

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

Business Committee Meeting

At its 8 December 2021 meeting, the Business Committee was updated on:

- the operating performance of CHESS for the December quarter 2021 (to 31 October 2021);
- the CHESS replacement project, including updates on project progress, the opening of ITE1 and an independent assessment against IBM's ASX Trade recommendations for CHESS replacement;
- the electronic CHESS holding statements project; and
- proposed T+1 settlement cycle in the US and considerations for the Australian market.

KEY ISSUES DISCUSSED

Members were briefed on the progress with the CHESS replacement project including the recent opening of the first industry testing environment (ITE1) and how corporate action events will be made available for testing from January 2022. There were questions and discussion on industry readiness and reporting, other competing priorities that could impact participants' readiness, and contingency planning for example if a participant is lagging behind.

The committee was advised that the optional service for shareholders to receive their CHESS holding statements and notifications electronically would go live on 13 December 2021. There was a discussion about the incentives for taking-up this new offering. A member also noted that they had raised a query with the Council of Financial Regulators regarding the ongoing validity of the mandatory nature of ASX's issuance of CHESS holding statements.

There was a presentation on the adoption of a T+1 settlement cycle in the US and considerations for the Australian market to facilitate member discussion and the importance on taking control for setting the agenda on how this might play out.

AGREED ACTIONS

The three open actions from previous meetings have been completed.

The following actions were identified at the December 2021 meeting:

- 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;
- 2. ASX to table contingency planning for CHESS replacement for discussion at a future business committee meeting;
- 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; and
- 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.

Minutes from the meeting are attached.



Agenda

Business Committee

Da	te	8 December 2021	Time	4:00pm – 6:00pm
Loc	ation	ASX offices – Level 1, 20 Bridge Street, Sydney		
1.	Minutes	s and Actions		4:00pm-4:15pm
	a) Min	utes from the 6 October 2021 Business Commit	tee Meeting	
	b) Ope	en actions		
2.	Service	Performance		4:15pm-4:30pm
	a) Casl	h Market Clearing and Settlement - Operating Pe	erformance	
3.	CHESS R	Replacement		4:30pm-5:15pm
	a) Proj	ect progress update		
	b) Inde	ependent assessment against IBM ASX Trade rec	commendations	
	-	mber feedback on Tranche 3 and combined oper sultation	rating rule amen	dments
4.	Service Enhancements		5:15pm-5:20pm	
	a) Elect	ronic CHESS holding statements		
5.	Market Trends & Insights		5:20pm-5:30pm	
	a) Mer	mber discussion on proposed T+1 Settlement cyc	cle in US	
6.	Closing		5:30pm-5:40pm	
	a) For	ward work program		
	b) Oth	er matters		
	c) Nex	t meeting – to be advised		

End of Year Drinks

Business Committee members are invited to stay for drinks to thank members for their participation throughout 2021.



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	
A C V	D:	Customer and Operating Officer	
ASX	Richard Atkins*	General Manager, Trading & Clearing Services	Helen Lofthouse
AIRA	lan Matheson	Chief Executive Officer	
ACSA	David Travers	Chief Executive Officer	
ASA	Fiona Balzer	Policy & Advocacy Manager	
AUSIEX	Mat Tilley	Head of Markets & Client Solutions	Mat Tilley
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 Industry Engagement &	
		Process Improvement	
Credit Suisse	Winston Loke	Australian Equities COO	
Goldman Sachs	Yen Le	Executive Director	
GIA	Megan Motto	Chief Executive Officer	
HSBC	Toni Icevski	Head of Client Services, Securities	
		Services	
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	Rebecca Hill
Morgans	Daniel Spokes	Director, Client Support Services	Daniel Spokes
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	Stuart Guinness*	Director – Regulatory Affairs/Company Secretary	Michael Go
UBS	Scott Hanlon	Head of Operations, Executive Director	
* Delegate		21. 21. 2 21. 21. 21. 21. 21. 21. 21. 21. 21. 21.	

