

Agenda

Business Committee

Dat	te 13 July 2022	Time	12:00pm- 2:00pm
Loc	ASX offices – Level 1, 20 Bridge Street, Sydney	1	
1.	Minutes and Actions	12:00pm- 12:20pm	
	a) Minutes from the 13 April 2022 Business Committee	ee Meeting	
	Open actions		
2.	Service Performance		12:20pm- 12:30pm
	a) Cash Market Clearing and Settlement - Operating R	Performance	
3.	CHESS Replacement		12:30pm-1:30pm
	a) Project progress update		
	b) Project timeline and milestones		
	c) Contingency planning		
	d) CHESS replacement operating rule amendments		
	e) Assurance program update		
4.	Service Enhancements		1.30pm- 1.40pm
	a) Electronic CHESS holding statements		
	i. Paper statement change		
	ii. New efficient process to notify participant	s of returned mail	
	iii. Update on electronic statements take up		
5.	Regulatory Expectations – External Audit		1:40pm-1:50pm
	a) Update on the upcoming external audit of ASX's c	ompliance with the	
	regulatory expectations		
5.	Other Matters		1:50pm- 2.00pm
	a) Forward work program		
	b) AOB		
	c) Next meeting – 5 October 2022		

Action Items*

*For historical action items please refer to archived minutes here.

Item	Action	Due date	Status	Owner
number#				
2021 Apr (1)	ASX to further consider NSX's data reporting request and engage bilaterally with NSX.	Jul 2021	Completed	ASX
2021 Apr (2)	ASX to confirm the timeframe for publishing an educational artefact around the phases of CHESS batch settlement (as an outcome of industry engagement regarding the November 2020 settlement delay).	Jul 2021	Completed	ASX
2021 Apr (3)	ASX to further consider the need for clarity with the data migration process.	Jul 2021	Completed	ASX
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	Completed	ASX
2021 Apr (5)	ASX to provide further detail at the next (July) meeting around its recent CHESS replacement governance framework review.	Jul 2021	Completed	ASX
2021 Jul (1)	Given the CHESS batch settlement delay on 4 May 2021, ASX to confirm CHESS replacement will continue to segregate mFund obligations (including payments) from the settlement of cash equities in the CHESS batch	Oct 2021	Completed	ASX
2021 Jul (2)	ASX to provide further background on the cause for a delay to ASX 24 payments on 4 May 2021, including whether there was a link to the CHESS batch settlement delay on the same day	Oct 2021	Completed	ASX
2021 Jul (3)	ASX to consider how to engage with participants regarding analysis on the increase in settlement fail rates.	Oct 2021	Completed	ASX
2021 Jul (4)	ASX to engage bilaterally with a member regarding their objection to the presentation format of company logos on the proposed electronic CHESS holding statements	Oct 2021	Completed	ASX
2021 Oct (1)	GIA to share their insights and experiences from their recent data migration and cutover activities as potential learnings for the CHESS replacement project	Dec 2021	Completed	GIA
2021 Dec (1)	ASX to follow up bilaterally with Chi-X on the planning and timeframe to manage any potential industry impacts with Chi-X's planned move to the Cboe platform prior to CHESS replacement go-live	April 2022	Completed	ASX
2021 Dec (2)	ASX to table contingency planning for CHESS replacement for discussion at a future business committee meeting	July 2022	Completed	ASX
2021 Dec (3)	ASX to table at the April 2022 meeting the current take-up and the trajectory rate for investors opting in for electronic CHESS holding statements to determine possible next steps	April 2022	Completed	ASX
2021 Dec (4)	ASX to include T+1 in the forward work program for further discussion; in the interim any member feedback on the materials presented would be welcomed	April 2022	Completed	ASX & BC Members
2022 Apr (1)	ASX to consider forums in which non-cash equity conversations can be undertaken, including Austraclear and recent issues and challenges for market repo transactions	July 2022		ASX



Business Committee Members

Company	Name	Job Title	Apologies
ABN AMRO Clearing	Barry Parker	Chief Executive Officer	
AFMA	Damian Jeffree	Senior Director of Policy	
ASX	Val Mathews	Business Committee Chair and Chief	
		Customer and Operating Officer	
ASX	*Richard Atkins	General Manager, Trading & Clearing	Helen Lofthouse, Group
		Services	Executive, Markets
AIRA	Ian Matheson	Chief Executive Officer	
ACSA	David Travers	Chief Executive Officer	
ASA	Fiona Balzer	Policy & Advocacy Manager	
AUSIEX	Eric Blewitt	Chief Executive Officer	
Bank of America	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	
Cboe	Mike Aikins	Chief Operating Officer, APAC	
Citi	Christopher Moore	Manager – Direct Custody & Clearing	
CMC	Andrew Rogers	Director of Broking Business	
CommSec	Sheridan Thompson	Head of Industry Engagement &	
		Process Improvement	
Computershare	Scott Hudson	General Manager – Market Liaison	
Credit Suisse	Winston Loke	Australian Equities COO	
FinClear Services	*Leigh Conder	Chief Operating Officer	David Ferrall, Founder, Managing Director & CEO
Goldman Sachs	Yen Le	Executive Director	
GIA	*David O'Kane	Chief Operating Officer	Megan Motto, Chief Executive Officer
HSBC	Toni Icevski	Head of Client Services, Securities	
		Services	
J.P. Morgan	*Steve Hackers	Head of Markets Operations	Jonathan Evans, Head of Custody & Markets Operations
Link Market Services	*Natalie Raynor	General Manager, Registry Australia	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	
SIAA	Judith Fox	Chief Executive Officer	
Sydney Stock Exchange	Michael Go	Chief Executive Officer	
UBS	Scott Hanlon	Head of Operations, Executive Director	
* Delegate		2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	

^{*} 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, Equity Post Trade, Securities and Payments	Apology
Diane Lewis	General Manager, Head of Regulatory Affairs	
Andrew Jones	General Manager, Issuer Services, Securities and Payments	
Suzy Munro	General Manager, Securities and Payments Operations	
Karen Webb	Senior Manager, Issuer Services, Securities and Payments	
Keith Purdie	Senior Manager, Equity Post Trade, Securities and Payments	

Observers

Name	Job Title	Apologies
Nathan Bourne	Senior Executive Leader, Market Infrastructure (ASIC)	
Dodie Green	Senior Manager, Market Infrastructure (ASIC)	Apology
Andia Petropoulos	Senior Analyst, Market Infrastructure (ASIC)	
Matt Gibson	Senior Manager, Financial Market Infrastructure, Domo Payments (RBA)	estic and
Stephanie Bolt Manager, Financial Market Infrastructure, Domestic and Payments (RBA)		nd

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

Business Committee Meeting

At its 13 April 2022 meeting, the Business Committee was updated on:

- the operating performance of CHESS for the March quarter 2022
- the CHESS replacement project, including updates on project progress, the announcement about changes to the software release schedule in ITE1 and implications for the commencement of accreditation and project milestones, and an independent assessment of ASX's assurance program for the implementation of the program; and
- the take-up rate of electronic CHESS holding statements

KEY ISSUES DISCUSSED

Members were briefed on the CHESS replacement announcement about changes to the software release schedule in ITE1 and implications for the commencement of accreditation and project milestones. There were questions and discussions on the increased risk to the industry if the April 2023 implementation date still holds and the need for ASX to provide certainty on the timeline for key project milestones, including go-live, as soon as possible. There was also discussion on periods in the calendar year that could be challenging for CHESS users if the go-live date were to be revised. EY attended to discuss the independent assessment of ASX's assurance program report and to answer members' questions which included when external stakeholders will be consulted as part of the assurance program.

