

Agenda

Business Committee

Dat	te 8 December 2021 Ti	me	4:00pm – 6:00pm
Loc	ASX offices – Level 1, 20 Bridge Street, Sydney		
1.	Minutes and Actions		4:00pm-4:15pm
	a) Minutes from the 6 October 2021 Business Committee Meet	ting	
	b) Open actions		
2.	Service Performance		4:15pm-4:30pm
	a) Cash Market Clearing and Settlement - Operating Performan	ice	
3.	CHESS Replacement		4:30pm-5:15pm
	a) Project progress update		
	b) Independent assessment against IBM ASX Trade recommend	dations	
	c) Member feedback on Tranche 3 and combined operating rul consultation	le amend	dments
4.	Service Enhancements		5:15pm-5:20pm
	a) Electronic CHESS holding statements		
5.	Market Trends & Insights		5:20pm-5:30pm
	a) Member discussion on proposed T+1 Settlement cycle in US		
6.	Closing		5:30pm-5:40pm
	a) Forward work program		
	b) Other matters		
	c) Next 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.

Action Items*

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

Item number#	Action	Due date	Status	Owner
2020 Dec (1)	Follow up with members who offered their help to assist ASX perform scenario planning in Q1 2021 to understand flow-on impacts from the CHESS batch processing delay on 17 November.	Apr 2021	Completed	ASX
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		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		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		GIA



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	Helen Lofthouse	Group Executive, Markets	
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	
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		Chief Executive Officer	
HSBC	Megan Motto		
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		Cash Equities Business Manager	
Morgan Stanley	James Indge Rebecca Hill	Chief Operating Officer	
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Morgans	Daniel Spokes	Director, Client Support Services	
NAB	Anita Mead	Head of Business Management, Self- Directed Wealth	
NSX	Chan Arambewela	Chief Operating Officer	
Pershing Securities	Leigh Conder	Chief Operating Officer	
SAFAA	Judith Fox	Chief Executive Officer	
	Michael Go	Chief Executive Officer	
Sydney Stock Exchange			
* Delegate	Scott Hanlon	Head of Operations, Executive Director	

^{*} 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	Guzy Munro General Manager, Clearing and Settlement Operations	
Karen Webb	Senior Manager, Issuer Services, Securities and Payments	
Keith Purdie	Senior Manager, Equity Post Trade, Securities and Payments	
Con Korkofigas	on 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)	



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Committee	Business Committee	
Agenda title	Minutes from 6 October 2021 Business Committee meeting	
Item	1a	
Purpose	To provide Business Committee members with the minutes and Business Committee report to the ASX Boards from the 6 October 2021 meeting	
Meeting date 8 December 2021		
Prepared by	Business Committee Chair, Chief Customer and Operating Officer (Val Mathews)	

OVERVIEW

Draft minutes and the draft report to the Boards of ASX Clear and ASX Settlement from the 6 October 2021 Business Committee meeting were emailed to all members of the Business Committee on 28 October for comment.

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

ATTACHMENTS

Attachment A Business Committee Report and Minutes from the 6 October 2021 Meeting

HIGHLY PROTECTED



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

Business Committee Meeting

At its 6 October 2021 meeting, the Business Committee was updated on:

- key themes and outcomes from meetings with committee members regarding the operation of the Committee;
- the operating performance of CHESS for the September quarter 2021;
- the CHESS replacement project, including updates on project progress, consultation on the tranche 3 and combined operating rule amendments, access pricing and industry test environment (ITE) 1 readiness;
- · the electronic CHESS holding statements project; and
- two recent regulatory expectations reports the annual report on cash equities clearing and settlement services
 developments, and the report prepared by an external auditor on ASX's compliance with the Regulatory Expectations
 for cash equity clearing and settlement services, including agreed actions.

KEY ISSUES DISCUSSED

ASX summarised feedback from 12 meetings with committee members regarding the operation of the Committee, including themes around the composition and changing aspects of the Committee, meeting agendas and duration, meeting materials and presentations, as well as meeting etiquette. ASX noted its intentions to accommodate the feedback received, including more forward looking information and encouraging interactive dialogue and input from members.

