

Agenda

Business Committee

Date	14 July 2021	Time	12:00pm – 2:00pm
Location	By teleconference		
1. Introductions and open actions			12:00pm-12:15pm
2. Service Performance			12:15pm-12:25pm
a) Cash Market Clearing and Settlement - Operating Performance			
3. CHES Replacement			12:25pm-1:25pm
a) Project update			
i. ASX's response to the consultation on proposed changes to netting and settlement workflow			
ii. Industry test strategy			
b) ISO 20022 Technical Committee report			
c) Governance			
d) Progress update on access pricing for service providers			
e) Data migration approach			
4. Service Enhancements			1:25pm-1:40pm
a) Corporate Action STP Phase 2 project			
b) Electronic CHES holding statements			
5. Regulatory Expectations – External Audit			1:40pm-1:50pm
a) Update on the upcoming external audit of ASX's compliance with the regulatory expectations			
6. Administration			1:50pm-2:00pm
a) Minutes from 14 April 2021 Business Committee meeting			
b) Forward work program			
c) Other matters			
7. Next Meeting – 6 October 2021			

Action Items

Item number#	Action	Due date	Status	Owner
2019 Sept (1)	Communicate with issuers on the proposed changes to corporate action forms and processes	Nov 2019	Completed	Karen Webb
2019 Sept (2)	Further information regarding how the market could use the optional DLT capabilities of the system	Nov 2019	Completed	Cliff Richards
2019 Sept (3)	Summary of the types of CHES replacement project risks ASX tracks	Nov 2019	Completed	Hamish Treleaven Cliff Richards
2019 Sept (4)	Implement changes to Business Committee processes (draft agenda and meeting action items)	Nov 2019	Completed	Gary Hobourn
2019 Sept (5)	Invite AMOs to attend the next meeting of the Implementation and Transition Working Group	Nov 2019	Completed	Keith Purdie
2019 Sept (6)	Circulate the annual Regulatory Expectations audit report and Management Accounts for the CS facilities	Nov 2019	Completed	Gary Hobourn
2019 Sept (7)	Organise a meeting with AMOs to discuss the issues raised during the PWC audit	Nov 2019	Completed	Karen Webb
2019 Sept (8)	Respond to industry feedback following release of ASX Clear GN10: Business Continuity & Disaster Recovery	Nov 2019	Completed	Hamish Treleaven
2019 Nov (1)	Provide members with the proposed times for the meeting dates in 2020.	Dec 2019	Completed	Gary Hobourn
2020 Apr (1)	Facilitate, with an industry group member, more effective engagement on benefits of the new system.	Jul 2020	Completed	Peter Hiom
2020 Oct (1)	Provide members with a roadmap for Day 2 implementation of remaining corporate actions functionality for CHES Replacement	Dec 2020	Completed	Timothy Hogben
2020 Oct (2)	Provide members with a forward stakeholder engagement plan for CHES Replacement	Dec 2020	Completed	Keith Purdie
2020 Dec (1)	Follow up with members who offered their help to assist ASX perform scenario planning in Q1 2021 to understand flow-on impacts from the CHES batch processing delay on 17 November.	Apr 2021	Completed	Val Mathews
2021 Apr (1)	ASX to further consider NSX's data reporting request and engage bilaterally with NSX.	Jul 2021		Timothy Hogben
2021 Apr (2)	ASX to confirm the timeframe for publishing an educational artefact around the phases of CHES batch settlement (as an outcome of industry engagement regarding the November 2020 settlement delay).	Jul 2021		Val Mathews
2021 Apr (3)	ASX to further consider the need for clarity with the data migration process.	Jul 2021		Timothy Hogben
2021 Apr (4)	ASX to confirm whether it would publish non-confidential submissions to the consultation on proposed changes to netting and settlement workflows.	Jul 2021		Timothy Hogben
2021 Apr (5)	ASX to provide further detail at the next (July) meeting around its recent CHES replacement governance framework review.	Jul 2021		Hamish Treleaven

Business Committee Members

Company	Name	Job Title	Apologies
ABN AMRO Clearing	Barry Parker	Chief Executive Officer	
AFMA	David Lynch	Chief Executive Officer	
ASX	Val Mathews	Business Committee Chair-elect & Chief Customer and Operating Officer	
ASX	Helen Lofthouse	Group Executive, Markets	
AIRA	Ian Matheson	Chief Executive Officer	
ACSA	Rob Brown	Chief Executive Officer	
ASA	Fiona Balzer	Policy & Advocacy Manager	
AUSIEX	Mat Tilley	Head of Markets & Client Solutions	
BAML	Stephen Hacker	Director, Head of Operations	
Bell Potter Securities	Robert Tesoriero	Settlements Manager	
BNP Paribas	Mark Wootton	Head of Custody Product Aust & NZ	
BoardRoom	Martin Jones	General Manager Corporate Governance & Director	
Chi-X Australia	Mike Aikins	Chief Operating Officer	
Citi	Lyall Herron	Program Manager	
CMC	Andrew Rogers	Director of Broking Business	
CBA (CommSec)	Sheridan Thompson	Head of Strategic Development	
Credit Suisse	Winston Loke	Australian Equities COO	
Goldman Sachs	Yen Le	Executive Director	
GIA	Megan Motto	Chief Executive Officer	
HSBC	Nichole Alexander	Manager, Aust Market Advocacy & Development	
J.P. Morgan	Jonathan Evans	Head of Custody & Markets Operations	
Link Market Services	Peter Jackson	Chief Operating Officer	
Macquarie Group	James Indge	Cash Equities Business Manager	
Morgan Stanley	Rebecca Hill	Chief Operating Officer	
Morgans	Daniel Spokes	Director, Client Support Services	
NAB	Anita Mead	Head of Business Management, Self-Directed Wealth	
NSX	Chan Arambewela	Chief Operating Officer	
Pershing Securities	Leigh Conder	Chief Operating Officer	
SAFAA	Judith Fox	Chief Executive Officer	
Sydney Stock Exchange	Antony Tolfts	Listings Director	
UBS	Conor Foley	Chief Operating Officer	

* Delegate

ASX Management

Name	Job Title	Apologies
Tim Hogben	Group Executive, Securities and Payments	
Daniel Moran	General Counsel	
Hamish Treleaven	Chief Risk Officer	
Dan Chesterman	Group Executive, Technology and Data, and CIO	
Sally Palmer	Deputy General Counsel	
Katie McDermott	General Manager, Securities and Payments	
Diane Lewis	General Manager, Head of Regulatory Affairs	
Andrew Jones	General Manager, Securities and Payments	
Karen Webb	Senior Manager, Securities and Payments	
Keith Purdie	Senior Manager, Securities and Payments	
Con Korkofigas	Senior Legal Counsel and Senior Manager	

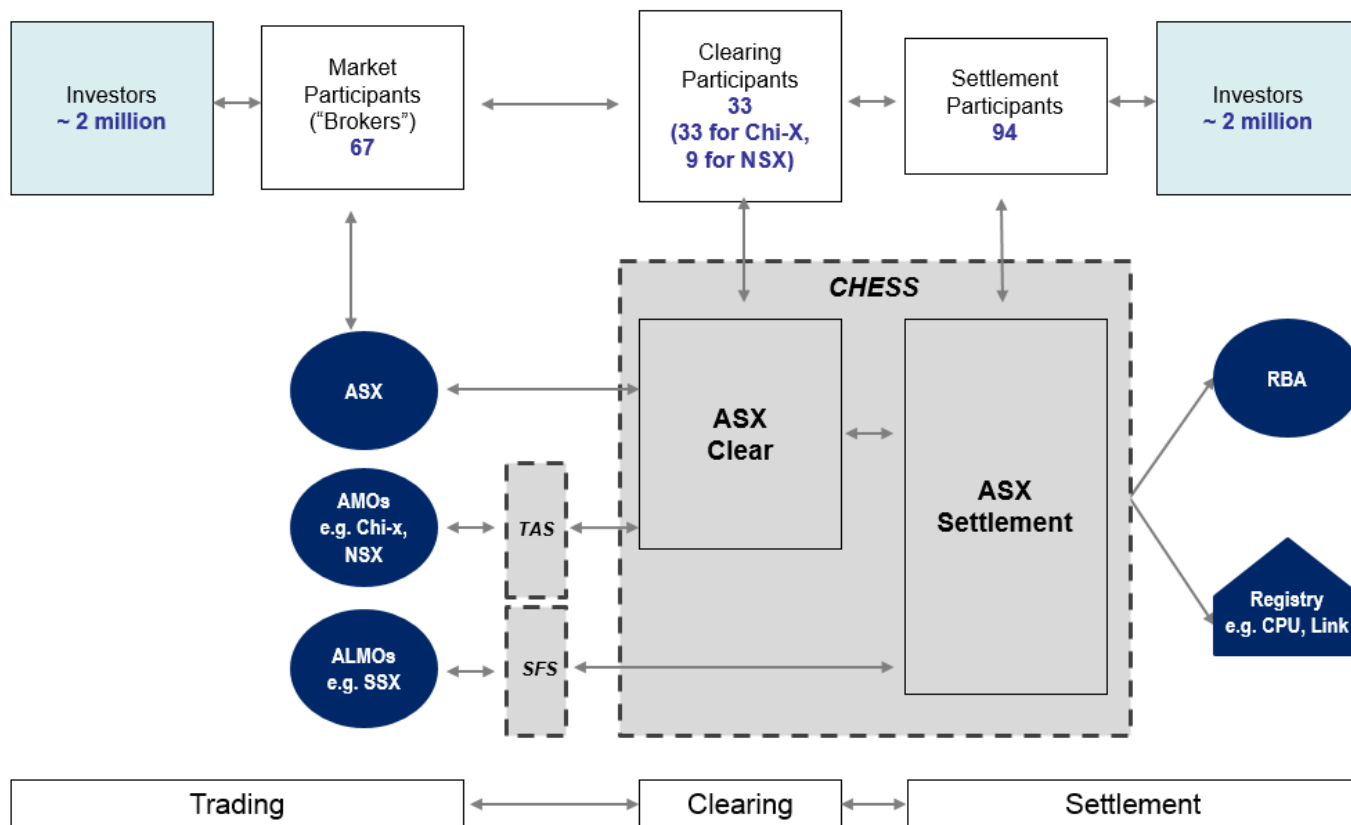
Observers

Name	Job Title	Apologies
Nathan Bourne	Senior Executive Leader, Market Infrastructure (ASIC)	
Dodie Green	Senior Manager, Market Infrastructure, (ASIC)	

Committee	Business Committee
Agenda title	Cash Market Clearing and Settlement - Operating Performance
Item	2a
Purpose	To report on key performance metrics for ASX's clearing and settlement services
Meeting date	14 July 2021
Prepared by	Chief Customer and Operating Officer (Val Mathews) General Manager, Clearing and Settlement Operations (Suzy Munro) Senior Manager, Settlement Operations (Brendan Laird)

OVERVIEW

Market Structure Overview



The clearing and settlement of equities performs a critical role in the operation of Australia's financial markets, helping to reduce counterparty and systemic risk, and provide transaction efficiency and certainty for end investors.

Core processes that provide these benefits include novation, netting and settlement.

Novation

Through a contractual process known as novation, ASX Clear becomes the seller to every buyer and the buyer to every seller, making it liable for completing all cleared transactions on the relevant market. Novation performs two important functions:

- it replaces the clearing participants' credit exposures to other clearing participants by substituting the clearing house as the central counterparty; and
- it maximises capital efficiency for clearing participants by permitting a single net exposure to be calculated and collateralised between the clearing house and each clearing participant.

Through novation, ASX Clear provides protection to non-defaulting clearing participants (and, indirectly, their clients) from the inability of a defaulting clearing participant to meet its obligations.

A key metric for monitoring novation is the percentage of on and off market trading that is novated.

Trades submitted for clearing and settlement by any market operator are verified prior to registration by ASX Clear. If the verification conditions are not satisfied then trades are rejected. Once a trade is registered it is novated. Novation is deemed to be effective from the matching of bid/offer (on market trades) or recording of the trade (reported trades) for all trade execution venues.

Netting

ASX Clear is approved as a 'netting market', and ASX Settlement is an 'approved netting arrangement', for the purposes of the Payment Systems and Netting Act. This gives legal certainty to the netting of settlement obligations. Settlement on a multilateral net basis maximises market efficiency by reducing participant transaction and funding costs.