The committee discussed the trajectory for the take-up of electronic CHESS holding statements and the reasons why adoption has not been higher.

An update was also provided on recent developments for the adoption of a T+1 settlement cycle in other markets.

AGREED ACTIONS

There was one new action raised from the meeting.

Minutes from the meeting are attached.



Business Committee

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a) M	inutes from the 8 December 2021 Business C	Committee Meeting	
. (Open actions		
2. Servic	e Performance		12:20pm- 12:30pm
a) Ca	ash Market Clearing and Settlement - Operati	ing Performance	
3. CHESS	Replacement		12:30pm- 1:35pm
a) I	Project progress update		
b) F	Project timeline and milestones		
c) I	ndependent assessment of ASX's Assurance	Program Report	
4. Servic	e Enhancements		1.35pm- 1.50pm
a) El	ectronic CHESS holding statements		
5. Other	Matters		1:50pm- 2.00pm
a) f	Forward work program		
b) A	AOB		
c) N	Next meeting – 13 July 2022		

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BOFA	Stephen Hacker	Director, Head of Operations	
Bell Potter Securities	Robert Tesoriero	Settlements Manager	Robert Tesoriero
BNP Paribas	Mark Wootton	Head of Custody Product Aust & NZ	
BoardRoom	Martin Jones	General Manager Corporate	
		Governance & Director	
Cboe	Mike Aikins	Chief Operating Officer, APAC	
Citi	Christopher Moore	Manager – Direct Custody & Clearing	
CMC	Andrew Rogers	Director of Broking Business	
CBA (CommSec)	Sheridan Thompson	Head of Industry Engagement & Process	
		Improvement	
Credit Suisse	Winston Loke	Australian Equities COO	
FinClear Services	Leigh Conder	Chief Operating Officer	Leigh Conder
Goldman Sachs	Yen Le	Executive Director	
GIA	Megan Motto	Chief Executive Officer	
HSBC	Toni Icevski	Head of Client Services, Securities Service	S
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	
SIAA ¹	Judith Fox	Chief Executive Officer	
Sydney Stock Exchange	Michael Go	Chief Executive Officer	
UBS	Scott Hanlon	Head of Operations, Executive Director	Scott Hanlon

^{*} Delegate

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¹ Stockbroker & Investment Advisers Association





Name	Job Title	Apologies
Tim Hogben	Group Executive, Securities and Payments	
Daniel Moran	General Counsel	Apology
Hamish Treleaven	Chief Risk Officer	
Dan Chesterman	Group Executive, Technology and Data, and CIO	Apology
Sally Palmer	Deputy General Counsel	Apology
Katie McDermott	General Manager, Equity Post Trade, Securities and Payments	
Diane Lewis	General Manager, Head of Regulatory Affairs	
Andrew Jones	General Manager, Issuer Services, Securities and Payments	
Suzy Munro	General Manager, Clearing and Settlement Operations	Apology
Karen Webb	Senior Manager, Issuer Services, Securities and Payments	
Keith Purdie	Senior Manager, Equity Post Trade, Securities and Payments	

Observers

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Dodie Green	Senior Manager, Market Infrastructure, (ASIC)	
Andia Petropoulos	Senior Analyst, Market Infrastructure (ASIC)	
Matt Gibson	Senior Manager, Financial Market Infrastructure, Domestic and Payments (RBA)	
Stephanie Bolt	Manager, Financial Market Infrastructure, Domestic and Payments (RBA)	



AGENDA ITEM 1: MINUTES AND ACTIONS

The Chair welcomed members and delegates to the meeting and noted three recent membership changes; Pershing is now listed as FinClear Services, Chi-X is now listed as Cboe Australia, and Christopher Moore was welcomed as the member for Citi, replacing Lyall Herron. An industry member also noted SAFAA's name change to Stockbrokers and Investment Advisers Association.

There were apologies from Leigh Conder (FinClear Services), Scott Hanlon (UBS), Robert Tesoriero (Bell Potter) and Helen Lofthouse (ASX Trade). Barry Parker (ABN AMRO), was represented by a delegate, Matthew McMahon.

The Chair noted Roberto Fitzgerald and Juan Carlos from Ernst & Young (EY) attended the meeting as guests to present on the findings from their Independent assessment of ASX's Assurance Program (agenda item 3b).

Also attending as observers were ASIC representatives, Dodie Green and Andia Petropoulos, and RBA representatives, Matt Gibson and Stephanie Bolt.

The agenda, papers and presentation materials were distributed to all members in advance of the meeting.

a) Minutes from 8 December 2021 Business Committee Meeting

The Chair noted that ASX received two comments on the draft minutes circulated, a correction to a company name which was amended, and a point of clarification on the forward work program. The minutes of the 8 December 2021 meeting were approved without any further changes.

b) Open actions

With regard to the four open actions raised at the last meeting, the following updates were provided:

- Action: ASX to follow up bilaterally with Cboe Australia (formerly known as Chi-X) on the planning and timeframe
 to manage any potential industry impacts with Chi-X's planned move to the Cboe platform prior to CHESS
 replacement go-live.
 - ASX confirmed regular engagement with Cboe regarding connectivity to CHESS for the purposes of the Trade Acceptance Service, and discussions about the planned transition to the Cboe platform, including testing and readiness for CHESS replacement. Cboe have since confirmed the platform migration timetable and have a comprehensive engagement plan in place with participants for any feedback. Cboe's COO for APAC confirmed the next key date for industry consultation was planned for 10 May 2022. Accordingly, the action has been recorded as closed.
- Action: ASX to table contingency planning for CHESS replacement for discussion at a future Business Committee meeting.
 - The Chair confirmed this is planned to be tabled at the July Business Committee meeting, as noted on the forward work program. Accordingly, the action has been recorded as closed.
- Action: ASX to table at the April 2022 meeting the current take-up and the trajectory rate for investors opting in for electronic CHESS holding statements to determine possible next steps.
 - The Chair advised this would be addressed as part of agenda item 4a. Accordingly, the action has been recorded as closed.
- Action: ASX to include T+1 in the forward work program for further discussion; in the interim any member feedback on the materials presented would be welcomed.



There was no further feedback from members and the Chair advised this would be included as part of the forward work program. Accordingly, the action has been recorded as closed.

AGENDA ITEM 2: SERVICE PERFORMANCE

a) Cash Market Clearing and Settlement - Operating Performance

In the absence of the ASX General Manager, Clearing and Settlement Operations, the ASX Group Executive, Securities and Payments provided an update on the operating performance of the cash market clearing and settlement services for the March 2022 quarter:

- System availability for the Trade Acceptance Service and Settlement Facilitation Service were at 100% for the quarter
- The daily average fail rate has decreased to 0.251% and averaged 0.282% for the previous twelve months. The maximum fail rate during that quarter was 0.652% in February, also lower than the highs from the previous quarter
- There was a 16% increase in trades registered
- Percentage of trades novated increased to 78.7% versus the more usual rate of ~72%
- Value of netting efficiency increased to 72.8% versus the more usual rate of ~65%, and volume of netting efficiency was 98.9%.

The ASX Group Executive, Securities and Payments also noted:

- FNZ Custodians were admitted as an ASX Clear and Settlement participant on 21 February 2022, and commenced trading activity on 7 March 2022
- key statistics around the BHP stock unification including a ~25% increase in settlement instructions over three consecutive days. This also coincided with a lower than average fail rate.