There were a number of questions around CHESS replacement data migration, with members noting their own experiences in this space, and demonstrating a willingness to share their experiences and provide input into ASX's planning. Members also provided updates on their vendors' readiness, with interest in levels of development in CDE as well as to better understand what performance testing would look like in ITE1.

Other questions included whether IBM's review of the recommendations following the ASX trade outage had any implications for the CHESS replacement go-live timeline, how references to CHESS in the *Corporations Act 2001 (Cth)* would be handled as part of the operating rule amendments, and when ASX would release the pricing information for electronic CHESS holding statements.

AGREED ACTIONS

Updates on the four actions raised at the last meeting were provided, with two action items closed and two action items remaining open. One action was assigned to a member at the October meeting – GIA agreed to share their insights and experiences from their recent data migration and cutover activities as potential learnings for the CHESS replacement project.

Minutes from the meeting are attached.



Agenda

Business Committee

Da	te 6 October 2021	Time	12:00pm – 2:00pm
Loc	cation By teleconference		
1.	Minutes and Actions		12:00nm 12:20nm
1.			12:00pm-12:30pm
	a) Minutes from the 14 July 2021 Business Col	mmittee Meeting	
	b) Open actions		
	c) Key themes and outcomes from meetings v	vith committee members	
2.	Service Performance		12:30pm-12:45pm
	a) Cash Market Clearing and Settlement - Ope	erating Performance	
3.	CHESS Replacement		12:45pm-1:25pm
	a) Project progress update		
	b) Consultation on Tranche 3 and combined o	perating rule amendments	
	c) Access pricing update		
	d) ITE1 readiness		
4.	Service Enhancements		1:25pm-1:35pm
	a) Electronic CHESS holding statements		
5.	Regulatory Expectations		1:35pm-1:50pm
	a) Report on cash equities clearing and settler	ment services development	ts
	b) External audit of ASX's compliance with the	e regulatory expectations	
6.	Closing		1:50pm-2:00pm
	a) Forward work program		

- a) Forward work program
- b) Other matters
- c) Next meeting 8 December 2021



Business Committee Members

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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	Helen Lofthouse	Group Executive, Markets	
AIRA	Ian Matheson	Chief Executive Officer	
ACSA	David Travers*	Chief Executive Officer designate	Rob Brown (Chief Executive Officer)
ASA	Fiona Balzer	Policy & Advocacy Manager	
AUSIEX	Mat Tilley	Head of Markets & Client Solutions	Apology
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	Nichole Alexander	Manager, Aust Market Advocacy & Development	
J.P. Morgan	Jonathan Evans	Head of Custody & Markets Operations	
Link Market Services	Peter Jackson	Chief Operating Officer	
Macquarie Group	James Indge	Cash Equities Business Manager	
Morgan Stanley	Rebecca Hill	Chief Operating Officer	
Morgans	Daniel Spokes	Director, Client Support Services	
NAB	Anita Mead	Head of Business Management, Self- Directed Wealth	
NSX	Chan Arambewela	Chief Operating Officer	
Pershing Securities	Leigh Conder	Chief Operating Officer	
SAFAA	Judith Fox	Chief Executive Officer	
Sydney Stock Exchange	Antony Tolfts	Listings Director	
UBS	Scott Hanlon	Head of Operations, Executive Director	

^{*} Delegate



ASX Management

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	
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, Clearing and Settlement Operations	
Karen Webb	Senior Manager, Equity Post Trade, 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	Title Apologies	
Nathan Bourne	Senior Executive Leader, Market Infrastructure (ASIC)	or Executive Leader, Market Infrastructure (ASIC)	
Dodie Green	Senior Manager, Market Infrastructure, (ASIC)		



AGENDA ITEM 1: MINUTES AND ACTIONS

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

The Chair noted two recent membership changes effective for the meeting; Damian Jeffree was welcomed as the new member for AFMA, replacing David Lynch, as well as Scott Hanlon from UBS, replacing Conor Foley.

One member was represented by a delegate, David Travers (for ACSA). Mat Tilley (AUSIEX) was noted as an apology with no delegate, as was Daniel Moran from ASX. ASIC representatives (Nathan Bourne, and Dodie Green) attended the meeting as observers.