A key metric for monitoring netting is the percentage by which novated value is netted down for settlement. This metric is termed "netting efficiency".

Settlement

ASX's model for settlement maximises efficiency, while minimising the risk of settlement failure. It does this by simultaneously transferring the legal ownership of shares and facilitating the transfer of money for those shares. This is done through a Model 3 multilateral net batch settlement mechanism with irrevocable settlement finality at the end of the processing cycle. The transfer of money occurs across the Exchange Settlement Accounts of payment providers in the RBA's Information and Transfer System (RITS).

A key metric for monitoring settlement is the percentage of scheduled settlement that successfully settles (i.e. the opposite of the "fail rate"). This metric is termed "settlement efficiency".

Service availability

ASX's critical processes of novation, netting and settlement are supported in ASX's core system CHES. It is critical for market operations, that CHES remains stable and available for processing. A key metric for monitoring systems availability is the percentage of systems uptime as measured against target availability times. The service availability target for CHES is 99.80%.

For the June 2021 quarter, the average monthly system availability was 100% for CHES. The average monthly availability of CHES has been 99.99% between November 2011 and June 2021.

Trade Acceptance Service and Settlement Facilitation Service

ASX Clear and ASX Settlement's Trade Acceptance Service (TAS) provides a mechanism for Chi-X and NSX to submit trades into CHES and the Settlement Facilitation Service (SFS) provides settlement arrangements for unaffiliated Approved Listing Market Operators (ALMOs) in respect of the CHES-eligible financial products listed on their markets (SSX). The CHES system performs the clearing and settlement functions.

The Trade Acceptance Service and Settlement Facilitation Service availability target is 99.80% (the same as CHES).

For the June 2021 quarter, the average monthly system availability was 100% for the TAS and Settlement Facilitation Service. The average monthly availability of the TAS and SFS has been 99.99% between November 2011 and June 2021 (the same as CHES).

Reporting on clearing and settlement service performance

The key metrics noted above on novation, netting efficiency and settlement efficiency for the June 2021 quarter are reported in Attachment A. They are also supported by charts demonstrating a longer reporting period in Attachment B.

Settlement Performance

A performance metric for monitoring the CHES settlement batch is the fail performance.

For the June 2021 quarter, the daily average fail performance has reduced to 0.253% and averaged 0.269% for the previous twelve months, between June 2020 and June 2021.

The daily average fail performance was 0.302% between November 2011 and June 2021.

During the quarter ASX Settlement Operations has been reviewing the daily settlement data for recurring trends in the settlement failure rate, to monitor and ensure there are no systemic issues.

Month	June	May	April	March	February	January
Average Fail Rate	0.178%	0.241%	0.343%	0.289%	0.293%	0.212%
Maximum Fail Rate	0.337%	0.522%	0.926%	0.506%	0.827%	0.488%
Minimum Fail Rate	0.094%	0.115%	0.191%	0.120%	0.153%	0.106%
# of days Fail rate > 0.50%	0	1	3	1	2	0
Batch Settlement Extensions	0	0	0	1	0	0
Fall back of Payment Provider	0	1	1	0	0	0

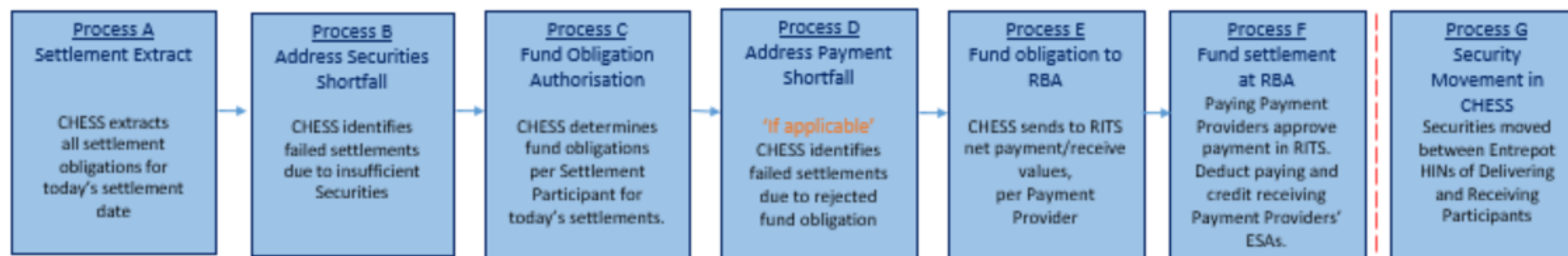
CHES BATCH BACK-OUT PROCESS – 4 May 2021

On Tuesday 4th May 2021, CHES Batch settlement commenced at 11.30am and was completed at 14:12pm, 2 hours later than usual timeframe, and within the Service Level for all Payment Provider authorisation by 2:30pm.

Background

An mFund Product Issuer Settlement Participant (PISP), had entered a message in CHES to process an mFund redemption request from a Settlement Participant. The message [MT-802 Redemption Order Response] contained an incorrect amount in the 'Fund Amount' field for payment under the resulting AQUA Redemption Payment Batch Instruction, of \$107,449,700, instead of \$10,744.97.

On Tuesday 4th May, 2021, CHES batch commenced on schedule at 11.30am and continued to **Process C – Fund Authorisation**. At Process C, payment messages are disseminated to the Payment Providers with net payment / receipt values for each payment facility operated by the Payment Providers for their Participants. Payment obligations require approval from the Payment Provider before the Batch will continue to Process D.



The Payment Provider payment was unable to approve the payment request as it exceeded the limit that was in place.

An escalation period commenced from 12.15pm between Payment Provider, PISP and ASX to determine the cause of the high payment value and discuss the available options to resume CHES batch.

At approximately 1pm, ASX Operations received a request the Payment Provider to reject the payment for the payment facility operated by them.

Settlement of payments on mFund applications and redemptions are segregated from market & other bilateral settlements within batch through the required use of separate payment facilities for:

- mFund redemptions;
- mFund applications; and
- market & other bilateral settlements.

ASX confirmed that only one Batch Instruction was tied to the redemption payment facility for settlement on Tuesday 4th May, 2021 and thus the impact of payment rejection in respect of that facility was limited to the one incorrect mFund redemption transaction. The back out process enabled the removal from settlement of the Batch Instruction which specified the incorrect payment amount for the mFund redemption request, for Tuesday 4 May, 2021.

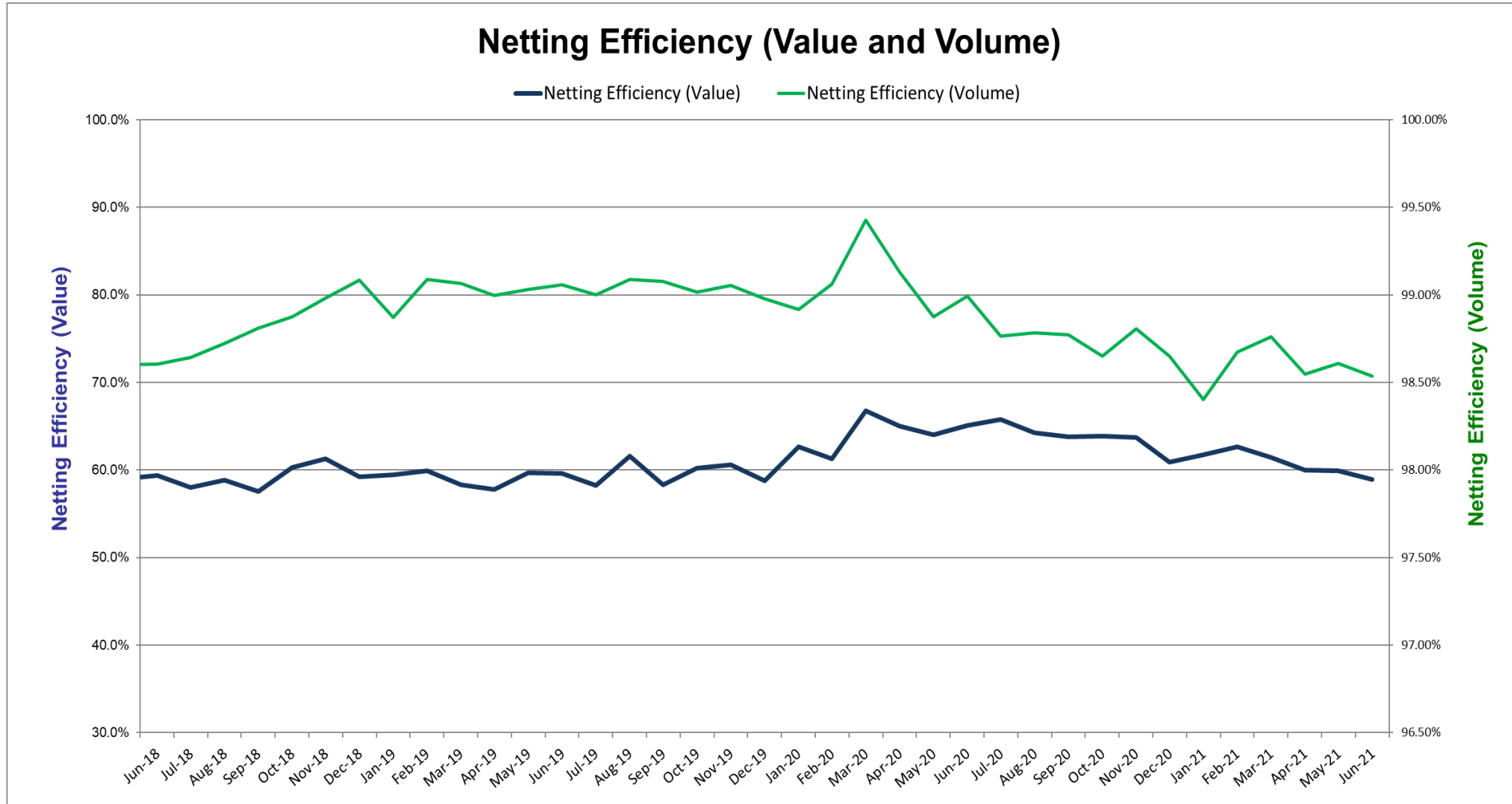
ASX Operations contacted the receiving Participant to explain the effect of the resultant back-out process, and CHESS Batch settlement was completed at 14:12.