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

AGENDA ITEM 3: CHESS REPLACEMENT

a) & b) Project timeline, milestones and progress update

The ASX Group Executive, Securities and Payments referred to the presentation shared in advance of the meeting to provide an update on the 28 March 2022 announcement about changes to the software release schedule in ITE1 and implications for the commencement of accreditation and project milestones (agenda item 3b). The key sentiment from stakeholders following the announcement was that while there was some disappointment, stakeholders were aligned to delivering CHESS replacement safely rather than implementing on time with some risk. However, it is important ASX provides certainty around the implementation date soon. Stakeholders have recently scaled-up project resourcing in preparation for commencement of CHESS user readiness activities and a delay would have a direct impact on costs. Some stakeholders also noted that the announcement provided some relief to their own project timeline in order to meet key milestone dates.

It was noted in accordance with best governance practices, and for a program of this size and complexity, ASX continually raise and assess potential risks with supporting mitigants to manage the impact. ASX is committed to providing full transparency of the risk register to both the ASX Boards and the regulatory agencies. EY have also undertaken three project governance reviews which have included considering risk and issue management and made several recommendations that ASX has since addressed. However, where material risks do arise that cannot be mitigated against, ASX is committed to provide the market with the relevant updates.



The ASX Group Executive, Securities and Payments summarised the key points from the presentation and the 28 March 2022 announcement including:

- testing of functional and non-functional indicators are meeting expectations
- 25 out of 27 software providers have been successfully onboarded to ITE1
- the delay of 2½ months has been caused by the late receipt of the next drop of code, v1.3, for software providers to undertake accreditation activities
- accreditation can start after software providers have completed their own development and testing to v1.3
- ITE1 defects raised by software providers to date is in line with expectations; fixes to customer defects will be applied in the next drop of software which is also the candidate for accreditation
- learnings from ITE1 are being applied to ITE2, including adjusting the approach for onboarding
- following an increase in retail activity and growth in HINs over the last 12-18 months, the range of non-functional testing scenarios by ASX have been revised
- the opening of ITE2 has been deferred from 18 April 2022 to 27 April 2022 to accommodate feedback around the Easter and ANZAC holiday period and will open with a dedicated period for onboarding
- CHESS user testing will be delayed, until v1.3 of the code that includes all customer facing functions can be deployed to ITE2
- The first market dress rehearsal, MDR1, scheduled for October 2021 will be deferred
- ASX expects a further drop of code, v1.4, however the changes in v1.4 will not affect software providers'
 accreditation activities
- Market dress rehearsals and industry wide testing will commence after v1.4 has been deployed i.e. with the code that will be the production candidate
- Further stakeholder engagement activities will commence in May including additional guidance on the go-live date; any changes will consider periods in the year that are more challenging around increased activity and risk e.g. corporate actions activity.

An industry association member noted that the market may not be accepting of the increased risk, if April 2023 still holds as the implementation date. The ASX Group Executive, Securities and Payments confirmed that ASX would not be reducing the critical path at the cost of industry readiness activities or moving any increased responsibility onto the market.

A participant member asked about the nature of stakeholder consultation and when it will start and finish. The ASX Senior Manager, Equity Post Trade Services provided an update as to the next steps which will include working group meetings with CHESS users in May as well as providing an opportunity for stakeholders to provide written feedback. It was noted that ASX has not yet specified when engagement was expected to complete and for the outcomes to be known. The ASX Group Executive, Securities and Payments explained that ASX was looking to provide the market with certainty as soon as possible, and the consultation would not span over several months, to assist organisations with their own planning. In the meantime, ASX has focused on providing certainty with near term project milestones including the commencement of accreditation activities and ITE2 connectivity and onboarding. The timeline for other key project milestones such as the commencement of CHESS user testing, MDRs and industry wide testing are key inputs into assessing the go-live date which will be subject to stakeholder input and feedback. The participant member acknowledged the response and explained that software vendors are unable to make a commitment on when they can deliver code to customers until ASX provide further certainty on the timeline.

A participant member sought validation on the implementation date for go-live or at the very least confirmation that April 2023 is no longer feasible. The ASX Group Executive, Securities and Payments noted that ASX hoped to provide more certainty on the go-live feasibility in early May.



A registry member asked about any potential impacts to operating rule amendments and possible delays. The ASX Group Executive, Securities and Payments confirmed there is no anticipated impact and that this continues to track to plan with ASX to provide its response to consultation in June 2022.

The ASX General Manager, Equity Post Trade, Securities and Payments provided a project update (agenda item 3a) noting the publication of operational readiness scenarios with over 740 scenarios covering all CHESS user cohorts.

The Chair invited member feedback on any periods in the calendar year that would be challenging for a revised implementation date. A registry member noted the second half of the year is not ideal for seasonal corporate action processing which runs from July to end November e.g. dividend reinvestment plans, annual general meetings and proxy voting. Accordingly, May or June would be preferable. An industry association member noted custodians would want to avoid May and June (due to the lodgement of audited statements). The ASX General Manager, Equity Post Trade, Securities and Payments noted the feedback is useful and the challenges it may present in balancing cohort specific preferences to implement CHESS replacement safely and securely.

A participant member noted that their software vendor would not be able to deploy code until later in 2022 and that the participant would then need nine months to test before they would be ready for go-live.

Another participant member asked what other factors are being considered in the decision-making on a revised implementation date, other than industry appetite to meet April 2023. The ASX Group Executive, Securities and Payments explained there are a range of factors being considered including timing for the next release of software code (v1.4), and that all functional and non-functional requirements are met.

The Chair summarised the need for ASX to provide certainty on the go-live date, that implementation risk will not be transferred onto the market as a result of any change, and reiterated the importance of seeking and balancing everyone's perspective as part of the stakeholder engagement process.

c) Independent assessment of ASX's Assurance Program Report

ASX's Chief Risk Officer introduced the topic and provided context before inviting EY to talk to the report. This included noting it is common practice to have independent assurance programs for significant projects of this size and nature to independently assess how the project is progressing, whether it is being managed well and is on track for successful delivery and completion, and to respond to any findings from any previous independent reviews.

The assurance project for CHESS replacement consists of about 40 independent reviews across a variety of topics and executed at key project milestones. The reviews, their findings and the project's response are reported to the project's executive steering group, to the boards of ASX Clear and ASX Settlement and to the regulatory agencies. The reviews serve as significant inputs into decisions made at key project milestones and whether the project should advance to the next phase.

Separately, following ASIC's investigation into the ASX Trade outage in November 2020 and the additional licence conditions imposed on ASX Clear and ASX Settlement, one of the licence conditions was to appoint an independent expert to effectively assess and report on the CHESS replacement assurance program with EY appointed as the independent expert. EY have since delivered their first report which was made public and is available on ASX's website. The report was also separately shared with members.

ASX's Chief Risk Officer also explained that EY will continue to provide reports every six months, in June and December, through to completion of the project. A report will also be provided two weeks before go-live and two reports, six months and 12 months, after go-live as part of a post implementation review. The reports will be made public and EY will continue to attend future Business Committee meetings to provide the findings and to keep members updated on the assurance review including tracking the closing out of any findings.

The EY Partner explained the first step was on the design to ensure the assurance program was fit for purpose, had the right frequency of reporting on progress, and the appropriateness of the framework for go-live. The design report, which was made public on 28 February 2022 and shared with members, also includes considering sufficient assurance activities are performed to cover both the risks and deliverables of the program, the nature and timing of the work and whether it is both sufficiently 'broad' and 'deep.' It also considers whether the program is being appropriately



governed to ensure the assurance program achieves what it says it will do and that major risks are being reported and managed.