^{*} 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	
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	
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)	
Andia Petropoulos	Senior Analyst, Market Infrastructure (ASIC)	
Matt Gibson	Senior Manager, Financial Market Infrastructure (RBA)	
Stephanie Bolt	Manager, Financial Market Infrastructure (RBA)	

Guest

Name	Job Title	Apologies
Mike Abel Associate Partner, Oceania FSO Technology Consulting, EY		



AGENDA ITEM 1: MINUTES AND ACTIONS

The Chair welcomed members and delegates to the final meeting of the year and noted two recent membership changes: David Travers was welcomed as the new member for ACSA, replacing Rob Brown; and Toni Icevski from HSBC, replacing Nichole Alexander.

There were apologies from Daniel Spokes (Morgans), Rebecca Hill (Morgan Stanley), Leigh Conder (Pershing) and Mat Tilley (AUSIEX). Two members were represented by a delegate, Stuart Guinness attended as a delegate for Michael Go (SSX), and Richard Atkins attended as a delegate for Helen Lofthouse (ASX Trade).

The Chair noted Mike Abel from Ernst & Young attended the meeting as a guest to present on an independent assessment against IBM ASX Trade recommendations (agenda item 3b).

ASIC representatives (Nathan Bourne, Dodie Green and Andia Petropoulos) attended the meeting as observers. The Chair also noted the RBA will now attend the meeting as observers (Matt Gibson and Stephanie Bolt).

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

a) Minutes from 6 October 2021 Business Committee Meeting

The Chair noted no comments were received on the draft minutes circulated. The minutes of the 6 October 2021 meeting were approved without any further changes.

b) Open actions

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

 Action: Given the CHESS batch settlement delay on 4 May 2021, 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.

At the last meeting, 6 October 2021, the ASX Group Executive, Markets noted that a delay to ASX 24 payments occurs when there is a delay to the conclusion of the CHESS batch and that ASX was working to refine that process to differentiate circumstances, as the delay is only appropriate in some cases. The action was left open until ASX had finalised the change of process.

In the absence of the ASX Group Executive, Markets, the Chair noted ASX has now reviewed this and has updated the operational process in place for the payment of outgoing ASX24 margins in the event of a CHESS batch delay. If the delay is caused by an ASX operational process issue, pending outgoing ASX24 margin payments will now be released. In the event of a CHESS batch delay caused by a customer financial issue, outgoing ASX24 payments for that customer may be held (subject to review by the ASX Chief Risk Officer/Default Management Committee as appropriate), but other customers' payments would now be released.

The member that first raised the issue noted they were seeking an undertaking from ASX that the two processes are separated both physically and procedurally since the two clearing houses are distinct from one another and governed by a separate set of rules. The Chair confirmed that they are separated and closed the action.

• Action: ASX to engage bilaterally with a member regarding their objection to the presentation format of company logos on the proposed electronic CHESS holding statements.

The ASX General Manager, Issuer Services, Securities and Payments, advised that the presentation format of company logos had been addressed and the AMO member confirmed the same. The Chair noted the action as closed.

• Action: GIA to share their insights and experiences from their recent data migration and cutover activities as potential learnings for the CHESS replacement project.



The Chair noted a meeting has been scheduled for 10 December between ASX and GIA to discuss and accordingly noted the action as closed.

AGENDA ITEM 2: SERVICE PERFORMANCE

a) Cash Market Clearing and Settlement - Operating Performance

The ASX General Manager, Securities and Payments Operations provided an update on the operating performance of the cash market clearing and settlement services for the December 2021 quarter (noting the metrics are to 31 October only):

- System availability for CHESS, Trade Acceptance Service and Settlement Facilitation Service were at 100% for the quarter
- Fail rates have tracked higher in recent months with the reported average of 0.35% in October continuing to track through to November at 0.334%. An increase in corporate action events can be a contributing factor where netting is turned off. The daily fail rate exceeded 0.4% on three occasions in both October and November and ASX's analysis has shown this was due to settlement for stocks with a corporate action event having netting turned off. ASX will continue to monitor this trend including following up with impacted participants
- Volume and value of trades continue to be strong and exceeded the previous two quarters.

