Program Newsletter

CHESS Replacement homepage

CHESS Replacement Project Update

April 2020

As we settle into life dealing with COVID-19 and new working arrangements, ASX continues to move forward with our preparations to consult on the implementation timetable from June 2020 and open an Industry Test Environment (ITE) from July 2020. This has included publishing ITE application forms which are now available for software developers who wish to optionally connect to ITE from July.

The ISO 20022 Technical Committee met on 7 April for possibly the last time. Since the Committee commenced its work in December 2016, all in scope CHESS EIS messages and new functions have been mapped to 106 ISO 20022 multifunctional messages. This has reflected an extraordinary effort from the Committee in working constructively across a great deal of technical detail.

Also in early April we published the first round of technical accreditation scripts for messaging (identifying the required test scenarios by the different CHESS user types). Additional scripts will be published in tranches as soon as they are available, with the next round expected by the end of this month.

Finally, in early April we published the last tranche of functional and messaging specifications which allows software developers to complete their development to the new system. We now turn our attention to updating procedural guidelines which will similarly be released in tranches over the coming months.

Further details on all of 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@asx.com.au.

Cliff Richards

Executive General Manager
Equity Post Trade

Engagement Activities

Connectivity & Integration Working Group

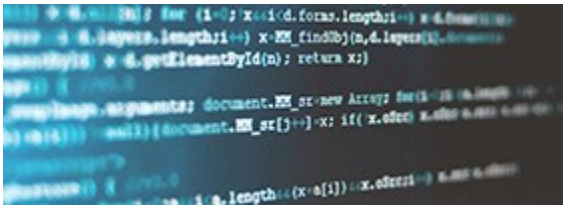
A Connectivity & Integration working group (C&I WG) was held on 19 February and included an overview on API contracts and details of the recent CDE 6 code release. The next C&I WG meeting will be held 13 May.

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 is targeted for 20 May.

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. Details of a code fix have been published.

Read more >

ISO 20022 Technical Committee Meetings

The ISO 20022 Technical Committee met for the 32nd and possibly last time on 7 April 2020 to discuss the final set of messages for member review.

Read more >

Corporate Actions STP

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

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 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

What's new

Release notes

Forward release plan

Where to next?

Upcoming activities

Useful weblinks

Contact us:

Follow us on:

CHESSReplacement@asx.com.au

Privacy Policy

The views, opinions or recommendations of the authors in these articles are solely those of the authors and do not in any way reflect the views, opinions, recommendations, of ASX Limited ABN 98 008 624 691 and its related bodies corporate (“ASX”). ASX makes no representation or warranty with respect to the accuracy, completeness or currency of the content. The content is for educational purposes only and does not constitute financial advice. Independent advice should be obtained from an Australian financial services licensee before making investment decisions. To the extent permitted by law, ASX excludes all liability for any loss or damage arising in any way including by way of negligence.

© Copyright 2020 ASX Limited ABN 98 008 624 691. All rights reserved 2020.

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 looked forward at the recent code drop - CDE 6. This release included 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 introduced 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 has since also published functional documentation in Release 7 (part II) on 28 February 2020, code and full release notes for CDE 6 on Tuesday 3 March and Release 8 documentation on 2 April 2020. Refer to the Forward Release Plan for details and the CDE section of this update.

The next C&I WG meeting will be held **13 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.

The views, opinions or recommendations of the authors in these articles are solely those of the authors and do not in any way reflect the views, opinions, recommendations, of ASX Limited ABN 98 008 624 691 and its related bodies corporate (“ASX”). ASX makes no representation or warranty with respect to the accuracy, completeness or currency of the content. The content is for educational purposes only and does not constitute financial advice. Independent advice should be obtained from an Australian financial services licensee before making investment decisions. To the extent permitted by law, ASX excludes all liability for any loss or damage arising in any way including by way of negligence.

© Copyright 2020 ASX Limited ABN 98 008 624 691. All rights reserved 2020.

Implementation & Transition Working Group

I&T Working Group

The latest Implementation & Transition working group (I&T WG) webinar was held on **1 April 2020**. The webinar primarily focused on ASX's annoucement that it would consult on the implementation timetable.

On 25 March 2020, ASX announced that it will consult on the implementation timetable for the CHESS replacement system. This is due to the unfolding COVID-19 pandemic. It is also in response to user feedback on timing, requested functionality changes, and the need for ASX to complete aspects of its own readiness. In June, ASX will seek user input on the new schedule that will move the go-live date from April 2021 to a later date. In the meantime, the target of opening an Industry Test Environment (ITE) in July is retained. Further details can be found by downloading the media release.