ATTACHMENT A – SUMMARY METRICS RELATING TO THE PERFORMANCE OF ASX'S CLEARING AND SETTLEMENT SERVICE

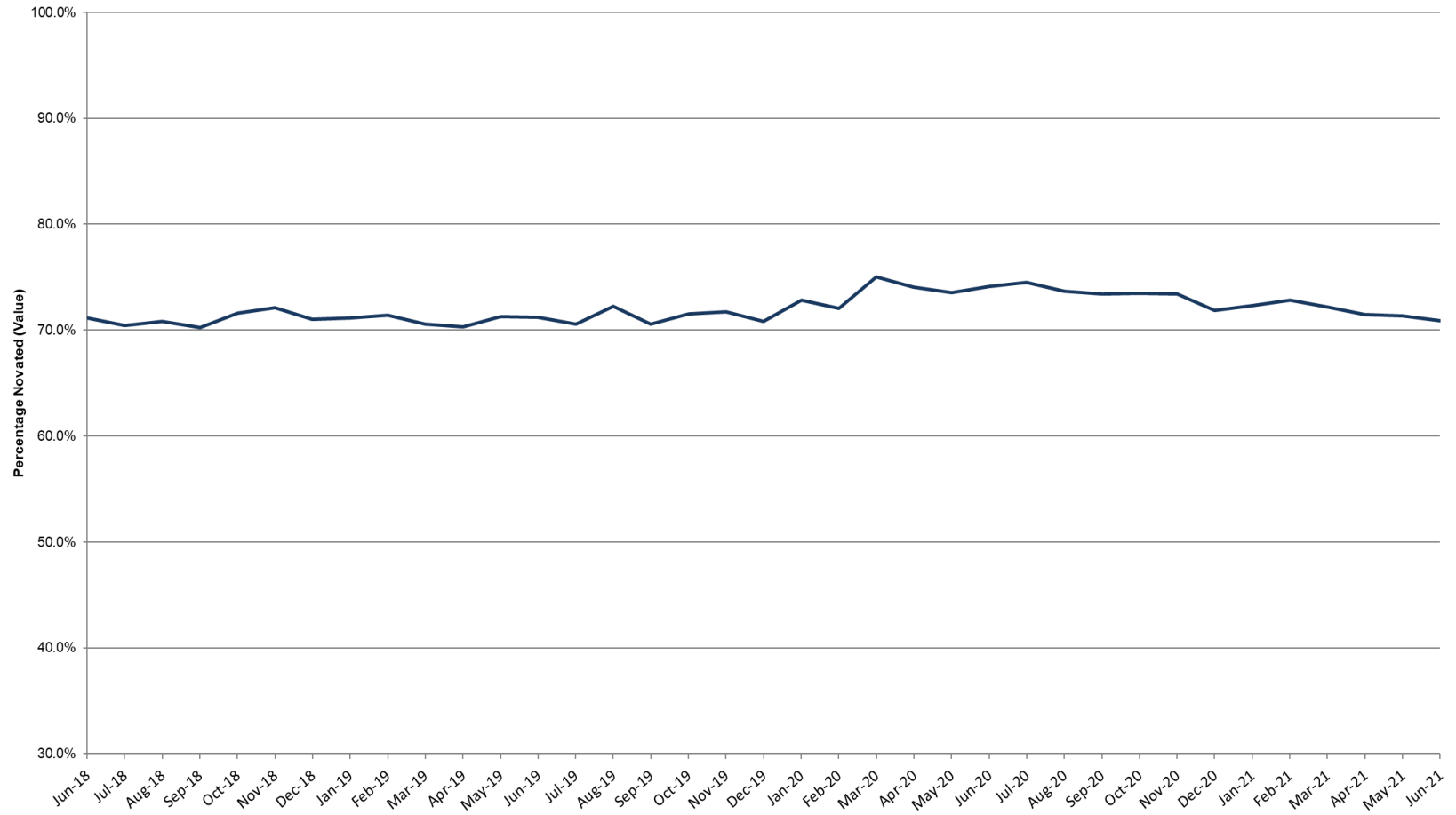
	June 2021 Quarter	March 2021 Quarter	December 2020 Quarter
System Availability (CHES)	100%	100%	100%*
System Availability (TAS)	100%	100%	100%
Total Trades Accepted (ASX)	93,450,951	96,548,767	95,399,586
Total Trades Rejected (ASX)	0	0	0
Total Trades Accepted (Chi-X)	31,755,054	35,429,442	31,719,859
Total Trades Rejected (Chi-X)	0	0	0
Total Trades Accepted (NSX via TAS)	224	449	161
Total Trades Rejected (NSX via TAS)	0	0	1
Total Settlements (SSX)	0	2	3
Total Value of Settlements (SSX)	\$0	\$0	\$1,283
Total Settlements (NSX via SFS)	N/A	N/A	316
Total Value of Settlements (NSX via SFS)	N/A	N/A	\$2,642,142.51
Daily Average Traded Value (On and Off Market)	\$8.08 billion	\$8.64 billion	\$8.69 billion
Daily Average Cleared Value	\$5.76 billion	\$6.26 billion	\$6.33 billion
Percentage Novated	71.2%	72.4%	72.9%
Daily Average Cleared Value Post-Netting	\$2.33 billion	\$2.38 billion	\$2.36 billion
Netting Efficiency (Value)	59.6%	61.9%	62.8%
Netting Efficiency (Volume)	98.56%	98.61%	98.70%
Daily Average Settled Value (Including Non-Novated)	\$11.7 billion	\$11.7 billion	\$11.8 billion
Settlement Efficiency (Value)	99.89%	99.86%	99.86%
Average Daily CHES Fail Rate (% Rescheduled to the next settlement date)	0.253%	0.266%	0.335%

* 1 delay to CHES schedule - extension of 3 hours to Batch Settlement completion on 17th November 2020

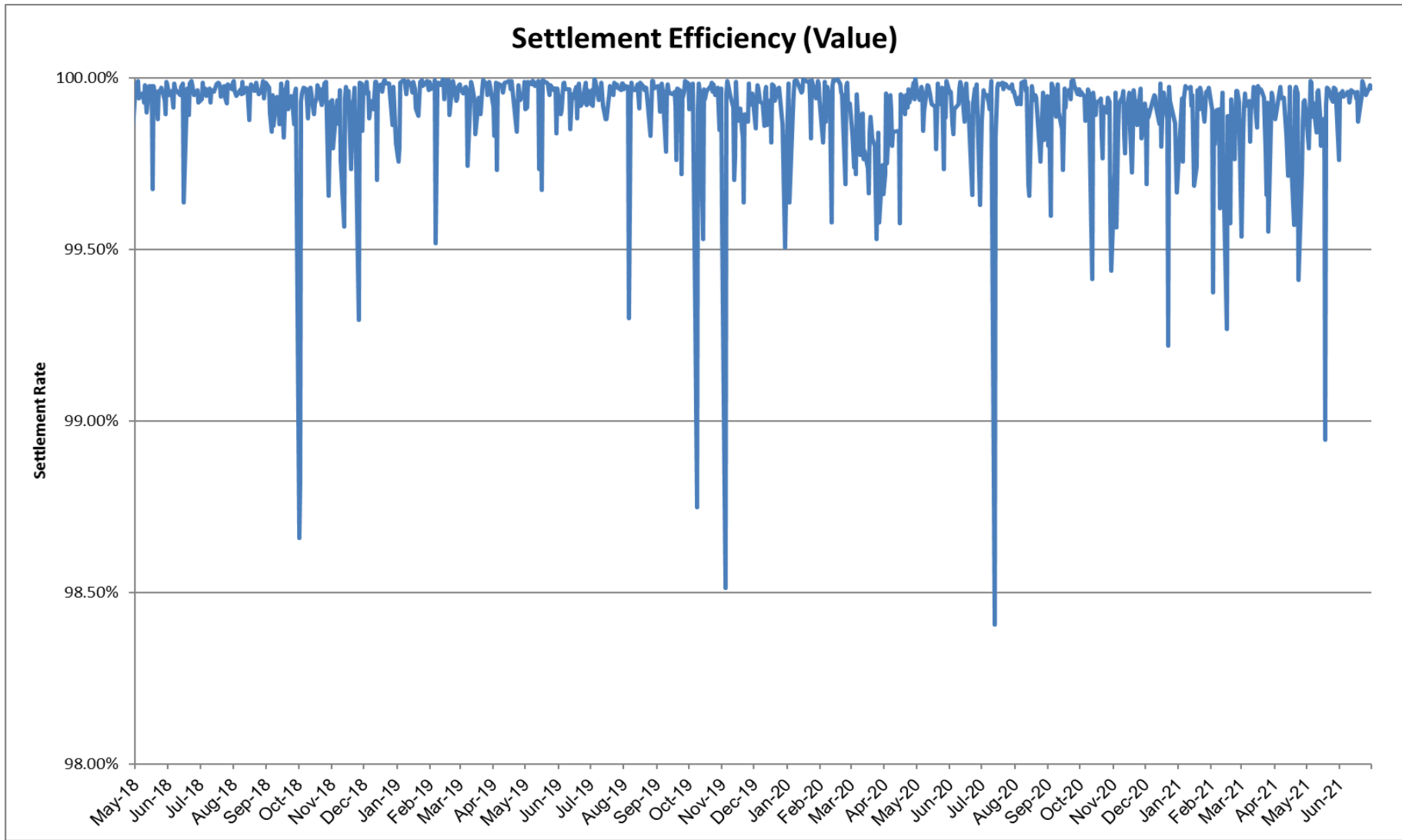
ATTACHMENT B – PERFORMANCE OF ASX'S CLEARING AND SETTLEMENT SERVICES FROM JUNE 2018 TO JUNE 2021



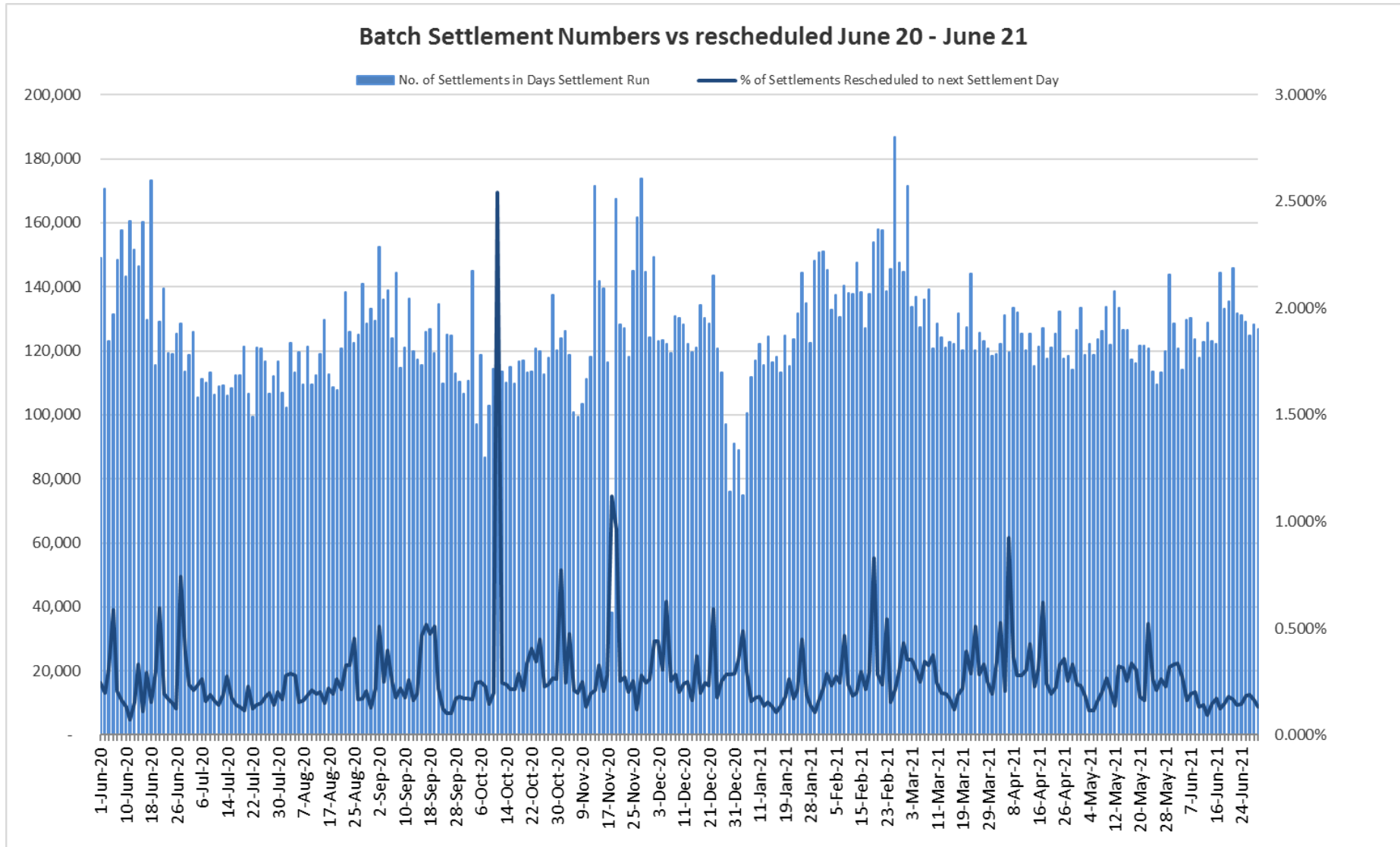
Percentage Novated



Settlement Efficiency (Value)



ATTACHMENT C – BATCH SETTLEMENT NUMBERS VS RESCHEDULED JUNE 2020-JUNE 2021



Committee	Business Committee
Agenda title	CHES Replacement – Project Update
Item	3a
Purpose	To provide Business Committee members with a project update
Meeting date	14 July 2021
Prepared by	Senior Manager, Securities and Payments (Keith Purdie)

KEY SUMMARY POINTS

- Project remains on track for the complete software code to be delivered into CDE end of August / early September 2021, ITE1 opening in November 2021 and go-live in April 2023
- All functional and messaging specifications have now been shared with the market, including the updated specifications for netting and settlement redesign published on 30 June 2021
- ASX’s [response to consultation feedback](#) on netting and settlement redesign was also published on 30 June 2021 following extensive market consultation and engagement on changes
- Combined CDE 11 with CDE 10 by bringing forward the functional code for DRP and BSP elections and enquiry to complete the functional build for Day 1 go-live by end of August / early September 2021
- Published an information paper setting out the [industry test strategy](#)
- Completed the upgrade to CDE infrastructure to support longer running environments between resets
- Completed initial engagement with sponsoring participants for planning HIN data remediation
- Ernst & Young has completed its review on project governance as part of the CHES replacement assurance program

BUSINESS DESIGN

Application Design, Build and Test

On 16 April 2021, mFund functionality (CDE 9.5) was deployed in the customer development environment (CDE). This release delivered all substantive mFund features such as application and redemption orders, settlement and investor data related workflows.