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

a) Minutes from 14 July 2021 Business Committee Meeting

The Chair noted that ASX had only received one comment, to amend a title for a member, which had been amended. The minutes of the 14 July 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: 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.
 - The ASX Group Executive, Securities and Payments noted consultation in 2019 regarding segregating mFund settlements (mainly payments) from the 11.30am batch, but market feedback indicated a preference to retain mfund within the batch (while retaining segregation of mFund payments within the batch to go through separate payment providers/payment facilities to equity settlements), to avoid contagion in the event of an issue with mFund settlements. A slight time delay could occur, which ASX scenario tests and monitors. The trade-offs/risks of doing it this way were discussed, and the Chair closed the action.
- Action: 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.
 - The ASX Group Executive, Markets, noted ASX's existing operational process whereby a delay to ASX 24 payments occurs when there is a delay to the conclusion of the CHESS batch. The ASX Group Executive, Markets, noted that ASX was working to refine that process to differentiate circumstances, as the delay is only appropriate in some cases. The Chair noted the action would remain open until ASX had finalised the change of process.
- Action: ASX to consider how to engage with participants regarding analysis on the increase in settlement fail rates.
 - The ASX Group Executive, Securities and Payments noted ASX's analysis pointed to five participants generating around 48% of the fails (with the remaining 52% from the rest of the market) over the past 30 months. As a next step, ASX would engage those five participants to better understand the cause and how their fail rates could be reduced. The Chair 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 discussion was on-going with the AMO member, regarding a redesigned footer of the statement. The member noted they had been liaising directly with ASX's Head of Enterprise Compliance on the matter, and that the member was happy for regulators to be involved in the discussions, if required. The Chair noted ongoing discussions and the action would remain open until these had been finalised.



The Chair noted a question from a member outside of the last meeting, asking when ASX would next report on international price benchmarking. The Chair advised that ASX was engaging with the ACCC over the next seven months on clearing and settlement fees for CHESS replacement, and ASX would update the Committee once that exercise was completed. The Chair also noted ASX's previous guidance that it would not increase fees for like-for-like clearing and settlement services.

c) Key themes and outcomes from meetings with committee members

The Chair thanked the 12 members they met with in August, and extended the invitation again to any further members who wished to discuss the operation of the Committee. The Chair summarised four main themes that came out of the meetings, and characterised the feedback as supportive and positive, with some opportunities for improvement noted.

The first theme was the composition and changing aspects of the Committee, with some noting the size had continued to grow, and a dilution of clearing and settlement expertise via the broadening membership of the committee, leading to some members relying on bilateral engagement outside of the Committee. Members also noted the breadth of agenda topics had possibly contributed to less conversational flow and changed the dynamic/tone of the meeting, with members seeing an opportunity for the Chair to facilitate more engagement and questions throughout the meeting. There was some uncertainty around ASX's process for selecting and rotating membership, which the Chair acknowledged was to contain the size of the meeting, but that this was an area ASX would provide enhanced clarity on in the future.

The second theme related to the meeting agenda and duration, with members generally supportive of the two hour quarterly meeting frequency. There was strong support for ensuring the agenda of the Committee was forward looking and focused on strategic development, including what members need to plan for, with suggestions for more member-led agenda items rather than an ASX-driven agenda, which was supported by the Chair. There were mixed views on the appropriateness of the agenda being weighted towards CHESS replacement, with some finding the content too technical, but also recognising the diverse membership of the Committee. Suggestions for other topics of interest included cybercrime, 2AM margining and aspects of the distributed ledger. There was also support for more healthy debate and dialogue.

The third theme related to meeting materials and presentations, with some repetition noted between the papers and the content delivered during the meeting. Going forward, the Chair noted that the papers would be taken as read, with more time devoted in the meetings to member feedback and questions. Condensed materials and executive summaries were also requested, which the Chair also noted had been taken on board. There was a desire to better understand the market preparedness for CHESS replacement, with a lens to the future and what it means for the customers. It was also suggested that Business Committee members could also present appropriate topics.

The fourth theme related to meeting etiquette. Members noted the larger size could make it harder at times to have a conversation, and that historically difficult conversations had been shut down by ASX, making members less inclined to ask questions, which the Chair noted ASX would actively encourage, including questions in advance. Overall members found the sharing of information via the Committee very valuable.