Overall, EY found the assurance program was fit for purpose. However, there were three recommendations to be addressed by ASX, with EY to report on their closure in June, and what, if anything, is still outstanding.

The EY Director explained there were no significant gaps in terms of the breadth of topics covered to ensure all key risks and elements are being considered and appropriately reviewed. In terms of the nature and depth of the assurance activities, EY had some recommendations. Firstly, it was recommended to enhance the scope of each individual review by expanding the indicative scope beyond a single statement so there is a clear view on expectations for the key areas of focus for each future review. A response to the question 'is the program ready to go to the next milestone?' was also recommended every time the project is reaching a key milestone.

In terms of governance and change management, EY acknowledged the assurance program needs to be able to adapt with any changes in the project. It was also recommended to uplift current processes in managing the different governance aspects of the program and provide additional clarity in terms of expectations so there is a very clear view on the expected inputs that the assurance program needs to provide.

An industry association member asked about contingency planning after noting in Appendix A, ASX assurance program summary, that contingency planning in the 2020 project replan was part of the scope of the independent assurance review, however contingency planning is yet to be tabled with members. The member also asked about stakeholder interviews that have been internal to date and when external stakeholder interviews will form part of future assurance framework reporting. EY explained the inclusion of external stakeholders in future reviews is in scope albeit the timing still needs to be decided. ASX's Chief Risk Officer explained an independent assessment of another replan is likely and will follow the same process as the 2020 replan.

A member asked if the March 2022 deadlines are being re-examined or if some of them are now complete. ASX's Chief Risk Officer explained the assurance program adjusts as the project moves or as the status of the project changes. Therefore, some timelines have been pushed out as a consequence and the assurance reviews at specific milestones have also moved accordingly.

AGENDA ITEM 4: SERVICE ENHANCEMENTS

a) Electronic CHESS holding statements

Referring to a presentation shared during the meeting, the ASX General Manager, Issuer Services, Securities and Payments, provided an update on the take-up rate of electronic CHESS holding statements. Key points from the presentation included:

- 12 participants have started to opt their customers into electronic CHESS holding statements
- In February 2022, around 2,500 electronic statements were distributed electronically to just under 300 holders
- By end of March 2022, just under 1,500 holders had opted into electronic statements, around a fivefold increase month on month
- There is broad commercial support for electronic statements from major (larger) participants but they were yet to opt in. This is more a timing issue as opposed to being unsupportive. One large participant, Openmarkets, is expected to go-live shortly, and several others have also signalled their intention to go-live soon
- Take-up rate of electronic statements is expected to be around a 10% increase on average every six months with a target of 55% by FY 2024. However, it was noted the take-up rate will not be linear and instead will be more irregular e.g. one large participant could have a disproportionate impact.

The ASX General Manager, Issuer Services, Securities and Payments also provided an update on the new pricing model for issuer services, which is expected to go-live on 1 July 2022. It was noted the new pricing model reduces the fees for CHESS holding statements delivered in paper form by more than 50%, from \$1.25 to \$0.50. Fees for electronic statements will continue to be waived.



A registry member asked as to the reasons why the take-up is not higher. The ASX General Manager, Issuer Services, Securities and Payments explained that software providers need to have the ability to send the requisite message with the email field populated. Participants also have to integrate the software with their CRM systems to be able to track investors and whether they have opted in or out. The sponsoring participant will also need to assess the legal consent required from investors and each participant will approach this differently e.g. does the investor need to provide positive consent versus a negative consent. Consideration also needs to be given to the privacy terms and conditions that investors have signed up to and whether or not that allows for holders or investors to be defaulted into electronic statements. Participants also need to assess this work against any other priorities or competing demands. Another member supported the sentiment and the need for participants to balance IT resource allocation for industry change, including CHESS replacement activities with other priorities. The registry member acknowledged the reply but noted the expectation registries had for a quicker take up than the target projection.

A market operator member asked as to the percentage of electronic statements produced versus the overall total of statements distributed. The ASX General Manager, Issuer Services, Securities and Payments noted this is small in the context of approximately two million statements produced a month.

An industry association member asked with regards to participants who have opted in, how they are promoting the email option to investors and if they are giving clients the option to allow their email address to be passed through to issuers. The ASX General Manager, Issuer Services, Securities and Payments explained that participants who have opted in are non-Business Committee members and therefore are unable to respond in the meeting, but advised the majority have permissioned email addresses to be passed through to issuers. A participant member also noted that their software vendor, GBST, is close to being ready which is about 60% of the market.

A registry member asked if paper statements can include a callout or advertisement for holders to talk with their sponsoring broker to opt-in for electronic statements. The ASX General Manager, Issuer Services, Securities and Payments explained this can be accommodated but consideration needs to be given to the timing i.e. brokers need to be ready to support this otherwise it will be an ineffective marketing exercise. However, this is part of the future roadmap to increase take up.

AGENDA ITEM 5: MARKET TRENDS AND INSIGHTS

a) Forward Work Program

The ASX Senior Manager, Issuer Services, Securities and Payments provided an update on T+1 in other jurisdictions. In February, India started to gradually phase in T+1 settlement for the two largest exchanges, NSE and BSE. Also in February, the US Securities and Exchange Commission (SEC) voted to propose rule changes that would reduce risk in the clearing and settlement of securities. Sponsors of the change - DTCC, SIFMA and ICI - have also commenced industry workshops that included a call to action. The SEC have proposed a 31 March 2024 implementation. The SEC expects a 41% reduction in margin requirements as well as operational efficiencies.

A change to the US settlement cycle will also impact other markets, including Australian investors who trade in the US. Impacts include a reduction to the corporate actions timetable. ASX and members should consider reaching out to the sponsors on the international considerations.

The sponsors have also confirmed Canada will align with the US, adopting the same implementation date. It is undecided if South American countries will follow suit but it was noted that they aligned the last time there was a change to settlement cycles. Mexico also followed suit.

T+1 will continue to be a topic for the forward work program.

Referring to the forward work program, the Chair noted a full agenda for the July meeting with a number of topics in scope including contingency planning, ASX's response to rule amendments, clearing and settlement pricing and terms of reference for the regulatory expectations audit. The CHESS replacement timeline will also be in scope for the next meeting. Accordingly, the Chair asked members to provide feedback on their priorities including the option to extend the meeting as well as any other topics that should be considered by the Committee. An industry association member suggested extending the next meeting rather than deprioritising items.



b) Other matters

Chair

A participant member raised a matter as it relates to client migration challenges for market repo transactions in Austraclear following the go-live in November 2021 and participants having to adopt manual processing, defeating the purpose of straight-through-processing for instructing and settling market repos. The Chair noted the charter for the Business Committee is for cash equities clearing and settlement matters but agreed to take away how ASX can help facilitate a broader conversation on this topic.

An industry association member asked about the next steps in publishing the pricing for clearing and settlement fees for CHESS replacement. The ASX Group Executive, Securities and Payments explained ASX is targeting to publish 12 months prior to go-live. However, it will not be possible to publish in April 2022 and more likely targeting end June 2022, subject to ACCC's review.

The Chair noted that ASX reviews Business Committee membership annually and considers potential changes to representative membership on a rotational basis. As part of the annual membership review, ASX will be looking to make any changes in advance of the next meeting in July.

Date

The Chair summarised the new action from this meeting.

The Chair thanked the Committee for their contributions and conversation.

