release at the end of September 2019.

CDE - Release 3

ASX refreshed CDE with a new code drop, Release 3 at the end of August. The features associated with this code drop can be found in our Release 3 release notes - part (i) May 2019, and part (ii) June 2019. This was the first set of features which will impact the **Share Registries** - who were encouraged to look at the associated technical documentation and consider their connectivity to the CDE to commence testing from CDE 3.

Messaging associated with the above features, the Proprietary Code List and Cross Reference Guides were also updated. New ISO 20022 message collections were published in the SWIFT MyStandards portal to align with the Release 4 functionality.

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.
- Details of how to request access to the CDE are available in our technical documentation portal.

Corporate Actions STP



Corporate Actions STP

Corporate Actions Straight Through Processing Phase 2 project

Separate to the CHESS Replacement project, ASX has been running a project to enable straight through processing (STP) of Corporate Actions. The project is addressing some of the challenges to both the market and ASX with corporate actions processing, as well as progressing a number of business requirements which came out of the 2017/18 CHESS Replacement consultation process, including:

- · Electronic single access point for corporate action event info
- Transparency through the life cycle of corporate actions
- Standardised DRP and BSP elections
- ISIN for entitlement in non-renounceable rights issues
- · Spin-offs involving entitlements in securities in foreign jurisdictions
- Share purchase plans; and
- Review deferred settlement trading processes.

The first phase of this project went live in 2014, and covered 4 major event types accounting for around 68% of corporate action volumes, introducing a new near real time ISO 20022 corporate action event notification service. The second phase of the project is now underway, and will round out the coverage to the complete set of corporate actions supported by ASX. The second phase of the project will be delivered in three stages, and the final release will go live prior to the go-live of the CHESS Replacement system.

The CHESS Replacement system will consume the ISO 20022 corporate action event notifications, and given its move from EIS proprietary messages to ISO 20022 messages – this also means ISO 20022 messaging standards and process models can be used to facilitate further requirements around supporting elections, acceptances and distributions.

An industry working group convenes regularly to progress the STP project. While the working group is run independently to the various CHESS Replacement stakeholder engagement forums, many industry stakeholders are represented in both groups.

More information on the project is available here.

Upcoming Activities



Upcoming Activities

DATE	ACTIVITY
Thursday 26 September 2019, 2.30pm-3.15pm	Sibos (London), Conference North, Conference Room 2 - DLT in 2019: Unlocking the potential for DLT to transform market infrastructure
End September	CDE 5 - Technical Documentation Release
Tuesday 1 October 2019, 3pm-5pm	ISO 20022 Technical Committee (refer here)
Wednesday 9 October 2019, 2pm-4pm	C&I working group - Security & Ledger API updates (refer here)
Tuesday 15 October 2019, 10am-12.00pm	Focus Group - Investor information (refer here)
October (TBC)	Implementation & Transition working group (refer here)

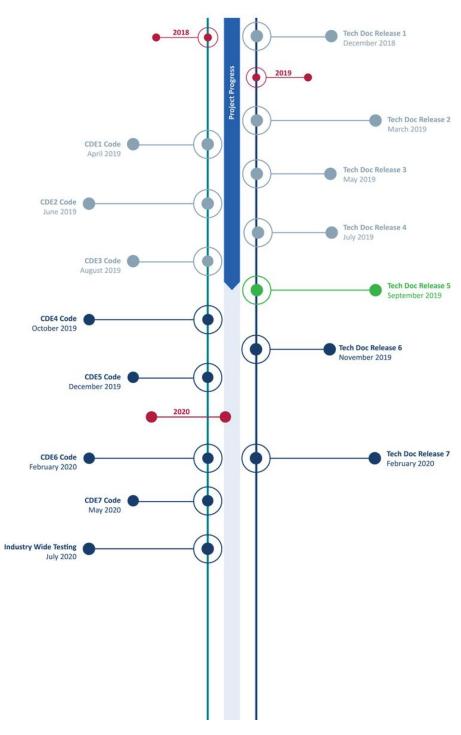
Refer to the CHESS Replacement Project Milestones.