On 30 April 2021, ASX published new documentation for CHES User Interface (UI) connectivity including outlining common CHES UI functionality and notifications, and updated ASX procedures and guidelines documentation relating to corporate actions.

CDE 10, the final CDE release, is now targeted for the end of August / early September 2021. This release will implement all remaining functional changes into CDE, including the netting and settlement workflow changes, and bringing forward the remaining features for DRP and BSP election and enquiry workflows that was originally planned to be released at the end of September 2021.

Testing for the CHES replacement application continues with an increased emphasis on the components required for ITE1 to commence in late November 2021. Performance testing is also proceeding on schedule.

Stakeholder Engagement

Consultation on proposed changes to netting and settlement workflow

ASX published its [response to consultation feedback](#) on the changes to netting and settlement workflow on 30 June 2021. The paper summarised the feedback received through consultation and ASX's consideration of, and response to, that feedback. The paper set out the confirmed solution design including a high level overview from trade registration through to batch settlement which clearly delineates the modifications made to the solution taking into account the feedback. The paper also outlined key project milestones that have been modified to accommodate the changes, namely the revised functional code being made available in CDE at the end of August / early September, in addition to combining CDE 11 to drop at the same time.

While this brings to a close the formal consultation, ASX remains open to working with stakeholders who have concerns or are unable to meet key project milestones, to help resolve any barriers to meeting the timeline as a result of these changes.

Implementation and transition working group

ASX hosted webinars on 3 June and 30 June 2021, which included updates on the confirmed solution design to netting and settlement workflows, an update on CHES holding statements as well as an overview of the [industry test strategy](#) information paper.

The webinar hosted on 3 June 2021 provided members a summary of the feedback received from the recent consultation paper on proposed changes to the netting and settlement design. The project team then stepped through an overview of the confirmed solution design, including the key design principles and the business process, whilst calling out what has changed in response to consultation feedback. Further detail was also provided on the modifications being made including how we are responding to feedback on trade cancellations post trade date, modifications to the net settlement movement message, sett_136, and the changes we are making to reporting to assist with an end-to-end reconciliation and investigations with any potential breaks. We also stepped through a couple of worked examples on an end-to-end reconciliation and how the required information will be made available at various intervals along the lifecycle.

The 3 June 2021 webinar also provided members with a live demonstration of the delivery option for the electronic provision of CHES holding statements, including options for the notification of returned mail.

The webinar hosted on 30 June 2021 primarily focused on the information paper published the same day on ASX's [industry test strategy](#), helping software providers and CHES users prepare for and resource their testing plans.

The audio recording from both webinars, presentation materials and ASX's published reply to questions asked during the 3 June 2021 sessions can be found here:

[Implementation and transition working group presentation materials – 3 June 2021, 30 June 2021](#)

The Q&A from the 30 June 2021 session is targeted to be published on the CHES replacement webpage by 9 July 2021.

Operating rules

Consultation on the third tranche of operating rule amendments as well as a consolidated rules package across all the rule amendments for the new system will now commence in late August 2021, with a 15 week consultation period concluding in early December 2021. ASX will provide its response to consultation in early June 2022, ahead of formal lodgement of the combined rules package with ASIC in early September 2022.

Payment Providers

ASX continued its engagement and updates with payment providers via the Equity Settlement Payment Provider Sub-Committee (ESPPSC), with the last meeting held on 15 June 2021. This session included a walkthrough of the CHES replacement rules consultation and a CHES UI overview and demonstration. The next ESPPSC is scheduled for August and will focus on the industry test strategy from the perspective of payment providers.

Approved Market Operators

Engagement with AMOs continues through a number of different channels. Representatives from all market operators are included in the project's communication list, and regularly receive all project communications including newsletters and invitations to working group webinars. The project team meet with AMOs bilaterally for discussion on specific details about their own arrangements, or in a combined working group. The most recent AMO working group meeting was held on 30 April 2021 to share a number of topics including a re-cap on CDE and technical documentation, and to provide an overview of the FIX Gateway topology and forward plan for AMOs. The project team is also continuing to work on responding to a number of questions that have been raised in either the bilateral or working group meetings. Further bilateral meetings will be scheduled in the near term.

Newsletters

ASX last published a project update to all stakeholders via the CHES Replacement Project Newsletter on 11 June 2021. This newsletter primarily focused on the confirmed solution design for netting and settlement workflow. The newsletter published on 23 April 2021 provided an update on consultation feedback for the netting and settlement redesign and provided additional details on the registration details tool and data remediation. A copy of both newsletters can be found here:

[CHES Replacement Project Update - April 2021](#)

[CHES Replacement Project Update - June 2021](#)

TECHNICAL DELIVERY

Infrastructure

Infrastructure delivery continues to make good progress, including testing of the integrated solution, to deliver a production grade ledger for the opening of ITE1 and to ensure software providers enter onto a secure and stable integrated environment.

The next deployment of ledger software from VMware into ASX's environment for testing both functional and non-functional requirements is in July 2021. This deployment is expected to be the target version for the opening of ITE1.

CHES UI build

Testing continues to track to plan and all customer development work is scheduled to complete by end-September 2021, in readiness for the opening of ITE1.

The development of payment functionality completed in May 2021 and (as noted above) a live demonstration was provided to payment providers on 15 June 2021 that included showing how to authorise Batch and RTGS payment obligations. A live demonstration on CHES UI features for mFund users is targeted for September 2021, as well as a demonstration on the CHES UI functions to all CHES users as part of the implementation and transition working group in October 2021.

The CHES UI User Guide continues to be progressively rolled out and is scheduled to be fully complete in advance of ITE1 opening.

CUSTOMER AND OPERATIONAL READINESS

Software provider readiness

Software providers now have all technical specifications to complete their functional development in advance of the last functional code drop, CDE 10, at the end of August / early September 2021.

ITE1 will allow software providers to access the CHES UI for the first time, as well as test non-functional features such as the production state security model, network failover and performance testing.

In CDE, the majority of software providers' connectivity via AMQP have now completed ISO message signing. There has also been a notable increase in CDE testing with the majority of share registries, along with increased engagement.

Messaging accreditation requirements are complete for the Day 1 original scope, pending updated scripts for the netting and settlement redesign that will be published to the market by the end of August 2021.

A number of additional software providers have now registered and downloaded the registration details tool to convert registration details from the legacy format to ISO 20022.

Our upgrade to CDE infrastructure to support longer running environments between resets – which we started to progressively roll out to CDE customers from mid-April 2021, is now complete. This means fewer resets with our next scheduled reset not planned until the release of CDE 10 at the end of August / early September 2021.

ASX has also recently upgraded its internal reporting on CDE testing activity to provide better metrics on assessing software providers' readiness as part of the entry criteria into ITE1.

CHES user operational readiness

ASX Operations have completed initial engagement with sponsoring participants who have had exceptions identified for HIN data that requires remediation to allow them to successfully migrate to the new system. This exercise occurred through May and June to plan the remediation steps with the goal of cleaning up any exceptions by the end of this year that would otherwise create an exception over the migration dress rehearsals and cut-over weekend.

ASX Operations will continue to engage with sponsoring participants into 2022 and up until go-live to ensure any new exceptions are remediated appropriately prior to the cutover weekend.

Industry testing

The [industry test strategy](#), which details the testing being conducted by software providers and CHES users in ITE1 and ITE2 respectively was published on 30 June 2021. The purpose of the industry test strategy is to inform all stakeholders on the approach to the different test stages and test environments, and what testing needs to be evidenced to be successful and progress onto the next stage. This includes the strategy for testing on migrated data, performance testing and an industry-wide end-to-end test in response to stakeholder feedback from the consultation on a revised implementation timetable. The paper also provided a timetable for when further information will be made available.

Cutover and deployment

Work has commenced on the preparation of documentation on system migration and cutover, which is planned for release to the market in December 2021. This documentation will include information on:

- An overview of the cutover and migration strategy
- Details and rationale on the single cutover weekend approach
- Inflight transactions and how they will be handled
- An indicative cutover weekend timeline

UPCOMING PROJECT MILESTONES

- End Jul 2021: Publication of ITE1 connectivity guide
- End Aug 2021: Commence consultation on the third tranche of operating rule amendments as well as a consolidated rules package across all the rule amendments
- End Aug / Early Sep 2021: Release of CDE 10, the final functional release
- Q3 2021: Publish accessing pricing for service providers
- Mid Oct 2021: Connectivity to ITE1
- End Nov 2021: Publish Accreditation Guide
- End Nov 2021: ITE1 opens and system testing commences



Committee	Business Committee
Agenda title	ISO 20022 Technical Committee Report
Item	3b
Purpose	To provide Business Committee members with a copy of the minutes from the last meeting of the ISO 20022 Technical Committee
Meeting date	14 July 2021
Prepared by	Group Executive, Securities and Payments (Timothy Hogben)

OVERVIEW

The minutes from the last Technical Committee meeting held on 26 March 2021 have been finalised and are available on the CHES Replacement website.

26 March 2021 <https://www2.asx.com.au/content/dam/asx/participants/clearing-and-settlement/ches-replacement/iso20022/meeting-minutes/iso20022-technical-committee-meeting-26mar21-minutes.pdf>



Committee	Business Committee
Agenda title	CHES Replacement – Governance
Item	3c
Purpose	To provide Business Committee members with an update on the CHES replacement governance framework
Meeting date	14 July 2021
Prepared by	Chief Risk Officer (Hamish Treleaven)

Members will be provided with a verbal update on 14 July regarding recent and future governance and assurance program developments.



Committee	Business Committee
Agenda title	CHES Replacement – Progress update on access pricing for service providers
Item	3d
Purpose	To provide Business Committee members with an update on access pricing for service providers
Meeting date	14 July 2021
Prepared by	General Manager, Securities and Payments (Andrew Jones)

Members will be provided with a short presentation on 14 July regarding CHES access pricing for service providers, including a worked example.



Committee	Business Committee
Agenda title	CHES Replacement – Data migration approach
Item	3e
Purpose	To provide Business Committee members with an update on the approach to data migration
Meeting date	14 July 2021
Prepared by	Senior Manager, Securities and Payments (Keith Purdie)

Members will be provided with a short presentation on 14 July providing further detail on ASX's approach to data migration.

Committee	Business Committee
Agenda title	Corporate Actions STP Phase 2 project
Item	4a
Purpose	To provide Business Committee members with a final update on the completed Corporate Actions STP Phase 2 project
Meeting date	14 July 2021
Prepared by	Senior Manager, Securities and Payments (Karen Webb)

ASX has now delivered Phase 2 of the Corporate Actions STP project. The final release (Release 3) was successfully implemented on 5 June 2021, also the effective date of the related ASX Listing Rule changes.

The project has delivered straight-through processing (STP) for the announcement and distribution of key information about issuer corporate actions and capital raising activities.

ASX expresses thanks to committee members for their support as well as the industry stakeholders who participated in the industry working group and gave their valuable feedback to the associated consultation on ASX Listing Rule changes.

Delivery summary

The scope for the final release remained unchanged, as previously reported to the Business Committee in April. In summary, the following changes have been delivered by the project:

Online forms and Listing Rule changes

There are now 10 online forms available for issuers to use via the ASX Online Companies announcement portal, including the 6 new online forms introduced in Phase 2 of the project. The Listing Rules require that issuers use online forms to announce certain events, bar any permitted exceptions or transition arrangements. This requirement ensures the standardised approach to these announcements and related benefits are achieved for close to 100% of circumstances. Transition arrangements are in place for the final release, particularly for any events ‘in-flight’ at the time of implementation.

Phase 2 of the project also provided the opportunity to enhance the existing online forms (e.g. for the announcement of dividends/distributions and interest payments) to include additional validations and more detailed data, particularly for tax components.

The online forms allow for STP of information related to 16 specified ISO 20022 corporate action event types, representing approximately 93% of corporate action volumes.