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

AGENDA ITEM 3: CHESS REPLACEMENT

a) Project progress update

The ASX Group Executive, Securities and Payments provided an update on the opening of ITE1, noting for the first time software vendors can now test in an integrated test environment which uses Digital Asset's Daml smart contract development capability on VMware's DLT platform. This significant milestone now exposes both non-functional as well as functional aspects of the CHESS replacement solution. The opening of ITE1 followed a robust go/no go decision framework that took into consideration a number of assessments, independent assurances and evident-based criteria. Since ITE1 has opened the environment has been stable and operating to expected service levels.

Next steps include onboarding software vendors throughout December into early 2022, and the opening of a second integrated test environment, ITE2, for CHESS users from April 2022.

The ASX Group Executive, Securities and Payments also thanked members and the broader industry for their input to reach this significant milestone.

The ASX General Manager, Equity Post Trade, Securities and Payments summarised recent project progress and other notable updates including:

- Corporate action events will become available to software vendors for testing in ITE1 from January 2022, noting new corporate action features can continue to be tested in the customer development environment (CDE)
- Key focus items following the onboarding of software vendors into ITE1 includes technical accreditation activities
 and the opening of ITE2 for CHESS users. Consequently, the timing for opening ITE-Migration (ITE-M), the
 industry test environment to optionally test workflows that start in CHESS and completes in the CHESS
 replacement system, and is not required for accreditation activities, is under review
- Consultation on the third of three tranches of operating rule amendments, together with the combined package of rule amendments published end August 2021 closes on Tuesday, 14 December
- Recent focus groups held to discuss key aspects for cutover and migration has provided valuable input into an information paper outlining the strategy that is scheduled to be published by year end
- A number of key metrics on stakeholder engagement activities in 2021.



A member asked how ASX was assessing industry readiness for go-live in April 2023. The ASX General Manager, Equity Post Trade, Securities and Payments confirmed that ASX is currently measuring software providers' activity in CDE with similar tracking and reporting to commence for ITE-1 activity. CHESS user engagement including attendance at working group meetings is another important metric. ASX is also looking to develop more intensive tracking for the various stage gates for CHESS user activities in ITE-2 and beyond. The ASX Group Executive, Securities and Payments added that ASX's Participant Compliance team will also engage with CHESS users and serve as another key input in assessing overall industry readiness.

The member also asked if this reporting will be shared with CHESS users, both individually as well as broader industry readiness on a no-names basis. The ASX Group Executive, Securities and Payments noted ASX could consider a peer-to-peer assessment on readiness activities. The Chair added ASX will consider a number of hard metrics that can be measured e.g. customers testing the functionality relevant to their user type, as well as more qualitative metrics such as sentiment.

A member asked if the regulators are concerned with participants' preparedness at this stage in the project and if ASX is comfortable with progress to date on software development. The ASX Group Executive, Securities and Payments noted the reporting ASX currently provides to the regulatory agencies on software providers progress while acknowledging the challenges in running multi-year projects, including balancing these against other competing demands which ASX is working through with some software providers. More generally, software provider concerns are not about software development, but more about upcoming activities such as data migration, market dress rehearsals, industry wide testing and rolling out software to support their customers' readiness activities.

A member asked about contingency planning if a participant is unable to attest to their readiness. The ASX Group Executive, Securities and Payments noted the worst possible outcome would be for a clearing or settlement participant to be suspended. However, this should be an unlikely outcome as ASX Participant Compliance will be engaging with participants long before go-live in addition to other stakeholder engagement activities to manage participants preparedness. The reliance many participants have on their software provider to be operationally ready was also noted.

A participant member highlighted their reliance on their software vendor and how there are timeline challenges for software vendors to provide a final product to their customers for testing. The ASX Group Executive, Securities and Payments noted in addition to ASX working with software providers and the different approaches vendors may adopt in rolling out software to customers to meet key project milestones, the responsibility is collective and participants also need to hold their software providers accountable in meeting the project timeline.