The Chair extended an invitation for further discussion, either during the meeting or outside of the meeting. Members did not raise any questions in respect of the update. One member accepted the invitation for a follow up meeting.

AGENDA ITEM 2: SERVICE PERFORMANCE

a) Cash Market Clearing and Settlement - Operating Performance

The ASX General Manager, Clearing and Settlement Operations provided an update on the operating performance of the cash market clearing and settlement services for the September 2021 quarter (covering July and August):

- System availability for CHESS, Trade Acceptance Service and Settlement Facilitation Service were all at 100% for the quarter.
- Fail rates were stable at around 0.25%, with a few days during July and August below 0.1%. Spikes are generally caused by two reasons unilateral fails where the fail is wholly within a settlement member, or where there is a



corporate action event with netting turned off. Over the quarter there were several corporate actions events for which netting was turned off, and these would be reported in future meeting materials.

- Volumes and value of trades had picked up in the September quarter, after dropping off a bit in the June quarter, largely due to reporting season with the elevated activity and related market volatility.
- Netting efficiency in value and volume terms remained steady.
- The average daily value of transactions settling in CHESS reached a high of \$12 billion during the September quarter.

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

AGENDA ITEM 3: CHESS REPLACEMENT

a) Project progress update

The ASX General Manager, Equity Post Trade, Securities and Payments summarised a number of key achievements, including:

- The final release of software code, referred to as CDE 10, to the market on 27 September 2021. All functional workflows had now been delivered in the customer development environment, including the redesign of netting and settlement workflows, and the new functionality for DRP and BSP.
- On the stakeholder engagement front, the AMO working group and new Software Provider Readiness working
 group were noted as being interactive and engaging forums. ASX also co-hosted a joint client session with Link
 Market Services, targeting company secretaries to provide updates on the benefits and related changes for issuers,
 electronic CHESS holding statements, corporate actions STP, DLT Solutions and market trends and insights.
- Regarding documentation, an information sheet on system access pricing was published, and also shared with all
 Committee members. In relation to the documentation for industry testing, ASX had updated connectivity guides,
 completed all scripts for messaging accreditation, published a guide to testing services, and a guide for fail over and
 recovery. ASX would publish an accreditation guide at the end of November 2021, and operational readiness
 scenarios by the end of December 2021.

The ASX General Manager, Equity Post Trade, Securities and Payments noted IBM's review of the recommendations following the ASX trade outage, and advised that ASX was completing an assessment against the CHESS replacement program. An update on the outcomes of that assessment would be presented to the Committee at the next meeting.

Regarding the IBM review, and the assessment and readiness activity, a member asked if this would potentially impact the overall delivery timeline. The ASX Group Executive, Securities and Payments noted ASX's self-assessment against the recommendations of the review for the CHESS replacement project was still on-going (and would also be supplemented by a third party review), but at this point there was no expectation of an impact to the go-live timeline for CHESS replacement given the existing governance and assurance program.

b) Consultation on Tranche 3 and combined operating rule amendments

Referring to a presentation shared during the meeting, the ASX Senior Legal Counsel and Senior Manager provided an overview of the tranche 3 and consolidated rule amendments released for consultation on 31 August 2021. The overview recapped on the 4 year journey to the release of the consultation package on 31 August 2021 – including the reasons why ASX needed to amend its operating rules; the interaction between the solution design processes for the new system and the rule amendments, and the focus of the feedback sought through the rules consultation; and a brief overview of the prior tranche 1 and tranche 2 consultations. The ASX Senior Legal Counsel and Senior Manager then outlined some of the key tranche 3 rule amendments, as well as an overview of the documents which make up the consultation package, an overview of the explanatory information provided to assist stakeholders, and how to navigate its contents. Next steps were also outlined, noting the request for written feedback by 14 December 2021, which allows for a 15 week consultation period. ASX intends to provide its response to consultation feedback to the regulatory agencies in April 2022, ahead of public release in early June 2022. Subject to regulatory clearance processes, formal lodgement of the consolidated rules package with ASIC is planned for early September 2022, with the final complete rule amendments planned to be published later in September 2022.