Information for the balance of 9 ISO 20022 event types (7% of volume) will continue to be captured manually by ASX, based on unstructured or prescribed word form based announcements by issuers or other parties.

The announcement of all types of changes to issued capital has now been catered for in 5 of the revised and new online forms – covering proposed issues, applications for quotation through to security cancellations. This completes the work to replace the old Appendix 3B word form, discontinued in December 2019. In the past the old Appendix 3B typically represented around 10,000 announcements per year. Four of these five online forms allow for STP of the related adjustments to issuer’s securities records captured by ASX based on pre-set validations and checks, and related entries in ReferencePoint products, such as the Daily Schedule. This ensures issuer announcement of changes are processed as quickly and efficiently as possible.

To assist issuers with their readiness for the latest changes, updates were provided in Listed@ASX Compliance updates published on 30 April, 27 May and 2 June, and the availability of associated ASX Online Companies training environment, and training material including 9 new recorded webinars providing an overview of the listing rule changes, transition and demonstration of form changes. ASX also provided 10 Microsoft Teams drop in sessions for issuers during June, providing the opportunity to ask ASX representatives questions about any of the changes.

Additionally, ASX updated Guidance Notes 14 - *ASX Market Announcements Platform*, 20 - *ASX Online* and 30 - *Notifying changes in issued securities and applying for quotation of new or additional securities* to reflect the Listing Rule changes and particularly in Guidance Note 30 to provide additional guidance on when and how to notify ASX of changes in issued securities, including applications for quotation.

Corporate action event information available in a global standard format within seconds

The ISO 20022 corporate action notification service now covers all events supported by ASX, as described in 25 specific ISO 20022 event usage guidelines (specifications), including the OTHR event introduced in this last release. Additional usage guidelines are also specified for the notification of a cancellation of an event, and the Business Application Header.

For those events supported by STP, ASX has observed that event notifications are available within a maximum 30 seconds (often less) from the time of the release of the equivalent PDF announcement to market.

The current set of production usage guidelines are published in SWIFT MyStandards, under the revised Community name 'ASX ReferencePoint ISO 20022 Corporate Actions'. The ReferencePoint ISO 20022 Real-Time Corporate Actions Manual has also been updated to reflect Release 3 changes. ASX has advised all community and industry working group members of the latest changes.

Further improvements to event information and processing:

The project and the related work on ASX Listing Rule amendments has also delivered on a number of business requirements that were identified in the CHES Replacement working groups conducted in 2017, and as outlined in the April 2018 Consultation Paper - [CHES Replacement: New scope and implementation plan](#) and the associated [consultation response](#) dated 4 September 2018. During the delivery period of the project, two consultations were conducted on ASX Listing Rule changes – the November 2018 consultation paper [Simplifying, clarifying and enhancing the integrity and efficiency of the ASX listing rules](#), and the November 2020 consultation paper [Proposed Listing Rules changes: online forms, notification of security issues and corporate action timetables](#). The delivered improvements include:

- The ISO 20022 service provides an **electronic single access point** for all corporate action event information managed by ASX, whether captured automatically or manually by ASX. The service covers all events notified to ASX by all listing markets for the purposes of CHES (and the in the future, CHES Replacement) support.
- Greater **transparency through the lifecycle of corporate actions**. The ASX Listing Rule and associated online form changes implemented in December 2019 and June 2021 have applied more prescriptive requirements on ASX listed issuers for their initial and subsequent announcements related to corporate action events. Any updates to event information announced by issuers is available in market announcements and transmitted via the ISO 20022 notification service.
- In July 2020 ASX implemented the availability of an **ISIN to represent entitlement in non-renounceable rights issues**. The ISIN details are included in the ReferencePoint Master List product, and the ISO 20022 service.
- Through the Listing Rule and online form changes, improvements have been made to the quality and transparency of information regarding **Security Purchase Plans (SPP)**, including specifying time limits by which the entity must announce the results of the SPP, issue the securities purchased under the SPP and lodge an application for their quotation - with the event information now also available in the ISO 20022 service.
- ASX also consulted on the **deferred settlement trading processes**, their relevance, the associated benefits and the settings for those periods, particularly in the prescribed event timetables in the ASX Listing Rules. Where possible, ASX has shortened and standardised the timeframes for various corporate actions, which in turn has made the timetables for those corporate actions that qualify for deferred settlement trading shorter and more consistent.

Post implementation activities

The project team concluded its post implementation support period at the end of June 2021. Since release 3 implementation we have seen the use of all of the updated and new online forms, including successful STP of a number of corporate action events, including non-renounceable, accelerated and Security Purchase Plan offers. An example of the new OTHR (reinvestment offer) has also been made available in the ISO 20022 service.

Support arrangements are now in place, with the ASX Listings Compliance and Operations teams continuing to monitor inbound announcements and assist issuers with their compliance and use of the online forms. Likewise, our Customer Technical Support team will provide first line support to users of the ISO 20022 service.

Benefits realised through delivery of this project

- Prescriptive guidance for issuers for the announcement of certain events, allowing issuers to make the best announcement possible when they use the online forms:
 - prefill of certain information, checks and validations, clear view of minimum data requirements, information messages regarding additional obligations.
 - improved workflows and improved compliance with the ASX Listing Rules through the presentation of only relevant information and questions.
 - validations prior to announcement submission allow for effective automated data capture and its availability as quickly as possible for service delivery.
 - warnings and exception management sourced from issuer filled online forms to ensure prompt and appropriate attention from ASX Listings Compliance and Operations.
- Reduction in pre and post announcement queries, and fewer corrections
- Improved quality of announcement information
- Improved quality and depth of ASX records and market information for events
- Improved timeliness in delivery of event information in a global standard format
- Investors and their agents receive issuer event data more quickly, in standardised and more comprehensive format, enabling more informed and timely investment decisions
- Single source of event notification/information for customers and for CHES Replacement in standardised ISO format across the full market announcement period each day
- Market participants and information providers can benefit from a timely and internationally standardized notification service to allow STP on their own part to improve their own back office processing and service to their own customers. The STP capability allows seamless event capture and management even during high volume announcement periods
- The global standard based notification forms a basis for CHES Replacement consumption and enhancements for corporate action support

Further information

Further information about the project and the ISO 20022 service is available from the following web pages:

<https://www2.asx.com.au/markets/clearing-and-settlement-services/asx-settlement/corporate-actions-stp>

<https://www2.asx.com.au/connectivity-and-data/information-services/reference-data/real-time-corporate-actions>



Committee	Business Committee
Agenda title	Electronic CHES holding statements
Item	4b
Purpose	To provide Business Committee members with an update on electronic CHES holding statements
Meeting date	14 July 2021
Prepared by	General Manager, Securities and Payments (Andrew Jones)

ASX is targeting go live for an electronic delivery option for CHES Statements in late 2021. This will include giving investors access to an investor portal with at least 12 months of historical statements and providing broker participants with an electronic means for monitoring returned emails.

Members will be provided with a verbal update on 14 July regarding progress and next steps on the CHES holding statements (eStatements) project.

Committee	Business Committee
Agenda title	Update on the upcoming external audit of ASX's compliance with the regulatory expectations
Item	5a
Purpose	To advise the Business Committee that the external audit of ASX's compliance against the Regulatory Expectations is expected to commence soon
Meeting date	14 July 2021
Prepared by	Chief Risk Officer (Hamish Treleaven)

In the *Regulatory Expectations for Conduct in Operating Cash Equity Clearing and Settlement Services in Australia* there is a requirement for ASX to commit to submitting an annual external audit of its governance, pricing and access arrangements against the Regulatory Expectations. The audit is designed to identify if there has been any evidence of non-compliance by ASX with its regulatory expectations obligations.

Four audits have been completed. The fifth audit, covering the 2020-21 financial year, is due to commence shortly and some Business Committee members will be contacted by PwC as part of their review.

The audit methodology this year will be the same as last year. The auditors will select a group of Committee members and approach them directly to discuss their audit questions. ASX is not involved in this process.

This direct approach is intended to enable the auditors to achieve a more representative sample of stakeholders and to better understand the feedback received.

It is expected each discussion would generally involve no more than 15-30 minutes of a member's time. We would encourage members to contribute to this process.

Members can also indicate to the auditors if they wish to be interviewed as part of the process. Please contact Deanna Chesler, (deanna.chesler@pwc.com) or Lucy Dickens, (lucy.a.dickens@pwc.com).

The Terms of Reference for the annual external audit set out the objectives, scope and approach for the external audit.

The Terms of Reference are provided in Attachment A.

ATTACHMENTS

Attachment A Terms of Reference

Regulatory Expectations External Audit Terms of Reference

Background

In the 'Regulatory Expectations for Conduct in Operating Cash Equity Clearing and Settlement Services in Australia' (CFR Policy Statement), there is a requirement for ASX to commit to submitting an annual external audit of its governance, pricing and access arrangements against the Regulatory Expectations.

To meet this requirement, ASX will annually commission an external audit conducted by an independent assurance firm. ASX has appointed PwC to perform the audit. As ASX's external auditors, PwC is, under the requirements of the Corporations Act, independent of the ASX.

The purpose of this document is to highlight the objectives, scope and approach for the external audit.

Objective

The objective of the external audit is to assess ASX's governance, pricing and access arrangements for the provision of cash equities clearing and settlement services. To meet this objective, ASX's governance, pricing and access arrangements will be assessed against the requirements of the Regulatory Expectations outlined in the CFR Policy Statement.

Scope

The external audit will assess whether ASX's policies and procedures are aligned with the Regulatory Expectations (that is, it will assess the effectiveness of the design of the policies and procedures). In addition, it will assess if ASX's operations have been conducted in accordance with such policies and procedures during the review period (that is, the operating effectiveness of the policies and procedures).

In accordance with the Regulatory Expectations, the external audit will not provide an opinion on subjective matters contained in the Regulatory Expectations, for example, on the promptness and efficiency of investments or the efficiency of prices.

Each of the Regulatory Expectations, against which ASX's governance, pricing and access arrangements will be assessed under the external audit, are set out in Attachment A.

Approach

The external audit is to be conducted in accordance with the *Australian Standard on Assurance Engagements 3100 – Compliance Engagements* (ASAE 3100) issued by the Australian Auditing and Assurance Standards Board. In accordance with ASAE 3100, the assurance report will provide an opinion on ASX's compliance with the Regulatory Expectations.

The approach will include, but not be limited to:

- performing a comparison of the compliance framework put in place by ASX against the requirements of the Regulatory Expectations
- testing of policies and procedures on a sample basis to assess whether they were designed appropriately and are operating effectively in accordance with the Regulatory Expectations
- conducting interviews with a sample of the members of the Business Committee to seek feedback in relation with ASX's compliance with the Regulatory Expectations;
- providing management with a report of findings, and seeking responses where required; and
- tracking the progress of previous audit recommendations and management action.

Timing and reporting

The external audit subject to these Terms of Reference will commence in July 2021 cover the period 1 July 2020 to 30 June 2021.

The external audit will be completed and the external auditor's report will be published within three months following the end of each financial year. The auditor's report will be provided to the relevant ASX Boards, the Agencies and the Business Committee promptly after the report's completion.

ASX will publish the external auditor's report on the ASX website.

Commitment from the ASX

To perform this audit, the auditor will have rights of access to the documents and resources it considers necessary to fulfil its responsibilities, including:

- relevant staff;
- IT systems, documentation and processes; and
- minutes and meeting documentation for the Business Committee, other relevant user governance arrangements and the relevant ASX Boards.