A member asked if ASX is giving consideration to the potential impacts on participants and vendors preparedness with Chi-X's move to the Cboe platform. The Chi-X member confirmed they are still in the planning stages which will take into consideration the CHESS replacement project and include consultation with ASIC but at this stage Cboe have not made any formal announcements. Another member asked that consideration is also given to ASIC's recent report on the ASX market outage and associated expectations for market participants in terms of other demands on the industry in parallel to CHESS replacement. ASX agreed to follow up with Chi-X on the planning and timeframe to manage any potential industry impacts with the move to the Cboe platform.

b) Independent assessment against IBM ASX Trade recommendations

ASX's Chief Risk Officer introduced this topic and noted that IBM delivered a report in June 2021 on the ASX Trade refresh project which included 59 recommendations for improvement spread across multiple domains such as governance, vendor management, testing and incident management. ASX has established a project to address every one of the 59 recommendations and that the work is well underway. In respect of CHESS replacement, there are two items of relevance. The first is in the RBA's annual Financial Stability Standards (FSS) assessment of the clearing and settlement facilities and the recommendation for an independent expert assess the CHESS replacement project against the 59 recommendations. The second point of relevance is with the additional licence conditions ASIC has imposed on ASX Clear and ASX Settlement, which were published on 24 November 2021, requiring an independent expert to track the closure of any actions out of the IBM review that are relevant for the CHESS replacement project. Ernst & Young (EY) were engaged to undertake this work on the CHESS replacement project.



The EY practitioner overseeing the review then discussed their report in which EY noted that of the 59 recommendations, 10 of the recommendations were identified as out of scope for one of three reasons: 1) the recommendation was at the enterprise level and not an individual project; 2) the CHESS replacement project had already reached a stage in the lifecycle where the particular recommendation was no longer relevant; 3) the recommendations were specific to other areas of ASX outside of the CHESS replacement project.

Of the 49 recommendations in scope, a calculated risk rating was associated with each recommendation which included zero high risks, 18 medium risks and the remainder of the in-scope items were deemed low risk.

Of the 18 medium risks, nine included increasing the plans put in place to cover off the recommendation; seven included formalising ad hoc processes so they become institutionalised into the implementation process; and two were considered to be new actions which included go-live contingency planning.

A member asked about the implications for ASX and participants, for example a possible change to the schedule or change to testing. The ASX Group Executive, Securities and Payments confirmed that there is no anticipated impact and that changes are more around items such as governance, risk management and resource allocation.

A member asked about contingency planning for go-live and when more clarity will be provided. The ASX Group Executive, Securities and Payments noted this continues to be developed and is a topic that can be tabled at a future meeting. Another member noted participants need this information as soon as possible to assist with their own planning and preparations.

A member sought an update on share registries readiness at this stage in the project lifecycle. The ASX Group Executive, Securities and Payments noted engagement with share registries is high across multiple avenues and that development and testing is generally progressing to expectations at this stage in the project lifecycle, including onboarding to ITE1. More recently, ASX has also been working with share registries in hosting joint client events with issuer company secretaries.

c) Member feedback on Tranche 3 and combined operating rule amendments consultation

This agenda item was requested by a member at the October 2021 meeting to allow members the opportunity in the December meeting to discuss any feedback they would like to share with the committee after having had more time to review the consultation paper.

One member noted they had already provided a submission to the consultation otherwise there were no other comments from members.

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 confirmed that go-live was on-track for 13 December 2021 with the electronic option for CHESS holding statements. Key points from the presentation included:

- No charge for participants to send emails to CHESS via EIS 203 message (for existing clients);
- No charge to issuers for CHESS statements delivered electronically;
- Investors will have access to a new portal allowing secure downloading of statements including historical statements that will start to build from go-live up to seven years;
- New design for electronic statements (as illustrated on the presentation slide); print statements will switch to the new format mid-2022;
- At least one participant will begin opting in customers from Monday, 13 December with many more looking to go live early in 2022; and



Investors must opt in via their sponsoring participant.

A member wanted the committee to note that they had raised a query with the Council of Financial Regulators as to the ongoing validity of the mandatory nature of ASX issuing CHESS holding statements. The member believes the ASX settlement rules mandating the generation of CHESS holding statements is dated and should be removed. ASX agreed to have discussions with the member about CHESS holding statements.