Headline messages from the webinar were:

- ITE will now split into two distinct environments:
  - ITE1 which is for the use of software developers to complete their development activities in a new integrated environment.
  - ITE2 which is for production CHESS Users and will tentatively be available from October 2020 (subject to the outcomes of the consultation process - detailed below).
- The replan consultation:
  - Will provide additional time for users to complete their operational readiness activities and to consider the rule changes that accompany the new system.
  - Will also increase the time available for back office software developers to familiarise themselves with key aspects of the new system in a production-like testing environment.
  - Will enable software developers and ASX to complete software development and testing.
- Consultation through Focus Groups and ISO 20022 Technical Committee has resulted in a number of changes to the final solution design to take into consideration stakeholder feedback. Accordingly, not all code will be be available in CDE7 at end of May. Details were provided in the slides.
- Pursuant to information provided in the February working group webinar, ASX published in Technical Documentation Release 8, a list of features and messages applicable for each participant type in the Technical Documentation portal. This included:
  - Complete list of features, and their relation to the role and user in the system (mandatory, optional or n/a for purposes of message accreditation).
  - List of messages relating to the 'Account Management' feature initially, and their applicability to each role and user.
  - Messages relating to other features will be published in subsequent technical documentation releases.
- The target of opening up the Industry Test Environment (ITE) in July 2020 is retained. Details about connectivity to ITE are below.

For further information on the components and requirements of technical accreditation, the presentation slides from April are available here , and webinar recording is also available here on the CHESS Replacement website.

The next I&T working group webinar will be on **20 May 2020**.

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 projeect. ITE is split into two separate environments:

- ITE1 is a new dedicated environment that is being made available to software providers only (vendors and in-house developers) from July 2020.
- ITE2, indicatively available from October, will be made available to all CHESS users. Details of how to connect and application forms for ITE2 will be published in due course.

ITE1 Application Forms

ASX has published ITE1 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 to ITE1 in time for the start of July 2020.

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.

The views, opinions or recommendations of the authors in these articles are solely those of the authors and do not in any way reflect the views, opinions, recommendations, of ASX Limited ABN 98 008 624 691 and its related bodies corporate ("ASX"). ASX makes no representation or warranty with respect to the accuracy, completeness or currency of the content. The content is for educational purposes only and does not constitute financial advice. Independent advice should be obtained from an Australian financial services licensee before making investment decisions. To the extent permitted by law, ASX excludes all liability for any loss or damage arising in any way including by way of negligence.

© Copyright 2020 ASX Limited ABN 98 008 624 691. All rights reserved 2020.

ISO 20022 Technical Committee Meetings

The ISO 20022 Technical Committee met on 7 April 2020 to discuss the final set of messages for member review.

The agenda included a review of member feedback on the published 'to-be' messages shared at the last meeting including:

- 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.

The final messages for member review include Reporting, Cancelled Funds Obligation (default management) and Close Out Notification, Holding Administration Lock, and DRP enquiry.

All in scope CHESS EIS messages and new functions have now been mapped to 106 ISO 20022 messages, including 7 new messages drafted specifically by ASX with SWIFT's assistance to meet CHESS replacement requirements.

Given the final set of messages are now with members for review and all outstanding action items have been closed, it is anticipated this will be the last meeting of the committee. ASX thanks all members of the committee for their substantial effort and contribution to this significant part of the project work.

A list of previous meeting dates and materials can be found here.

The views, opinions or recommendations of the authors in these articles are solely those of the authors and do not in any way reflect the views, opinions, recommendations, of ASX Limited ABN 98 008 624 691 and its related bodies corporate (“ASX”). ASX makes no representation or warranty with respect to the accuracy, completeness or currency of the content. The content is for educational purposes only and does not constitute financial advice. Independent advice should be obtained from an Australian financial services licensee before making investment decisions. To the extent permitted by law, ASX excludes all liability for any loss or damage arising in any way including by way of negligence.

© Copyright 2020 ASX Limited ABN 98 008 624 691. All rights reserved 2020.

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. Details 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 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
- Wednesday 25 March 2020 CDE 6 environment reset - inducted a code fix for a defect relating to 'Identical Business Message Identifier'.
- Tuesday 14 April 2020 - a code fix was introducted to the CDE environment, resolving two previously observed behaviours in CDE 6.

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

ASX published on 2 April 2020 the latest documentation release (Rel 8 part I) including the first round of technical accreditation scripts for messaging (identifying the required test scenarios by the different CHESS user types). Full details can be found at April 2020 - Documentation Release Notes (Part I).

Further technical documentation (Rel 8 part II) and further accreditation details will be published at the end of April 2020.

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.

The views, opinions or recommendations of the authors in these articles are solely those of the authors and do not in any way reflect the views, opinions, recommendations, of ASX Limited ABN 98 008 624 691 and its related bodies corporate (“ASX”). ASX makes no representation or warranty with respect to the accuracy, completeness or currency of the content. The content is for educational purposes only and does not constitute financial advice. Independent advice should be obtained from an Australian financial services licensee before making investment decisions. To the extent permitted by law, ASX excludes all liability for any loss or damage arising in any way including by way of negligence.

© Copyright 2020 ASX Limited ABN 98 008 624 691. All rights reserved 2020.

Rule Amendment & Public Consultation Timeline

Market Consultation

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. ASX is working to provide a response to consultation feedback received on the tranche 1 draft rule amendments in May 2020.