Audit Scope - Regulatory Expectations

<p>1. User input to governance</p> <p>To ensure responsiveness to users' evolving needs, transparent formal mechanisms should be maintained within ASX's governance framework to give users a strong voice in strategy setting, operational arrangements and system design, and to make ASX's monopoly cash equity CS services directly accountable to users. As part of this:</p>	
1(a)	ASX should make an explicit public commitment to investing promptly and efficiently in the design, operation and development of the core CS infrastructure for the Australian cash equity market, including the Clearing House Electronic Sub-register System (CHES) and any future replacement system. This commitment should be supported by governance processes that enable users to provide input on the setting of the investment strategy. Investments should ensure that, to the extent reasonably practicable, the performance, resilience, security and functionality of the core CS infrastructure meet the needs of users, recognising the diversity and differing needs of users. At a minimum, the core CS infrastructure should accommodate internationally accepted communication procedures and standards.
1(b)	ASX should ensure that the membership of its user governance arrangements is representative of the user base of its CS services, and that members are able to have a strong input into the agenda and format of meetings or other user governance mechanisms and the setting of priorities.
1(c)	ASX should demonstrate that it has had regard to the views of members in setting the terms of reference for the external audits of its governance, pricing and access arrangements carried out in accordance with the Regulatory Expectations. This may take the form of members' non-objection of the proposed terms of reference. These terms of reference may change following any review of the Regulatory Expectations.
1(d)	ASX should maintain accountability arrangements that provide for regular public attestations as to the effectiveness of its interactions with users. For example, the following arrangements would be appropriate: <ul style="list-style-type: none"> i. ASX's user governance mechanisms operate on a 'comply or explain' basis; that is, the relevant Board would take actions in accordance with recommendations from the user governance mechanisms, or else explain why such actions had not been taken. ii. ASX report, on at least an annual basis, the service developments and investment projects that it has progressed and how it has taken into consideration the views of users.
1(e)	ASX should formally commit to retaining a Board structure for ASX Clear and ASX Settlement that comprises a minimum of 50 per cent of non-executive directors that are also independent of ASX Limited, and where a subset of these independent directors can form a quorum.
1(f)	ASX should establish governance structures and reporting lines at the management and operational levels that promote access to its CS services on commercial, transparent and non-discriminatory terms. These arrangements should ensure that the interests of users are upheld in accordance with Regulatory Expectation 3. This may be demonstrated, for example, through the key performance indicators set for relevant management.
<p>2. Transparent, non-discriminatory and fair and reasonable pricing of CS services</p> <p>ASX should publicly commit to an appropriate minimum level of transparency of pricing across its range of monopoly cash equity CS services (including the provision of data). The pricing of these services should not discriminate in favour of ASX-affiliated entities (except to the extent that the efficient cost of providing the same service to another party was higher). Other than where pricing is anti-competitive or gives rise to financial stability or market functioning issues, the fees charged by ASX are a commercial matter for ASX and its customers. Nevertheless, to</p>	

<p>ensure that the fees charged by ASX for its cash equity CS services are transparent, non-discriminatory, and fair and reasonable:</p>	
2(a)	<p>ASX should ensure that all prices of individually unbundled CS services, including rebates, revenue-sharing arrangements and discounts applicable to the use of these services:</p> <ul style="list-style-type: none"> i. are transparent to all users of the services ii. do not discriminate in favour of ASX-affiliated entities, except to the extent that the efficient cost of providing the same service to another party was higher iii. are made available to stakeholders in a form such that the impact of pricing changes can be readily understood.
2(b)	<p>ASX should maintain an appropriate method for determining the prices of its CS services so as to generate expected revenue that reflects the efficient costs of providing those services, including a return on investment commensurate with the commercial risks involved.</p>
2(c)	<p>ASX should make an explicit public commitment that any changes in the prices of its CS services will not be implemented in a way that would materially shift revenue streams between aspects of its trading, clearing and settlement services.</p>
2(d)	<p>ASX should publish any increases in its CS fee schedules along with an attestation justifying their reasonableness. For the most material such increases, this attestation would be expected to refer to relevant metrics and other evidence, such as the calculated return on equity, benchmarked price lists, or an independent review of how ASX’s cash equity CS fees compare with those of CS facilities in other markets.</p>
2(e)	<p>ASX should maintain an appropriate model for the internal allocation of costs, including the cost of allocated capital, as well as policies to govern the transfer of prices between the relevant ASX Group entities. Compliance with the model and policies would be expected to be subject to internal audit review. The model and policies should be based on reasonable cost allocation principles. For example:</p> <ul style="list-style-type: none"> i. where possible, costs should be directly allocated to the service(s) which give rise to those costs ii. shared costs should be allocated based on appropriate and transparent metrics.
2(f)	<p>ASX should negotiate commercially and in good faith with unaffiliated market operators and CS facilities regarding fees and other financial contributions charged for any extensions to its monopoly CS services, and in particular those provided under the existing Trade Acceptance Service and the Settlement Facilitation Service.</p>
<p>3. Commercial, transparent and non-discriminatory access to CS services – service levels, information handling and confidentiality</p> <p>ASX should facilitate access to its cash equity CS services (including data) on commercial, transparent and non-discriminatory terms. Non-discriminatory terms in this context are terms that do not discriminate in favour of ASX-affiliated entities (except to the extent that the cost of providing the same service to another party is higher). As part of this:</p>	
3(a)	<p>ASX should have objectives for its CS services that include an explicit public overarching commitment to supporting access to its CS services on commercial, transparent and non-discriminatory terms. ASX should maintain standard user terms and conditions that are consistent with these objectives, taking into account the legitimate business interests of ASX and any parties seeking access to its CS services.</p>
3(b)	<p>Service level agreements should commit ASX to providing access to its CS services for unaffiliated market operators and CS facilities on operational and commercial terms and service levels that are materially equivalent to those that apply to ASX as a market operator or CS facility.</p>

3(c)	ASX should publish and adhere to protocols for dealing fairly and in a timely manner with requests for access. These protocols should include reasonable timeframes for responding to enquiries and arrangements for dealing with disputes. Nothing in the protocols should affect either party’s right to refer a dispute to arbitration by the ACCC once the arbitration regime is implemented.
3(d)	ASX should make an explicit commitment to ensuring that any investments in the systems and technology that support its cash equity CS services do not raise barriers to access from unaffiliated market operators or CS facilities. Announcements of any material investments in the systems and technology that support ASX’s cash equity CS services should be accompanied by a public attestation that those investments will be designed in a way that does not raise such barriers.
3(e)	ASX should retain, and periodically review, its standards for the handling of sensitive or confidential information. Consistent with governance arrangements that promote access on commercial, transparent and non-discriminatory terms (see Regulatory Expectation 1(e)), these arrangements should ensure that conflict sensitive information pertaining to the strategic plans of unaffiliated market operators or CS facilities is handled sensitively and confidentially, and cannot be used to advance the interests of ASX as a market operator or CS facility.



Committee	Business Committee
Agenda title	Minutes from 14 April 2021 Business Committee meeting
Item	6a
Purpose	To provide Business Committee members with the minutes and Business Committee report to the ASX Boards from the 14 April 2021 meeting
Meeting date	14 July 2021
Prepared by	Business Committee Chair-elect, Chief Customer and Operating Officer (Val Mathews)

OVERVIEW

Draft minutes and the draft report to the Boards of ASX Clear and ASX Settlement from the 14 April 2021 Business Committee meeting were emailed to all members of the Business Committee on 10 May 2021 for comment.

The finalised Business Committee report and minutes will be provided to the ASX Clear and ASX Settlement Boards for the next meeting.

ATTACHMENTS

Attachment A Business Committee Report and Minutes from the 14 April 2021 Meeting

Business Committee Report to the Boards of ASX Clear and ASX Settlement

Business Committee Meeting

At its 14 April 2021 meeting, the Business Committee was updated on:

- the operating performance of CHES for the March quarter 2021, including an update on the outcomes of ASX's industry engagement following the CHES settlement batch completion delay on 17 November;
- the CHES replacement project, including feedback on the consultation on proposed changes to netting and settlement workflow, ISO 20022 Technical Committee report and a progress update on participant engagement for clearing and settlement pricing;
- the Corporate Actions STP Phase 2 project; and
- the electronic CHES holding statements project.

KEY ISSUES DISCUSSED

ASX summarised key themes from feedback on the consultation on netting and settlement workflow changes, with interest from members in whether potential further design changes being contemplated by ASX would minimise operational risk on clearing and settlement participants, implications for key milestones and overall timelines, the international comparisons performed, publication of non-confidential responses, whether ASX would re-consult with the market and more discussion around why the changes are necessary at this stage of the project.

ASX outlined the current status of the electronic CHES holding statements project, with interest from members in how ASX would incentivise take-up, the timing for go live of both the print and electronic preferences and consideration of the future electronic communication innovations.

Other member questions related to ASX's update on engagement following the 17 November 2020 CHES settlement batch delay, including whether ASX would publish a formal report on the incident and the timing for ASX implementing changes in response to engagement, and how ASX would manage the CHES replacement data migration both in advance of and over cutover weekend.

Agreed Actions

An update on the action raised at the last meeting was provided, and the action was closed.

ASX committed to the following actions at the April meeting:

1. ASX to further consider NSX's data reporting request and engage bilaterally with NSX.
2. ASX to confirm the timeframe for publishing an educational artefact around the phases of CHES batch settlement (as an outcome of industry engagement regarding the November 2020 settlement delay).
3. ASX to further consider the need for clarity with the data migration process.
4. ASX to confirm whether it would publish non-confidential submissions to the consultation on proposed changes to netting and settlement workflows.
5. ASX to provide further detail at the next (July) meeting around its recent CHES replacement governance framework review.

Minutes from the meeting are attached.

Agenda

Business Committee

Date	14 April 2021	Time	12:00pm – 2:00pm
Location	By teleconference		
1.	Service Performance	12:00pm-12:15pm	
	a) Cash Market Clearing and Settlement - Operating Performance		
2.	CHES Replacement	12:15pm-1:30pm	
	a) Project update		
	b) Feedback on the consultation on proposed changes to netting and settlement workflow		
	c) ISO 20022 Technical Committee report		
	d) Progress update on participant engagement for clearing and settlement pricing		
3.	Service Enhancements	1:30pm-1:45pm	
	a) Corporate Action STP Phase 2 project		
	b) Electronic CHES holding statements		
4.	Administration	1:45pm-2:00pm	
	a) Minutes from the 7 December 2020 Business Committee Meeting		
	b) Forward work program		
	c) Other matters		
5.	Next Meeting – 14 July 2021		

Business Committee Members

Company	Name	Job Title	Apologies
ABN AMRO Clearing	Matthew McMahon*	Head of Operations	Barry Parker (Chief Executive Officer)
AFMA	Damian Jeffree*	Director	David Lynch (Chief Executive Officer)
ASX	Peter Hiom	Business Committee Chair, Deputy CEO	
ASX	Richard Atkins*	General Manager, Trading Services	David Raper (Executive General Manager, Trading Services)
AIRA	Ian Matheson	Chief Executive Officer	
ACSA	Rob Brown	Chief Executive Officer	
ASA	Fiona Balzer	Policy & Advocacy Manager	
Automic	Paul Williams	Managing Director	Paul Williams
BAML	Stephen Hacker	Director, Head of Operations	
Bell Potter Securities	Rodd Kingham	Head of Operations - Transformation	Rodd Kingham
BNP Paribas	Mark Wootton	Head of Custody Product Aust & NZ	
Chi-X Australia	Mike Aikins	Chief Operating Officer	
Citi	Lyall Herron*	Program Manager	Miles O'Connor (Director, Direct Custody & Clearing Securities & Funds Services)
CMC	Andrew Rogers	Director of Broking Business	
CBA (CommSec)	Sheridan Thompson	Head of Strategic Development	
Computershare	Scott Hudson	Head of Intermediary Services	
Credit Suisse	Winston Loke	Australian Equities COO	Winston Loke
Deutsche Bank AG	Geoffrey Plaisted	Chief Operating Officer, Equities	
Goldman Sachs	Yen Le	Executive Director	
GIA	Megan Motto	Chief Executive Officer	
HSBC	Nichole Alexander	Manager, Aust Market Advocacy & Development	
J.P. Morgan	Paul Cooper*	Head of Equity Market Operations	Jonathan Evans (Head of Custody & Markets Operations)
Macquarie Group	James Indge	Cash Equities Business Manager	
Morgan Stanley	Carrie Barracks*	Country Business Manager	Rebecca Hill (Chief Operating Officer)
Morgans	Daniel Spokes	Director, Client Support Services	
NAB	Anita Mead	Head of Business Management, Self-Directed Wealth	
NSX	Chan Arambewela	Chief Operating Officer	
Pershing Securities	Leigh Conder	Chief Operating Officer	Leigh Conder
SAFAA	Judith Fox	Chief Executive Officer	
Sydney Stock Exchange	Antony Tolfts	Listings Director	
UBS	Conor Foley	Chief Operating Officer	Conor Foley

* Delegate

ASX Management

Name	Job Title	Apologies
Tim Hogben	Group Executive, Equity Post Trade and CHES Replacement	
Daniel Moran	General Counsel	Daniel Moran
Hamish Treleaven	Chief Risk Officer	
Dan Chesterman	Chief Information Officer	Dan Chesterman
Val Mathews	Chief Operating Officer	Val Mathews
Sally Palmer	Deputy General Counsel	Sally Palmer
Katie McDermott	General Manager, Equity Post Trade Services	
Diane Lewis	General Manager, Head of Regulatory Affairs	
Karen Webb	Senior Manager, Equity Post Trade Services	
Keith Purdie	Senior Manager, Equity Post Trade Services	
Con Korkofigas	Senior Legal Counsel and Senior Manager	
Andrew Jones	General Manager, Strategic Partnerships	

Observers

Name	Job Title	Apologies
Nathan Bourne	Senior Executive Leader, Market Infrastructure (ASIC)	
Dodie Green	Senior Manager, Market Infrastructure (ASIC)	

INTRODUCTION

The Chair welcomed members and delegates to the first meeting of the year, held again using Microsoft Teams with videoconference technology.