A member asked how ASX was dealing with references to CHESS in the *Corporations Act 2001 (Cth)*. The ASX Senior Legal Counsel and Senior Manager noted that the relevant part of the *Corporations Act 2001 (Cth)* deals with supporting post-trade activities and the settlement of securities and transfers through CHESS, and would continue to support the new system. Protections for clearing and settlement under the *Payment Systems and Netting Act 1998 (Cth)* were also noted to continue to be in place under the new system.

c) Access pricing update

Referring to a presentation slide shared during the meeting, the ASX General Manager, Issuer Services, Securities and Payments advised that ASX had issued an information sheet on access pricing, and summarised the key details.

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

d) ITE1 readiness

Referring to a presentation shared during the meeting, the ASX General Manager, Equity Post Trade, Securities and Payments spoke to the various environments already in place, and forthcoming through to April 2023, with an emphasis on the ITE1 environment, a progression from the Customer Development Environment (CDE) with an increased number of integration points, and all access channels (AMQP, SWIFT, Ledger API, FIX and CHESS UI), as well as increased functional and non-functional features. The dataset would also be larger than CDE, moving away from individual sandbox environments to expanded datasets to facilitate system testing by software providers in preparation for accreditation.

The ASX General Manager, Equity Post Trade, Securities and Payments then outlined what ITE1 would deliver, in terms of security and privacy; stability; business capabilities and access; performance; resilience; maintainability; and client test tools.

A member noted their organisation's (GIA's) own recent large data migration (which involved three successful dress rehearsals and took six rather than the four-planned days), and asked about potential vulnerabilities over the cut-over weekend in April 2023, and any tolerance for it taking longer than the assumed planned four days. The member was interested in details such as decision gates for rollback versus push forward, disaster recovery and planning, as well as communication to the market throughout the process. The ASX General Manager, Equity Post Trade, Securities and Payments agreed that ASX's planning and documentation needed to capture the types of scenarios and content the member outlined, and confirmed that at least one market dress rehearsal would include a rollback scenario. ASX's documentation would also address the timeframe over the cutover weekend, including the point at which a rollback decision would be made, and it would also provide detail after a final rollback decision was made, on what recovery would look like from a roll-forward perspective. The ASX Group Executive, Securities and Payments noted that GIA's recent experiences around data migration would be of interest and value to ASX, as had similar insights from Computershare, and asked the member to share their insights/experiences with ASX.

Another member requested involvement in the contingency planning for the migration weekend, ideally while documentation was in draft form rather than finalised, to allow for input into the planning. The ASX Senior Manager, Equity Post Trade, Securities and Payments noted that ASX would host targeted Focus Group meetings on this topic prior to the release of the documentation, to gain insights and opinions from the market.

A member noted feedback from their vendor that from April/May 2022 there is a lot of testing, requiring multiple environments for participants, and requested the documentation as soon as possible to ensure they will be ready. The vendor had noted finite testing resources in the data migration space, and that the second half of 2022 would be tight with overlapping testing taking place. The ASX General Manager, Equity Post Trade, Securities and Payments acknowledged this feedback, and noted that ASX was conscious of limiting the amount of parallel testing required across different environments.

A member asked whether ASX was monitoring and aware of participants who might be lagging in their development in CDE. The ASX General Manager, Equity Post Trade, Securities and Payments confirmed that ASX was tracking activity in CDE, and engaging with CHESS users. At this stage ASX was comfortable with where everyone is at, but this would become an area of increased focus for ASX going forward.



Regarding performance in ITE1, a member asked if this captured volume testing or a vendor testing their connectivity with ASX. The ASX General Manager, Equity Post Trade, Securities and Payments confirmed that from a performance perspective, ASX needed to manage cumulative volumes across the market across all processes for the clearing and settlement facility. For ITE1 specifically, ASX's focus was on software providers, and ensuring the environment has the capability to facilitate the volumes they need to meet testing performance thresholds relevant for their business. The member also provided an update from their vendor, with regards to their progress, noting they expected to finish cutting code by the end of the year, but would not provide a copy to the member until May 2022, with the member noting it would be a tight turnaround for their own build after receiving the code in May 2022.