A member asked committee members representing participants for their views on the adoption rate of electronic statements. A member representing a sponsoring participant noted that there are software challenges and that they are currently not able to pass the email address through to CHESS. There are also considerations for holdings that have not been active for some time and require the email address to be validated requiring remediation steps in order to protect shareholders from fraud. A general discussion followed on the potential for fraudulent activity, both for print statements with a registered postal address and electronic statements with a digital email address. Another member noted the preference for digital solutions and having the choice but that the development work needs to be prioritised against other initiatives as well as the cost for supporting digital statements, for example practical matters such as managing email bounce backs. Other members also cited technology development, other competing priorities, legal and privacy aspects.

A member asked if ASX will run a campaign to encourage take-up of digital statements. The ASX General Manager, Issuer Services, Securities and Payments noted that participants need time to prepare and prioritise but at some point it is likely there will be some kind of 'push' to encourage investors to opt in, but the sequencing needs to be considered in the context of other priorities including participants' work on CHESS replacement. Another member noted it was not only CHESS replacement that participants are working on but there is also a significant amount of regulatory reform that involves system changes and it was a matter of resource allocation.

The Chair suggested tabling at the April 2022 meeting the current take-up and the trajectory rate for investors opting in for electronic CHESS holding statements to inform a discussion about possible next steps.

AGENDA ITEM 5: MARKET TRENDS AND INSIGHTS

a) Member discussion on proposed T+1 settlement cycle in the US

The ASX Senior Manager, Equity Post Trade, Securities and Payments referred to the presentation shared in advance of the meeting noting the purpose is to provide high level information and to discuss considerations for the Australian market and next steps. It was also noted Citigroup had provided their permission to share some excerpts from their recently published Securities Services Evolution paper based on a global survey of financial market infrastructures.

Key points from the presentation included:

- Recent market trends including trading volatility, the post trade implications of high trade volume and prices around meme stocks, digital assets and digital transformation in post trade;
- Catalysts for change including requests to reduce the clearing risk profile, investments in automation and availability of real time data;
- Potential benefits for participants through reducing settlement timeframes, including reduced margin calls;
- Other markets outside the US considering a change to T+1;
- Global markets participants' expectation for change in the next five years to the settlement timeframe;
- Market feedback ASX has recently received from CHESS replacement consultations including settlement optionality; and
- Considerations for the Australian market including potential onshore impacts from the US moving to T+1 and time zone challenges.



A member shared their experiences in the Indian market transition to T+1, noting the process and importance for market consultation and different concerns depending on the time zone. The member also noted SGX had recently published a Q&A paper on T+1 to elicit market feedback.

A member noted the importance of starting the discussions early to set the agenda for the Australian market.

There was also a general discussion on cross border transactions and ADRs.

AGENDA ITEM 6: CLOSING

a) Forward work program

The Chair outlined the forward work program, as contained in the meeting materials, and noted further discussion on T+1 should also be included and encouraged member input and suggestions for other topics.

A member noted the forward work program is only focused on cash equities and asked if the scope of this committee could be broadened to include other asset classes. The Chair noted this falls outside the charter of the business committee but would separately consider how this might be covered.

b) Other matters

A member sought an update on a matter outside the code of practice for cash equities clearing and settlement as it relates to changes for market repo transactions in Austraclear that went live on 22 November 2021 and the impact to settlement efficiency as well as challenges around tolerance levels and new mandatory fields. The ASX Group Executive, Securities and Payments noted the change was subject to the normal rigour for a release including participants' readiness and that the level of mismatches in settlement is now back to pre-release levels. ASX is working with the industry to address any residual issues with straight-through processing for instructing and settling market repos.

The Chair summarised the new actions from this meeting.

The Chair thanked the Committee for their contributions and conversation.

c) Next meeting - 13 April 2022

The next meeting is scheduled for 13 April 2022.

The meeting closed at 5.58 pm.

Chair

Signed as a correct record of the meeting.

14 April 2022

Date