The Chair welcomed Chan Arambewela to the committee as the new representative for NSX, replacing John Williams. Six members were represented by delegates, Damian Jeffree (for AFMA), Carrie Barracks (for Morgan Stanley), Matthew McMahon (for ABN Amro), Paul Cooper (for J.P. Morgan), Lyall Herron (for Citi) and Richard Atkins (for ASX Trade). Winston Loke (Credit Suisse) and Rodd Kingham (Bell Potter) were noted as apologies with no delegate, and Leigh Condor (Pershing Securities), Paul Williams (Automic) and Conor Foley (UBS) were apologies on the day. ASIC representatives (Nathan Bourne, and Dodie Green) attended the meeting as observers.

The presentation materials shared during the meeting would be distributed to all members after the meeting.

With regard to the one open action, the Chair advised that an update would be provided by ASX's Chief Operating Officer's delegate for the meeting (ASX Group Executive, Equity Post Trade and CHES Replacement) as part of agenda item 1a.

AGENDA ITEM 1: SERVICE PERFORMANCE

a) Cash Market Clearing and Settlement - Operating Performance

The ASX Group Executive, Equity Post Trade and CHES Replacement (ASX Group Executive) provided an update on the operating performance of the cash market clearing and settlement services for January to March 2021:

- Barrenjoey Markets was admitted as an ASX Clear and Settlement participant on 12 March 2021, with initial trading, clearing and settlement activities commencing on 23 March 2021 without issue.
- System availability for CHES, Trade Acceptance Service (TAS) and Settlement Facilitation Service (SFS) were all at 100% for the quarter. CHES availability over the past decade was noted as about 99.99%. The ASX Group Executive noted use of the TAS by NSX and Chi-X, and use of the SFS by Sydney Stock Exchange.
- Trade counts were similar to the previous quarter.
- The percentage of trades novated remained just above 72%, noted as an indication of how much is being executed on market and how much is being reported. The balance of that 72% being crossings, block trades, reports etc. The administrative and liquidity benefits of netting were noted – after netting around 1.5% of actual trades executed on the market were settled in volume terms, and only 38% of the value.
- The average daily value settled was \$11.7 billion.
- Fail rates remained relatively low, averaging 0.266% over the quarter (max 0.82%, min 0.10%). ASX was undertaking further analysis of fail rates, noting the recent average of around 0.2-0.3% not decreasing and the importance of keeping this rate as low as possible.

The NSX representative noted their use of the TAS, and their request to ASX outside of the committee to have NSX securities identified separately in the operating performance statistics produced by ASX (in terms of the netting efficiencies that relate to other stocks). The ASX Group Executive acknowledged the request, and advised that ASX would give it further consideration in consultation with NSX.

The ASX Group Executive provided an update on the action raised at the previous meeting - to follow up with members who offered their help to assist ASX perform scenario planning in Q1 2021 to understand flow-on impacts from the CHES batch processing delay on 17 November 2020. The ASX Group Executive summarised the issue experienced on the day, and thanked those who took the time to discuss and provide constructive feedback to ASX, noting how worthwhile the exercise was for ASX. An important takeaway which came through from engagement with members was the importance of improvements to ASX's communication methods throughout an incident, with more detailed communications requested from ASX (such as possible rectification times, the cause, what stage in the process things were at) to assist customers with their own preparation activities, risk management, resourcing, client communications and funding discussions. ASX would also implement processes to engage with customers/participants to understand the impacts and discuss the options available during an incident.

Two other areas for action are:

- ASX providing more educational information and detail around the various processes undertaken, and how the settlement cycle works, to assist with customer understanding.
- The need for ASX to regularly revalidate contact details for customers (noting personnel changes).

The ASX Group Executive noted ongoing and regular discussions with regulators regarding incidents of this nature.

A member asked if ASX would publish a report on the incident, addressing what happened and the actions being taken by ASX to mitigate against the technology issue re-occurring and address feedback from customers. The ASX Group Executive advised that it was not standard practice for such a report to be published. It was also noted that ASX welcomed any further bilateral engagement with members. The member noted the constructive and helpful nature of the conversations to date on the matter.

A member asked when ASX's educational material around the phases of CHES batch settlement, and ASX's enhanced communication protocol would be made available. The ASX Group Executive took an action to confirm the timeframe for publishing an educational artefact (noting existing materials were detailed and consideration needed to be given to how best to present the materials for publication). Regarding the communication learnings, ASX confirmed the learnings would be adopted immediately.

AGENDA ITEM 2: CHES REPLACEMENT

a) Project update

The ASX General Manager, Equity Post Trade Services provided an update on the program and progress since the last meeting, on the topics of business design, technical delivery and customer and operational readiness, as noted in the paper.

A member asked about the potential risks, including ASX's risk assessment that registries and/or sponsoring brokers could end up with different versions of data following system migration. The ASX General Manager, Equity Post Trade Services noted that ASX will make the registration tool widely available to the market and that it is ASX's expectation that data cleansing of the CHES sub-register will occur prior to migration, allowing for the details to then flow to all relevant systems. The member acknowledged this, and asked what would happen if there was data misalignment. The ASX Group Executive responded that ASX has built into its test strategy the use of migrated data as a consequence of the feedback received as part of its consultation on the implementation timeline in 2020. Testing on migrated data will provide an opportunity to reconcile and identify any misalignment in advance of go-live. The ASX Group Executive agreed to further consider the need for clarity with the data migration process.

The ASX Group Executive also noted that ASX was considering how to provide further transparency to committee members around the activity levels of those connecting to CDE, including the appropriate level of reporting going forward.

b) Feedback on the consultation on proposed changes to netting and settlement workflow

Referring to a presentation shared during the meeting with members, the ASX Group Executive briefly summarised the background and rationale to the proposed changes.

The ASX Group Executive noted ASX received consultation feedback from 30 organisations (including software vendors, clearing and settlement participants, settlement only participants, approved market operators (AMOs) and industry associations), and thanked those who provided feedback via consultation response or the numerous stakeholder engagement forums held. ASX was still analysing the feedback received, before confirming the final solution design and any assistance ASX may provide to participants in adapting to the revised solution. A key focus for ASX was preserving the fundamental need for improved scalability and capacity on Day 1 and managing delivery risk and operational risk, noting these were key themes from the responses. ASX will take into account the potential opportunities to address the development and testing effort for software providers, mitigate overall operational impacts on participants, as well as eliminate the need for further capacity related design changes after go-live.

Key themes from the consultation responses included:

- Broad acknowledgement that the industry did not want post-trade processing to constrain trading activity, but some consideration should be made to reduce operational and delivery risk to the market of the revised design.
- ASX's proposal was a significant change to an existing workflow which had been in place for the past three decades, however ASX noted it did not consider the solution out of step with other international markets needing to process large volumes, including the de-coupling of clearing and settlement processing from the respective reporting and confirmation.
- The requirement for rework from those who had already coded and tested to the previous design.
- Further information was required to make a fulsome assessment of the impact of the proposed change, with ASX acknowledging the need to update technical specifications, including supporting information around ISO message changes - this being in train and following ASX's standard processes.
- From a reconciliation perspective in calculating net obligations to the clearing house, better enriched messaging, more detail in messages and additional reporting was required.

The ASX Group Executive advised that ASX would continue to analyse the feedback received to identify areas for enhancement and how the feedback could be taken on board.

A member noted that 18 months ago there was no mention of volume or capacity issues. The ASX Group Executive noted the magnitude of the new records observed in March 2020 (at 3.5 times the previous record), and ASX's requirement to build in additional headroom above the new record. It was also noted that systems were generally not built with infinite capacity. Regarding scalability, removal of linear processes (for which time is the main lever to scale) was also noted as beneficial, given how compressed financial markets processing times were both intraday and overnight. It was reiterated that the exercise was being undertaken now to avoid the need to have further conversations around capacity in the future.

A member asked whether the international comparisons performed by ASX captured other markets with a high retail presence. The ASX Group Executive confirmed that of the four markets using DvP model 3 analysed, at least one market had a high retail presence.

A member asked when ASX was aware that there was a (capacity/scalability) issue. The ASX Group Executive confirmed that the replacement system was always designed to be horizontally and vertically scalable, and that ASX had been building to a headroom above the volumes experienced in March 2020. However, the March 2020 trading record has led ASX to consider its Day 1 capacity requirements and use the new record 7 million trades as the base case for determining the required headroom. It was noted that 7 million trades is substantially above where trading activity has now normalised since March 2020, at around 2-2.5 million trades per day. The member asked whether there was an issue with the underlying technology meeting scale and speed requirements. The ASX Group Executive confirmed there was no issue with the underlying technology, and that the critical path and key milestones for all non-functional requirements were on track and being met. The member also asked whether the netting and settlement workflow changes would have any implications for the April 2023 go-live date. The ASX Group Executive advised that the April 2023 go-live date remained unchanged. It was yet to be determined whether the netting and settlement workflow code would be released in CDE 10 at end June 2021 (as previously advised by ASX), or as part of the final CDE 11 code drop.

A member acknowledged their support for ASX's move to increase scalability of the new system, and thanked ASX for its acknowledgment during the meeting of the proposed solution's potential increases to risk for clearing participants. Noting the solution design was under review, the member asked whether ASX was contemplating an external analysis of the risk profile associated with the proposed changes, for the system and its users. The ASX Group Executive noted the engagement with impacted stakeholders to date, and the diverse users of the system with their own (and different) back-office systems and processes, which would complicate a risk assessment given the lack of commonality. The ASX Group Executive welcomed an offline discussion if the member had a clear sense of how the assessment would be conducted, and how it would take account of the differences in users' systems and processes.

Another member thanked ASX for acknowledging the rework the proposed solution would require of clearing and settlement participants, and welcomed any consideration into minimising the operational risk for participants. Acknowledging the consultation process to date, the member asked whether ASX would present a revised solution to

stakeholders for them to consider and provide feedback on again. The ASX Group Executive responded that ASX would formally reply to the consultation feedback received, including publishing the detailed proposed design after taking all feedback into consideration. It was noted that ASX had engaged with some respondents bilaterally (and would continue to) on their specific feedback and the ISO 20022 Technical Committee had reconvened to obtain feedback on message related changes. However, ASX was not planning to undertake a further formal consultation process on the revised solution design.

In terms of next steps, the ASX Group Executive noted continuing analysis by ASX, engagement with regulatory agencies, and deferral of the publication of technical specifications previously communicated for release in mid-April 2021. It was also noted that ASX would advise the revised publication date in mid-May 2021, and that there was no change to the go-live date of April 2023. Bilateral engagement outside of this process was also welcomed.

c) ISO 20022 Technical Committee report

The ASX Group Executive noted that the ISO 20022 Technical Committee reconvened on 26 March 2021 in relation to the proposed changes to ISO 20022 messages as a result of the proposed changes to netting and settlement workflows. Around 50 members from 22 organisations attended, with actions arising around reconciliation as well as a request for worked examples of scenarios in relation to message flows. The ASX Group Executive thanked those who participated, noting the importance of moving to a global messaging standard and the level of engagement and expertise the industry brought to the table.

Members did not raise any questions in respect of the ISO 20022 Technical Committee report.

d) Progress update on participant engagement for clearing and settlement pricing

Referring to a presentation shared during the meeting with members, the ASX General Manager, Strategic Partnerships outlined recent engagement on clearing and settlement pricing, with 15 meetings held with various participants including institutional, retail, small and large custodians and payment operators. The discussions were characterised as very productive. Feedback, to date, was that participants were very willing to engage on the topic and that each participant (from a business model, systems and other perspectives) interacts with CHES slightly differently. Overall, the feedback was characterised as positive. The discussions revealed no major surprises and a sense of relief amongst participants that ASX was not proposing to make material changes to clearing and settlement pricing.