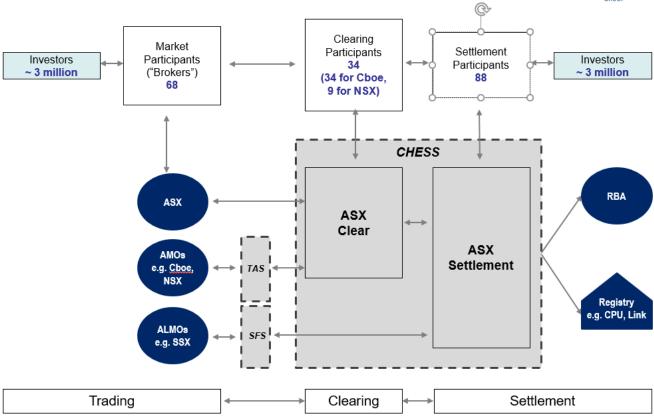
c) Next meeting – 13 July 2022
The next meeting is scheduled for 13 July 2022.
The meeting closed at 1.32 pm.
Signed as a correct record of the meeting.



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	13 July 2022
Prepared by	General Manager, Securities & Payments Operations (Suzy Munro)
	Senior Manager, Settlement Operations (Brendan Laird)

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 CHESS. It is critical for market operations, that CHESS 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 CHESS is 99.80%.

For the June 2022 quarter, the average monthly system availability was 100% for CHESS. The average monthly availability of CHESS has been 99.99% between November 2011 and June 2022.

Trade Acceptance Service and Settlement Facilitation Service

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

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

For the June 2022 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 2022 (the same as CHESS).

Reporting on clearing and settlement service performance

The key metrics noted above on novation, netting efficiency and settlement efficiency for the June 2022 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 CHESS settlement batch is the fail performance.

For the June 2022 quarter, the daily average fail performance has decreased to 0.238% (March 0.251%) and averaged 0.279% for the previous twelve months, between July 2021 and June 2022.

The daily average fail performance was 0.294% over the 3 year period from July 2019 and June 2022.

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

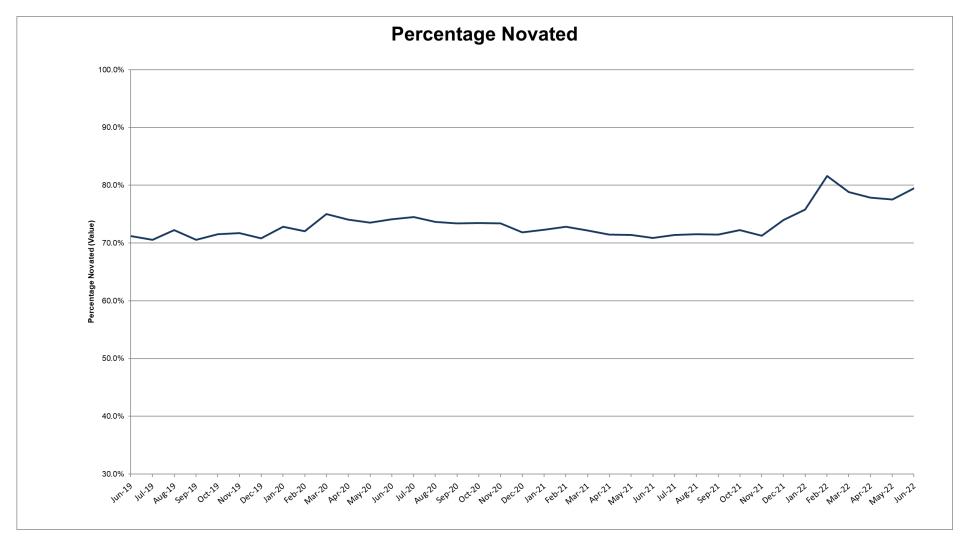
Month	June	May	April	March	February	January
Average Fail Rate	0.216%	0.231%	0.274%	0.241%	0.258%	0.256%
Maximum Fail Rate	0.313%	0.564%	0.576%	0.437%	0.652%	0.589%
Minimum Fail Rate	0.098%	0.115%	0.148%	0.132%	0.151%	0.171%
# of days Fail rate > 0.50%	0	1	3	0	1	2
Batch Settlement Cut-off Extensions	2	1	0	1	0	0
Fall back of Payment Provider	0	0	1	0	1	0

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

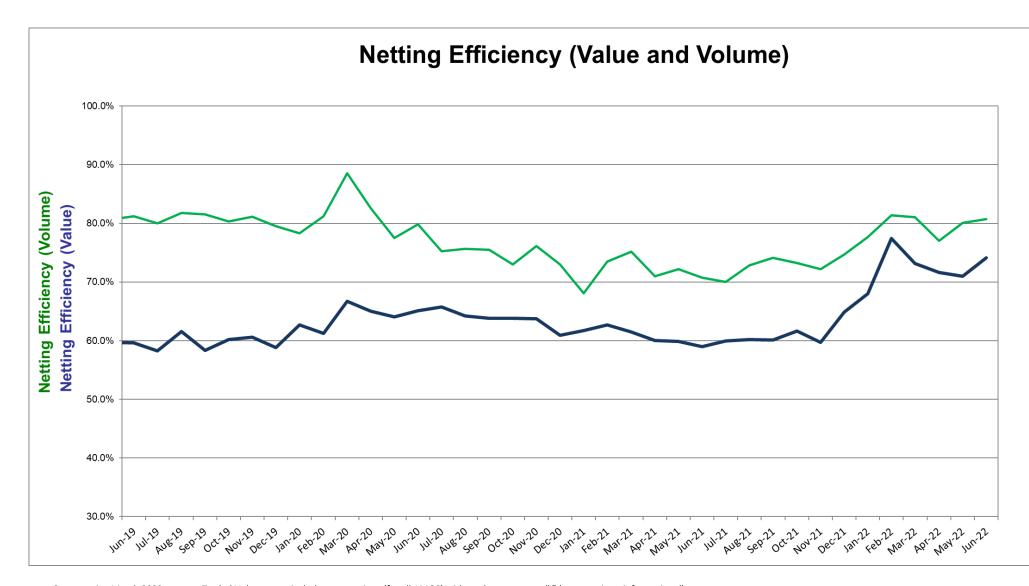
	June 2022 Quarter	March 2022 Quarter	December 2021 Quarter
System Availability (CHESS)	100%	100%	100%
System Availability (TAS)	100%	100%	100%
Total Trades Accepted (ASX)	112,436,196	124,158,530	105,589,408
Total Trades Rejected (ASX)	2	0	0
Total Trades Accepted (Cboe)	39,228,382	39,524,131	34,150,600
Total Trades Rejected (Cboe)	0	0	0
Total Trades Accepted (NSX via TAS)	151	325	354
Total Trades Rejected (NSX via TAS)	1	0	0
Total Settlements (SSX)	0	1	0
Total Value of Settlements (SSX)	\$0	\$600	\$0
Daily Average Traded Value (On and Off Market) *	\$12.30 billion	\$14.13 billion	\$9.21 billion
Daily Average Cleared Value *	\$9.57 billion	\$11.16 billion	\$6.68 billion
Percentage Novated *	78.2%	78.7%	72.5%
Daily Average Cleared Value Post-Netting	\$2.65 billion	\$2.97 billion	\$2.53 billion
Netting Efficiency (Value) *	72.2%	72.8%	62.0%
Netting Efficiency (Volume) *	98.9%	98.90%	98.67%
Daily Average Settled Value (Including Non-Novated)	\$13.50 billion	\$15.83 billion	\$13.50 billion
Settlement Efficiency (Value)	99.90%	99.89%	99.85%
Average Daily CHESS Fail Rate (% Rescheduled to the next settlement date)	0.238%	0.251%	0.329%