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.

The views, opinions or recommendations of the authors in these articles are solely those of the authors and do not in any way reflect the views, opinions, recommendations, of ASX Limited ABN 98 008 624 691 and its related bodies corporate (“ASX”). ASX makes no representation or warranty with respect to the accuracy, completeness or currency of the content. The content is for educational purposes only and does not constitute financial advice. Independent advice should be obtained from an Australian financial services licensee before making investment decisions. To the extent permitted by law, ASX excludes all liability for any loss or damage arising in any way including by way of negligence.

© Copyright 2020 ASX Limited ABN 98 008 624 691. All rights reserved 2020.

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.

The views, opinions or recommendations of the authors in these articles are solely those of the authors and do not in any way reflect the views, opinions, recommendations, of ASX Limited ABN 98 008 624 691 and its related bodies corporate ("ASX"). ASX makes no representation or warranty with respect to the accuracy, completeness or currency of the content. The content is for educational purposes only and does not constitute financial advice. Independent advice should be obtained from an Australian financial services licensee before making investment decisions. To the extent permitted by law, ASX excludes all liability for any loss or damage arising in any way including by way of negligence.

© Copyright 2020 ASX Limited ABN 98 008 624 691. All rights reserved 2020.

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 Frequently 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?

ASX plans to provide further technical details on the ASX Customer Identity Access Management system (CIAM) at the May 2020 Connectivity & Integration working group.

If documentation is ready before this date, ASX will publish this information in 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. 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.

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

- General CHESS Replacement questions
- Technical Documentation FAQs

The views, opinions or recommendations of the authors in these articles are solely those of the authors and do not in any way reflect the views, opinions, recommendations, of ASX Limited ABN 98 008 624 691 and its related bodies corporate (“ASX”). ASX makes no representation or warranty with respect to the accuracy, completeness or currency of the content. The content is for educational purposes only and does not constitute financial advice. Independent advice should be obtained from an Australian financial services licensee before making investment decisions. To the extent permitted by law, ASX excludes all liability for any loss or damage arising in any way including by way of negligence.

© Copyright 2020 ASX Limited ABN 98 008 624 691. All rights reserved 2020.

Upcoming Activities

Upcoming Activities

Date	Activity
Wednesday 13 May 2020, 2pm-3.30pm	Connectivity & Integration working group (refer here)
Wednesday 20 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)
June 2020	Consultation on implementation timetable (refer here)
July 2020	Industry Test Environment (ITE) optionally opens for developers

The views, opinions or recommendations of the authors in these articles are solely those of the authors and do not in any way reflect the views, opinions, recommendations, of ASX Limited ABN 98 008 624 691 and its related bodies corporate ("ASX"). ASX makes no representation or warranty with respect to the accuracy, completeness or currency of the content. The content is for educational purposes only and does not constitute financial advice. Independent advice should be obtained from an Australian financial services licensee before making investment decisions. To the extent permitted by law, ASX excludes all liability for any loss or damage arising in any way including by way of negligence.

© Copyright 2020 ASX Limited ABN 98 008 624 691. All rights reserved 2020.

Useful weblinks

Useful weblinks

ASX CHESS Replacement communications (including past newsletters):	https://www.asx.com.au/services/chessreplacement-communications.htm
CHESS Replacement - Tranche 2 Rule Amendments	Consultation Paper - February 2020
CHESS Replacement - Tranche 1 Rule Amendments	Consultation Paper - November 2019
ASX CHESS Replacement System Access Pricing	Pricing Letter - September 2019
Toronto Centre Podcast: Introducing the Newest Technology to Capital Markets: The Industry's Perspective	Podcast - July 2019
ASX CHESS Replacement website:	https://www.asx.com.au/services/chess-replacement.htm
ASX Technical Documentation:	https://asxchessreplacement.atlassian.net/wiki/spaces/CSP/overview
Digital Asset – DAML (including requesting the SDK):	https://daml.com/
ASX Response to consultation feedback:	https://www.asx.com.au/documents/public-consultations/response-to-chess-replacement-consultation-feedback.pdf
ASX 2018 Consultation Paper:	https://www.asx.com.au/documents/public-consultations/chess-replacement-new-scope-and-implementation-plan.pdf
Recent ASX Webinars:	https://www.asx.com.au/services/webinar-archive.htm

The views, opinions or recommendations of the authors in these articles are solely those of the authors and do not in any way reflect the views, opinions, recommendations, of ASX Limited ABN 98 008 624 691 and its related bodies corporate (“ASX”). ASX makes no representation or warranty with respect to the accuracy, completeness or currency of the content. The content is for educational purposes only and does not constitute financial advice. Independent advice should be obtained from an Australian financial services licensee before making investment decisions. To the extent permitted by law, ASX excludes all liability for any loss or damage arising in any way including by way of negligence.

© Copyright 2020 ASX Limited ABN 98 008 624 691. All rights reserved 2020.