Referring to ASX presentation slide number 8, the ASX General Manager, Strategic Partnerships provided an overview of the proposal around clearing and settlement pricing, characterised as generally no changes to the rates or bases of charge.

Members did not raise any questions in respect of the update.

AGENDA ITEM 3: SERVICE ENHANCEMENTS

a) Corporate Actions STP Phase 2 project

The ASX Senior Manager, Equity Post Trade Services provided an update on the progress of the Corporate Actions STP Phase 2 project, which was progressing well to its delivery schedule for final release in June 2021, noting this was a change from the previously advised release date of March 2021. An overview of work completed over recent months was provided, as noted in the paper.

The ASX Senior Manager, Equity Post Trade Services noted that the various releases and enhancements of the project had been supported by associated ASX Listing Rule changes, with the first changes linked to the December 2019 release, and another round of changes linked to the upcoming release. A consultation paper was released on 30 November 2020, to which ASX received 15 submissions (6 confidential, 9 non-confidential and published on ASX's website), from share registries, issuers, law firms and an information provider. The responses were characterised as mostly supportive of the changes, but ASX has made a number of further changes in response to the feedback.

- Regarding proposed changes to the announcement of issues of unquoted securities, particularly those made under employee incentive schemes, and cancellation of any associated securities, issuer feedback suggested that the proposed timing requirements for the notifications would necessitate frequent notifications and impose an

administration burden on issuers. In response to this feedback, ASX had made changes to allow periodic notifications by issuers. Similarly, the requirement for timing of notification of cancellations related to buy-backs were also reviewed and adjusted.

- Regarding issuer notification of postponed or cancelled distribution payments, ASX proposed some changes following an increase in these notifications during the height of the pandemic. A number of participants and other stakeholders approached ASX with feedback about this matter, given the consequential impacts. Taking on board that feedback, the proposed change was now that issuers that do announce postponed, cancelled or reduced distributions, will need to provide a satisfactory explanation. When the issuer is filling in an update to an online form related to those distributions, they will be presented with a warning to say they should comply with that requirement and the announcement will also be checked pre-release by ASX announcement and compliance staff to check that the explanation is satisfactory. These changes are confined to the announcement of actual or declared distributions and not for estimated distributions.
- Otherwise, the changes fall into the categories of further drafting modifications and responses to logistical questions about the online forms.
- It was also noted that the proposed adjustment to some of the corporate action timetables were not objected to, and would be proceeding.

ASX's consultation response was published on its public consultation web page on 24 March 2021 and includes a summary of the feedback received, ASX's response and the final changes, including the associated online and Word forms. The target effective date for the rule changes is aligned with the final project release of 5 June 2021, subject to regulatory approval.

The ASX Senior Manager, Equity Post Trade Services provided an update on recent stakeholder engagement, and noted that the CHES replacement team continued work to update the corporate action workflow diagrams which include the initial online form and ISO 20022 notification through to CHES in the CHES replacement documentation, which should be completed by May 2021.

A member noted ASX had published listing rule consultation submissions to its website, and asked if ASX would do the same for the consultation on netting and settlement workflows given the market-wide implications of the proposed changes. The Chair agreed to take this away, noting some portion of the responses were confidential and that ASX often published a summary of responses as part of its formal response to consultation (as it had done for the listing rules consultation).

b) Electronic CHES holding statements

The ASX General Manager, Strategic Partnerships noted that the current status of the project was in testing and thanked the Australian Shareholders' Association and other members who had assisted with testing and eliciting feedback to date. Given the potential to impact many investors and that it involves a number of changes – new functionality, a change of service provider and changes to the way paper statements are delivered – ASX was approaching the test phase cautiously and was planning to go live with the print option in Q1 FY22. ASX has also engaged bilaterally and multilaterally with participants and registries, which has been productive and lead to ASX making system and process enhancements. It was noted that ASX was currently working through the pricing structure for electronic CHES holding statements.

A member asked how ASX was promoting take-up of the new online solution. The ASX General Manager, Strategic Partnerships noted take-up was via broker participants yet the issuers had the strongest incentive to increase electronic adoption. ASX had been engaging with registries, issuers and participants to ensure all relevant users worked through the challenges together. ASX's efforts for Day 1 were targeted at brokers, with almost every broker ASX had engaged with to-date being supportive about the changes. Brokers had indicated they would likely run an electronic email campaign offering electing into electronic holding statements for Day 1. Some participants were reviewing their existing terms and conditions with customers to ascertain whether an investor who had already consented to electronic communications could be defaulted to electronic holding statements. ASX would be monitoring take-up post Day 1, and would look at additional promotional campaigns if required. The member noted there would be a cost to producing an electronic email campaign for brokers, and given this cost assumed this would be incentivised. The ASX General Manager, Strategic Partnerships confirmed ASX would be waiving all of its charges for brokers submitting emails into

the system (normally \$1.25 cost to the brokers for change of registration details), and also noted that many brokers saw the move to electronic statements as an enhancement to their customer experience. The member also noted they would engage bilaterally with ASX on how the paper statements will be branded.

A member asked for an update on the timing of the release. The ASX General Manager, Strategic Partnerships confirmed the current plan is to go-live with the paper component in August 2021, with the electronic component following one to two months later. The member noted the project had been delayed and asked if there were any other major obstacles or impediments to all participants and registries being part of the solution. The ASX General Manager, Strategic Partnerships advised there were no major obstacles, noting that each participant needed to work through their own legal teams to understand their privacy/consent requirements.

A member noted their organisation had around seven million out of twelve million accounts with email details, and expressed interest in ongoing discussions with ASX, registries and issuers around encouraging up-take. The ASX General Manager, Strategic Partnerships agreed this was a very strong starting point and hoped the number of accounts with emails would increase.

Regarding the change from paper to electronic statements being discussed, a member commented on the innovations occurring in the digital communications space, noting that digital communication could mean something different to email in the future (such as an application or portal), and noted the language should be kept technology neutral to accommodate future innovations in electronic communications. The ASX General Manager, Strategic Partnerships acknowledged this comment, and added that whilst ASX's Day 1 efforts were specific to email, the vendor selected by ASX could provide flexibility in terms of broader communication channels in the future if required.

Another member acknowledged the comment around the future of email addresses, but stressed that the sooner the changes to introduce electronic CHES holding statements via email occur, the better for issuers and participants. The member suggested ASX could add to its communications the potential other uses issuers would have for email addresses, with the ASX General Manager, Strategic Partnerships noting this was a nuanced topic and welcomed a separate discussion.

AGENDA ITEM 4: ADMINISTRATION

a) Minutes from the 7 December 2020 Business Committee Meeting

The Chair noted that ASX had not received any comments from members regarding the minutes of the 7 December 2020 meeting, and the minutes of the 7 December 2020 meeting were approved without any further changes.

A member requested some further detail and transparency regarding ASX's governance changes for the CHES replacement project referred to at the 7 December 2020 meeting. ASX agreed to take that as an action for the following meeting.

b) Forward work program

The Chair noted that a forward work program with meeting dates for the remainder of 2021 was contained in the agenda papers, and that the program will continue to focus on regular updates on the CHES replacement project, Corporate Actions STP and the electronic CHES holding statement project. The Chair invited suggestions from the Business Committee members on topics that could be covered at future meetings. No further suggestions were provided by members at the meeting.

c) Other matters

The Chair thanked the committee for its participation and contributions. The Chair also noted that ASX had made a charitable donation in lieu of a social gathering after the last meeting of 2020.

AGENDA ITEM 5: NEXT MEETING

The next meeting is currently scheduled for 14 July 2021, which ASX intends to hold in person, COVID restrictions permitting.

The meeting closed at 1.45pm.

Signed as a correct record of the meeting.

Chair

Date

Committee	Business Committee
Agenda title	Forward work program
Item	6b
Purpose	To update Members on the forward work program of the Business Committee for 2021
Meeting date	14 July 2021
Prepared by	Business Committee Chair-elect, Chief Customer and Operating Officer (Val Mathews)

The Business Committee will meet four times in 2021:

- 14 April 2021
- 14 July 2021
- 6 October 2021
- 8 December 2021

Subject to any input from members who wish to suggest additional items, the forward work program of the Business Committee in 2021 will be predominately focused on CHES replacement: documentation, test environments, implementation timetable and CHES user readiness activities.

A second major stream of work for the first half of the year is the Corporate Action STP Phase 2 project, completed in June 2021.

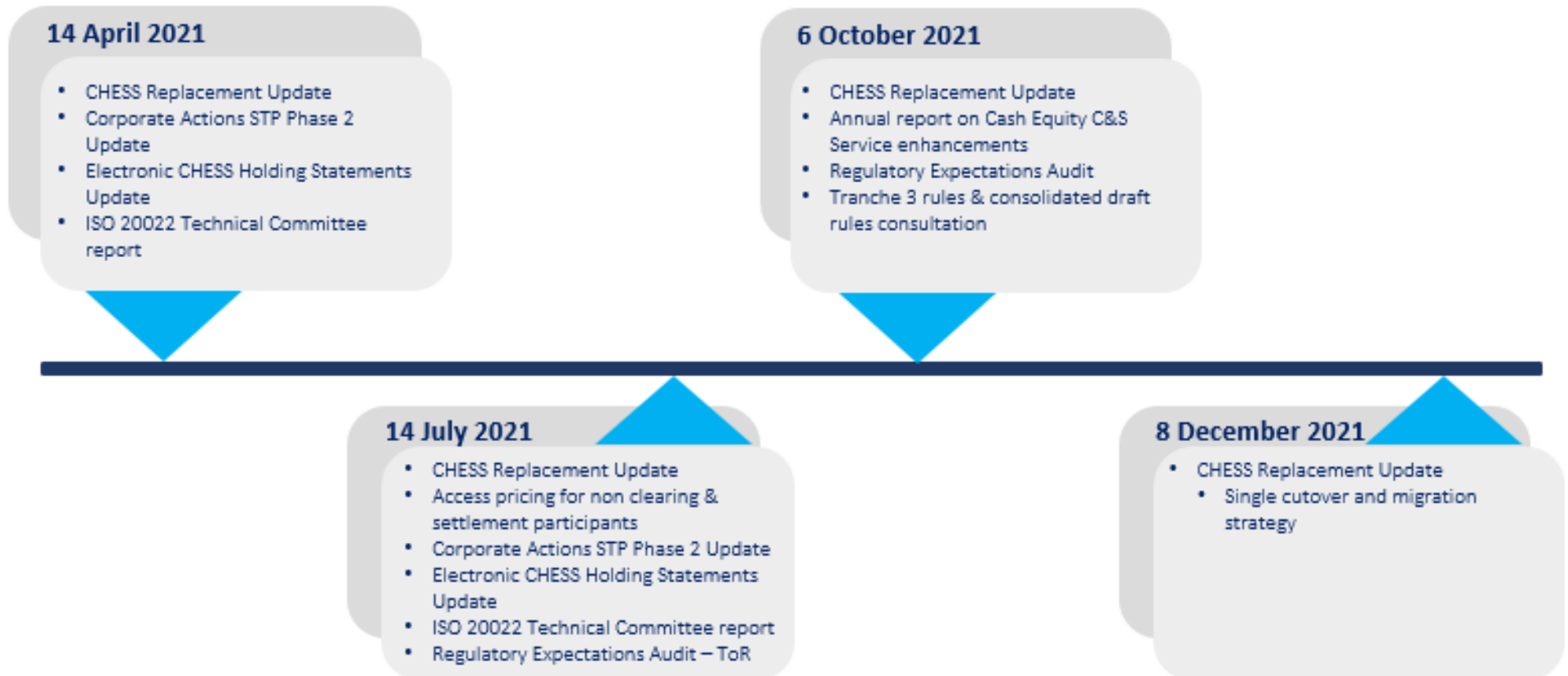
Members will also be provided with updates on the Electronic CHES Holding Statements initiative.

Members of the Business Committee are invited to suggest topics for inclusion in the forward work program at any time by contacting the Business Committee Secretariat.

ATTACHMENTS

Attachment A Business Committee Forward work program

Attachment A: Business Committee Forward work program



Note: the forward work program does not include the standing agenda items for each meeting.