^{*} Commencing March 2022 quarter, Traded Volume now includes transactions (for all AMOS) with settlement status "I" (e.g. crossings, informational)

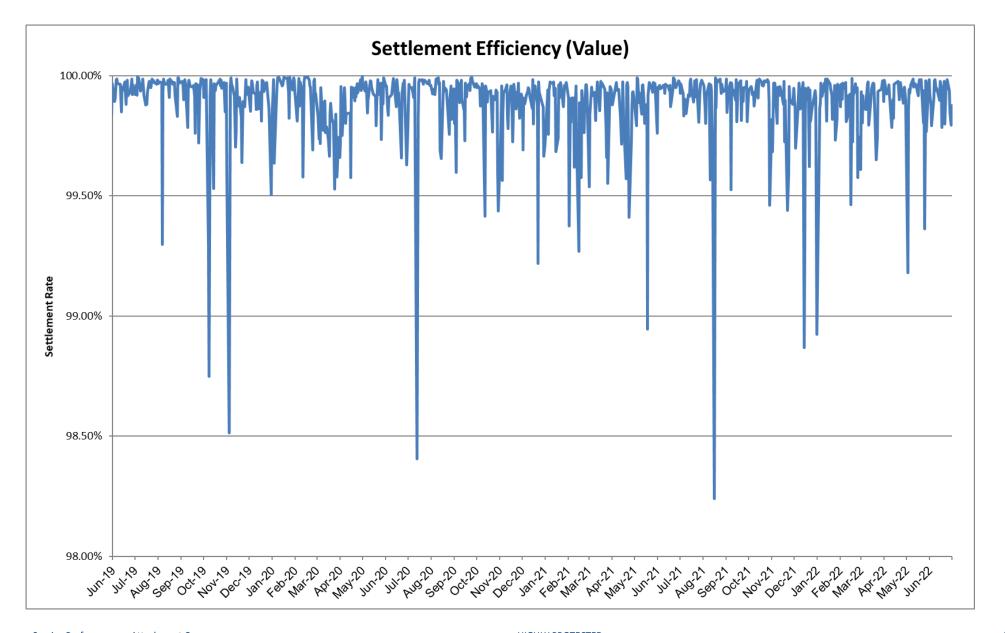
ATTACHMENT B – PERFORMANCE OF ASX'S CLEARING AND SETTLEMENT SERVICES FROM JUNE 2019 TO JUNE 2022



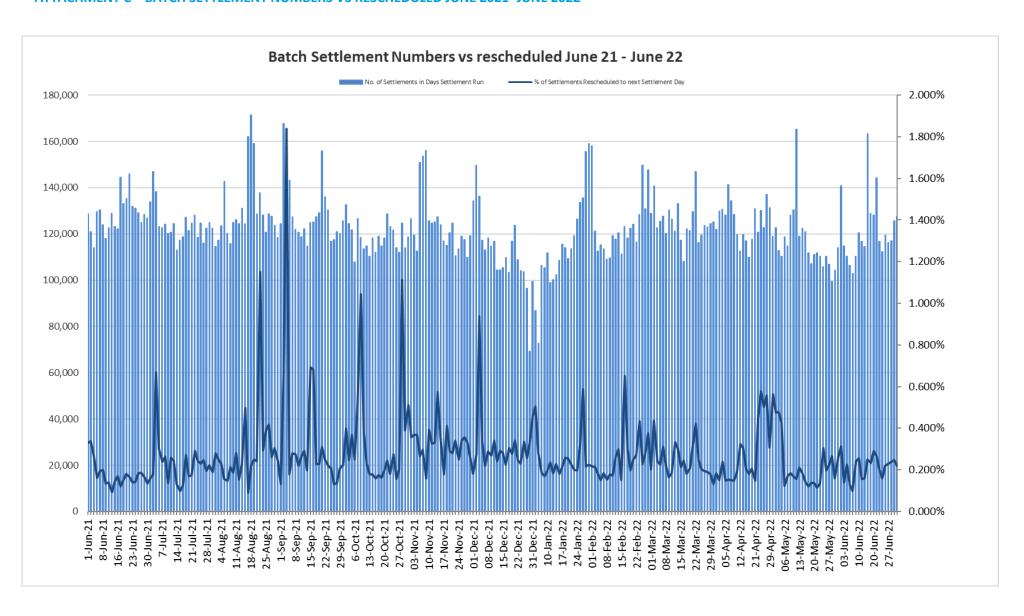
Commencing March 2022 quarter, Traded Volume now includes transactions (for all AMOS) with settlement status "I" (e.g. crossings, informational



• Commencing March 2022 quarter, Traded Volume now includes transactions (for all AMOS) with settlement status "I" (e.g. crossings, informational)



ATTACHMENT C – BATCH SETTLEMENT NUMBERS VS RESCHEDULED JUNE 2021- JUNE 2022





Committee	Business Committee
Agenda title	CHESS Replacement
Item	3a, 3b, 3c, 3d, 3e
Purpose	To provide Business Committee members with a project update
Meeting date	13 July 2022
Prepared by	Group Executive, Securities and Payments (Tim Hogben)
	General Manager, Equity Post Trade, Securities and Payments (Katie McDermott)
	Senior Manager, Equity Post Trade, Securities and Payments (Keith Purdie)

KEY SUMMARY POINTS

- Go-live in April 2023 is no longer viable following the delay to delivering the remaining application software
- Stakeholder engagement working groups to seek input on a revised timetable for go-live will commence in the second half of July
- EY have been commissioned to evaluate whether the replanning process has been robustly validated and challenged and the recommended timeline is realistic
- ASX's response to consultation feedback received on the CHESS Replacement Tranche 3 and Combined Rule Amendments Consultation Paper was published on 30 June
- ITE2 opened on 27 April for CHESS user onboarding with four customers now fully connected, and ASX has received applications from approximately 50% of CHESS users
- ASX's testing on the next functional release of code, version 1.3, is tracking to plan and is expected to be deployed into ITE1 at the end of July
- ASX's internal performance testing over multiple days of the full technology stack is successfully processing 2.5m trades per day, plus most common used ISO messages, EOD and batch settlement within SLAs
- Accreditation for software will now be a two-step process, with an initial accreditation on version 1.3 to be completed by the end of this year as a readiness metric, and a final accreditation on the release candidate closer to the implementation weekend
- New documentation published provides further support for industry testing including a guide to IWT and sample customer migration reports that will be provided to CHESS users over the implementation weekend

UPDATE ON KEY PROJECT TIMELINE & AND NEXT STEPS

Revised timetable for go-live & next steps in engaging stakeholder feedback

A market announcement and communication on 11 May to CHESS stakeholders confirmed April 2023 for go-live is no longer viable. The decision reflected the delay to the remaining delivery of application software, which no longer gives ASX and CHESS users the time allocated to complete their testing and other readiness activities before April 2023. A new go-live date will be determined after further planning with our technology partner and input from stakeholders on the timing of project milestones.

The working groups to elicit stakeholder feedback will now commence in the second half of July. ASX will provide information in advance to assist with a constructive industry consultation and help stakeholders to prepare in providing feedback. The working groups will also provide an opportunity to seek clarification and hear from other stakeholders on the questions to which ASX is seeking responses. Stakeholders will have up to four weeks to provide written feedback.