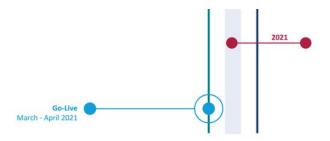
Project Milestones



Project Milestones







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BAU Project Updates



BAU Project Updates

Two business requirements identified as part of the 2017 CHESS Replacement Business Requirements Working Groups (captured in ASX's April 2018 Consultation Paper "CHESS Replacement: New Scope and Implementation Plan") are being progressed by ASX outside of the CHESS Replacement project, as Business-As-Usual activities, as neither are dependent on the new system. Subject to the necessary regulatory clearances, both business requirements are **targeted to be delivered prior to go-live** of the CHESS Replacement system.

Transfers to the CHESS Subregister

On 30 August 2019, ASX released its response to submissions received on its July 2018 Consultation Paper "Transfers to the CHESS Subregister."

ASX has also informally lodged with ASIC amendments to the ASX Settlement Operating Rules to implement this business requirement. These rules reflect the revised proposal described in ASX's response to submissions received.

At this stage, ASX is anticipating that these rules will become effective on or around mid-December 2019, subject to regulatory clearance.

Corporate Actions - Takeover Offer

On 30 August 2019, ASX formally lodged with ASIC rule amendments seeking to enhance the existing process for acceptance of an off-market takeover offer (in respect of CHESS holdings) and published a market notice providing a copy of the amendments.

ASX anticipates that these rules will become effective on 30 September 2019, subject to regulatory clearance. ASX will issue a further market notice confirming the effective date once the regulatory clearance process is complete.

ASX will provide further updates on these BAU items in due course.

For further detail on these two business requirements, please refer to our August newsletter.

Rule Amendment & Public Consultation Timeline



Rule Amendment & Public Consultation Timeline

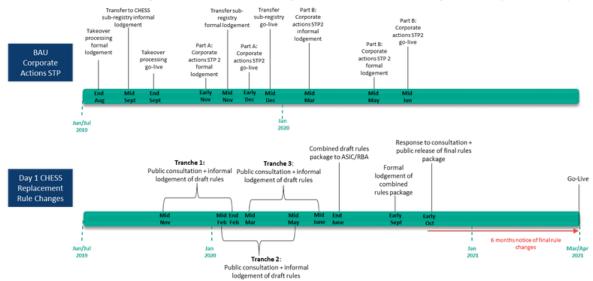
ASX has been engaging with regulators in relation to the rules and other relevant regulatory aspects that need to be addressed to support any new or changed services and functionality, including our indicative timeline.

Included below is a timeline setting out key dates for regulatory and public consultation processes for the rule amendments required for CHESS Replacement.

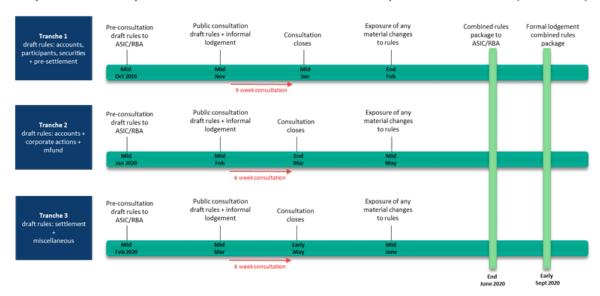
The timeline covers rule amendments required for Day 1 changes in the new system, including new business requirements, re-engineering of solutions for existing CHESS functionality and the decommissioning of existing CHESS functionality.

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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Useful weblinks



Useful weblinks

ASX CHESS Replacement System Access Pricing

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

ASX CHESS Replacement communications (including past newsletters):

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:

Pricing Letter - September 2019

Podcast - July 2019

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

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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