ASX has commissioned EY to undertake an independent review of the replan. The review will be done in parallel with the replanning process to help support ASX's decision-making.

Timing for release of the new implementation plan, which will include a revised go-live date, will depend on the extent of consultation feedback, the time taken by EY to complete its review of the project replan, and ASX's processes of internal governance and engagement with the regulatory agencies. As formal stakeholder feedback is not targeted until 4 weeks after the working groups, i.e. end of August, it is unlikely a new timetable will be announced before October 2022.

ITE1 software provider testing and accreditation

Twenty-six of 27 software providers and one CHESS user organisation have been onboarded into ITE1. The remaining software provider is developing a proprietary solution and is scheduled to connect to ITE1 in July and is expected to complete the initial accreditation activities prior to year-end, which is in line with the near term milestones ASX has communicated.

In May, a change to the accreditation approach was announced which will now be a two-step process; an initial accreditation on version 1.3 of code to be completed by the end of this year and a final accreditation on the code complete candidate closer to the go-live weekend. The revised approach will provide an earlier readiness metric on where software providers are with their development with version 1.3. This will allow CHESS users to have a view on the state of the software that they will be testing on and the opportunity to provide feedback to their software provider prior to final accreditation. The final accreditation performed allows both ASX and software providers time to address any additional delivery and defects and provides the maximum possible protection that ensures the stability and confidence of the clearing and settlement facility.

Software providers testing in ITE1 continues with the key vendors continuing to track to expectations. The share registries are also tracking well but progress for some in-house participants continues to be varied. However, in terms of coverage in testing the available scope of version 1.2 of the code in ITE1, collectively software providers have successfully tested most of the available functionality.

The key concerns from software providers are around system refreshes with the most recent reset, which was unplanned, occurring on 28 June. The incident occurred at the end of the settlement batch process, and a reset was considered the only option available to resolve the issue in a timely manner. The impact of any resets is a loss of test transactions, including any long-running test scenarios for corporate actions. This was the second time there has been an unplanned reset since ITE1 opened at the end of November, noting the previous reset took place over a weekend. While resets can have high impacts on inflight test scenarios, ASX has communicated completing the build will continue to be the primary focus of Digital Asset before moving onto technical aspects such as upgrades. Until that time, environment resets in ITE1 and ITE2 may be necessary, albeit subject to internal governance which takes into account external impacts. To be very clear, resets are not considered an option to resolve issues in a production environment.

ASX's testing of version 1.3 of the application is tracking to schedule for deployment into ITE1 at the end of July. This software release is expected to be the code candidate for software providers to commence the initial accreditation phase in ITE1 subject to ASX completing its testing

Business Committee members will be provided a short presentation on 13 July to provide some key metrics on ITE1 testing activity on a no-names basis.

ITE2 CHESS user testing and operational readiness assessment

ITE2 onboarding is underway with four customers fully connected. To date, ASX has received 44 applications from customers of which 35 have been processed but still await final confirmation as to access points and minor technical checks from the relevant customer. ASX had previously provided guidance to CHESS users to target onboarding into ITE2 by September 2022 but this timeline will now be subject to stakeholder feedback on the replan. In the interim period, the third and final step of the onboarding process, a readiness test, has been put on hold until version 1.3 of the code has been deployed to ITE2. This is to accommodate software vendors from not having to deploy version 1.2 of the code to complete the onboarding confirmation test activities to validate the set-up to ITE2 has been successfully completed by CHESS users. Further information on ITE2 onboarding test activities can be found here.

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CHESS users will not be able to conduct user testing in ITE2 until after the version 1.3 software release has been tested and deployed by ASX in ITE2. The timing of CHESS user testing will be discussed in the working groups scheduled for end of July.

ASX has also published a guide to industry wide testing (IWT) including guiding principles and the workflows and features in scope. The IWT guide will be progressively updated over the coming months including a test plan and schedule of events.

Cutover and migration

In April 2022, 18 sample customer migration reports were published covering share registries, AMOs, clearing and settlement and settlement only participants, controlling participants and PISPs. The samples should further assist CHESS users in their assessment of how to use the reports to assist with their own cutover activities.

Since April 2022, ASX continues to run mock migrations to validate the execution of ASX's data migration and reconciliation of the cutover to prove the end to end data migration and reconciliation process. To date, ASX has now completed 14 mock migrations.

The information paper explaining ASX's assessment of the different implementation options, including cutover on a single weekend, targeted for publication in Q2 2022, will now be published in July 2022. This paper seeks to explain the considerations and assessment by ASX to use a risk mitigated single cutover approach and will include the evaluation criteria, an assessment on the different implementation options and various risk mitigations.

Public Consultation on Tranche 3 and consolidated rules package

On 30 June, ASX published its response to consultation feedback received on the tranche 3 and consolidated draft rule amendments across all three tranches. This included a summary of the feedback received in stakeholder submissions, ASX's response to the feedback, and the draft rule changes made to ASX Settlement Operating Rules and Procedures and ASX Clear Operating Rules and Procedures taking into account the feedback received.

The consolidated rule amendments, together with procedures, explanatory documents and technical specifications for the business functionality, will enable stakeholders to make a comprehensive assessment of the proposed operating rule changes relating to CHESS replacement.

Subject to the regulatory clearance processes, ASX proposes to formally lodge the combined rules package with ASIC in the fourth quarter of calendar year 2022 and publish the final rule changes at least six months prior to go live, noting that certain transitional rules will have an earlier commencement date.

A copy of ASX's full response to consultation to tranche 3 and combined rule amendments can be found here.

Business Committee members will be provided a short presentation (agenda item 3d) on 13 July on the key points in the response to consultation.

Contingency Planning

ASX is giving careful consideration on what steps can be taken in the event a CHESS user is not ready in time, both in the lead up to go-live as well as if a CHESS user is unable to complete the necessary readiness activities over the implementation weekend.

Business Committee members will be provided with a short presentation (agenda item 3c) on 13 July on some of the considerations that are underway as well as next steps.

STAKEHOLDER ENGAGEMENT ACTIVITIES

Software Provider Readiness working group

ASX has recently hosted one software provider readiness working group.

On 18 May, working group members were provided with an update on failover testing, the process for accreditation exemptions and new documentation updates. The presentation materials and Q&A can be found here.

Regular bilateral meetings continue to focus on software providers' testing in ITE1.

Implementation and Transition Readiness working group

The most recent implementation and transition working group webinar was held on 23 May. The webinar discussed the reasons why April 2023 for go-live is no longer a viable date, near term milestones and the change in approach for accreditation. The approach for market consultation on a replan was also discussed. A recording of the webinar, presentation materials and Q&A can be found https://example.com/her

Bilateral engagements across all stakeholders

ASX has hosted 104 bilateral meetings with stakeholders' since 1 April to 30 June. These engagements have been focused on the following topics:

- ITE1 testing progress
- ITE2 onboarding
- Inflight migration (ITE-M) testing
- Market dress rehearsals
- Soft soundings on the approach to industry wide testing
- Sample customer migration reports
- HIN data remediation
- CHESS UI demonstrations
- Support for CHESS users testing of corporate actions

Project Documentation

ASX continues to publish project documentation to prepare software providers and CHESS users for various readiness activities as follows:

- In April 2022
 - o Updated functional specification ASX Operations initiated account type change
 - ISO 20022 Messaging ASX Operations initiated account type change
 - FIX Messaging Sequence number gap management
 - Operational Readiness Scenarios inc. batch settlement and exception handling for payment providers
 - o Sample customer migration reports
- In May 2022
 - CHESS UI user guide bulk import functionality
 - Cutover and migration details of active account migration
 - Updated operational scenarios for share registries
- In June 2022
 - Guide to Industry Wide Testing (IWT)
 - Version 1.3 test tools
 - Share registry specific landing page

Full release notes for documentation published in April, May and June can be found here.

Key CHESS user updates by cohort type

Clearing and Settlement Participants

ASX continues to hold bilateral meetings with clearing and settlement participants to identify where additional support or guidance may be required for CHESS user readiness activities. Key themes from recent engagements include i) requests for more certainty in relation to key project milestones, especially the timing of ITE2 onboarding with clarification sought on the need for software deployment to complete the onboarding confirmation test activities, ii) resourcing and budget considerations raised in the context of there not being a confirmed project timeline, iii) greater transparency sought in relation to how software providers are tracking with their development and testing in ITE1, (iv) AMO support/integration for CHESS users end-to-end testing in ITE2.

Share Registries

Monthly bilateral meetings with share registries continue at an operational level as well as executive level bilateral engagement with Computershare and Link. Recent engagements have included discussing share registries support for the end-to-end testing of corporate actions as well as some targeted deep dives on functional aspects to respond to questions from share registries.

Payment Providers

ASX provided a project update at the most recent Equity Settlement Payment Provider Sub Committee (ESPPSC) meeting held on 7 June.

Approved Market Operators (AMOs)

Engagement with each AMO has continued on a bilateral basis. AMOs will be invited to participate in a working group meeting in second half of July where ASX will seek their input on the timing of project milestones, and provide more information on the settings for key test periods.

HIN DATA REMEDIATION

Remediation of HIN data exceptions has been on-going. Clearing and settlement participants have now remediated ~70% of all reported exceptions as at 30 June '22 with 20 participant firms having remediated all of their reported exceptions.

ASX are continuing to track and report on the remaining HIN data exceptions and are working with affected participants to reduce the number of outstanding exceptions with a particular focus on those accounts that will not be able to migrate to the new system in their current format.

Separately, to encourage the removal of dormant or inactive accounts, ASX continues to offer bulk cancellations (greater than 100 HINs) free of the standard CHESS messaging fees. Participants are encouraged to actively review and remove their dormant client accounts. This initiative has seen more than one million dormant HINs cancelled in the past two years.

ASSURANCE PROGRAM

The Assurance program continues to track to plan and engage with EY as independent expert on their reviews.

So far, 17 program assurance reviews out of 44 have been completed. These have resulted in 149 findings of which 28 are still to be closed out. A further 27 reviews are then yet to be started, with these being mainly aligned across key project milestones except for 8 reviews that are not milestone dependent (i.e. do not occur at milestone dates). The Assurance Program will be re-baselined in line with the replan of the CHESS Replacement Program.

With respect to the additional Licence Conditions reviews, ASX has fully addressed all 3 recommendations from the initial EY design assessment review of the Assurance Program (issued February 2022). EY have now completed their second independent expert review, which provides an update on the status of remedial actions from their initial review and the progress of completed assurance activities. The report also includes an update on the trade outage independent expert review recommendations relevant to the CHESS Replacement Program. ASX has agreed with ASIC to release the second independent expert review report, targeted for mid July 2022.

With respect to the EY independent review of the IBM recommendations, 9 out of 20 actions are now closed. The remaining 11 are not due for completion and continue to be monitored and tracked.

EY have been invited to the meeting on 13 July to provide Business Committee members with an update on the assurance program (agenda item 3e).



Committee	Business Committee
Agenda title	Electronic CHESS holding statements
Item	4a
Purpose	To provide Business Committee members with an update on electronic CHESS holding statements
Meeting date	13 July 2022
Prepared by	General Manager, Securities and Payments (Andrew Jones)

Members will be provided with a short presentation on 13 July regarding the new online returned mail solution, printed CHESS statement design and the take up of electronic statements for Q2 2022.



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	13 July 2022
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.

The FY22 audit is due to commence shortly. The audit methodology this year will be the same as in previous years.

As part of their review, PwC will select a group of Committee members and approach them directly to discuss their audit questions. ASX will not be 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 (<u>deanna.chesler@pwc.com</u>) or Glenn Mackrell (<u>glenn.y.mackrell@pwc.com</u>).

The Terms of Reference for the annual external audit set out the objectives, scope and approach for the external audit and is provided in Attachment A.

ATTACHMENTS

Attachment A Terms of Reference

HIGHLY PROTECTED

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 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 (i.e. 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 (i.e. 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 the following pages.

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 be commence in July 2022 cover the period 1st July 2021 to 30th June 2022.

Agenda item 5a – Attachment A

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 Council of Financial Regulators, the Australian Competition and Consumer Commission; 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

ASX's go	e responsiveness to users' evolving needs, transparent formal mechanisms should be maintained within vernance framework to give users a strong voice in strategy setting, operational arrangements and system and to make ASX's monopoly cash equity CS services directly accountable to users. As part of this:
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 (CHESS) 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: 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

2. Transparent, non-discriminatory and fair and reasonable pricing of CS services

indicators set for relevant management.

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

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

ensure that reasonable	the fees charged by ASX for its cash equity CS services are transparent, non-discriminatory, and fair and
2(a)	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: 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)	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.
2(c)	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.
2(d)	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.
2(e)	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: 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)	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.
	rcial, transparent and non-discriminatory access to CS services – service levels, information handling infidentiality
non-discrim	facilitate access to its cash equity CS services (including data) on commercial, transparent and inatory terms. Non-discriminatory terms in this context are terms that do not discriminate in favour of ed entities (except to the extent that the cost of providing the same service to another party is higher). As
3(a)	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.
3(b)	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.

Agenda item 5a – Attachment A

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	Forward work program
Item	6a
Purpose	To update Members on the forward work program of the Business Committee for 2022
Meeting date	13 July 2022
Prepared by	Business Committee Chair, Chief Customer and Operating Officer (Val Mathews)

The Business Committee will meet four times in 2022. The meeting dates are:

- 13 April 2022 12.00-2.00pm
- 13 July 2022 12.00-2.00pm
- 5 October 2022 12.00-2.00pm
- 7 December 2022 4.00-6.00pm

Subject to any input from members who wish to suggest additional items, the forward work program of the Business Committee in 2022 will continue to be predominately focused on CHESS replacement: test environments, implementation timetable and CHESS user readiness activities, including accreditation, migration and cutover.

Members will continue to be provided with updates on the Electronic CHESS Holding Statements initiative.

Additionally, ASX will monitor global adoption of T+1 settlement and discuss the appropriate timing for this item on the forward work program.

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 by email at BCSecretariat@asx.com.au.

ATTACHMENTS

Attachment A Business Committee Forward work program 2022

HIGHLY PROTECTED

Attachment A: Business Committee Forward work program 2022

13 April 2022

- · CHESS Replacement Update
- Electronic CHESS Holding Statements update
- · T+1 / Settlement optionality

5 October 2022

- · CHESS Replacement update
 - · Reporting on user readiness
- Electronic CHESS Holding Statements update
- Annual report on Cash Equity C&S Service developments
- · Regulatory Expectations Audit

13 July 2022

- · CHESS Replacement Update
 - · Contingency planning
 - Final CHESS Replacement rule amendments
- Electronic CHESS Holding Statements update
- Regulatory Expectations Audit Terms of Reference

7 December 2022

· CHESS Replacement Update

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