To conclude, the Chair noted the concurrency of CHESS replacement with another ASX initiative to replace the current Signal B service. ASX had announced earlier in the year that it would replace the current Signal B protocol with an industry standard FIX interface in March 2022. This had generated feedback from the market and resulted in a technology forum being facilitated by AFMA. In response to market feedback, ASX will introduce a production parallel run from April to June 2022, for participants and software providers who consume the Signal B service, to provide additional test time for any who have not completed their readiness by March 2022. The Chair noted that ASX was working to develop an improved and more proactive change timetable, in recognition of the importance of early and transparent communication to customers. The AFMA member acknowledged ASX's response to the market feedback on this matter, which was gratefully received by its members.

AGENDA ITEM 4: SERVICE ENHANCEMENTS

a) Electronic CHESS holding statements

The ASX General Manager, Issuer Services, Securities and Payments confirmed that go-live was on-track for December 2021. A technical fact sheet was issued to the market to provide an overview of the process, with particular emphasis on the participant side including how to ensure participants get the fee waiver for putting emails into the system. The ASX General Manager, Issuer Services, Securities and Payments had been contacted by a number of participants, and had over a dozen calls with participants to discuss, with the general feedback characterised as very positive. Most participants, particularly the larger participants, had indicated they would start work on this in early 2022, acknowledging that there is a small amount of work required, to start offering electronic statements from Q1 or Q2 2022. Some smaller participants had indicated they would be going live in December 2021.

ASX had reached out to around 2,500 issuers, to give them the opportunity to update their logos for the new design of the statement, as well as providing the opportunity for the logos to be displayed in colour. Almost half of the issuers had responded with updated logos, with many others confirming they were happy with their existing logo. The new statement design would go-live for electronic statements in December 2021, and print statements would follow sometime in Q1 2022.

A member asked when ASX would release the pricing information for electronic statements. The ASX General Manager, Issuer Services, Securities and Payments confirmed this was targeted for October/November 2021 (at least one month before go-live).

AGENDA ITEM 5: REGULATORY EXPECTATIONS

a) Report on cash equities clearing and settlement services developments

The ASX Senior Manager, Equity Post Trade, Securities and Payments provided an overview of the service developments report produced by ASX in relation to ASX's conduct in operating its cash equity clearing and settlement services and its code of practice. While CHESS replacement remains a key focus for clearing and settlement services, ASX had progressed a number of important servicing enhancements, for example in response to 2020 market conditions, customer requests and some other improvements. The report also noted planned future enhancements.

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

b) External audit of ASX's compliance with the regulatory expectations



ASX's Chief Risk Officer thanked those Committee members who participated in the annual audit conducted by PwC, with PwC reporting that logistically the audit went well and that the process was efficient. The findings of the audit had been shared with ASX's Clearing and Settlement boards, ASIC, RBA as well as Committee members via the meeting papers.

ASX's Chief Risk Officer noted that the results of the audit demonstrate that ASX has complied in all material respects with Regulatory Expectations. ASX had agreed to a number of action items, as contained in the report, addressing the same types of feedback summarised by the Chair as part of agenda item 1c, including improving understanding of the process around Committee membership rotation, agenda input, managing the information content supplied through the meetings and eliciting more questions throughout the meetings. ASX also agreed to provide more information on the calculation of revenue sharing rebates, and provide greater transparency on the pricing of clearing and settlement services for the CHESS replacement system. ASX's Chief Risk Officer noted that ASX was working to respond on these action items and that members would see the outcomes over coming meetings.

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

AGENDA ITEM 6: CLOSING

a) Forward work program

The Chair outlined the forward work program, as contained in the meeting materials, and encouraged member input and suggestions. A member suggested the inclusion of the tranche 3 rule amendments package on the agenda for the December meeting (not a presentation from ASX, but the chance for discussion and questions), given that members would have likely digested the consultation materials by then, which the Chair confirmed ASX would include.

A member asked about proposed changes to cash market margin, moving from two-year to five-year historical volatility, and asked when the changes would be formally communicated. ASX's Chief Risk Officer noted this would be discussed at the next Risk Consultative Committee meeting on 25 November 2021, where an update would be provided [as applicable to ETOs, noting that a <u>market notice</u> was issued on 7 October 2021 advising of changes effective 25 October 2021 for specified equities securities].

b) Other matters

The Chair summarised the actions carried forward from last meeting, and the new action from this meeting.

The Chair thanked the Committee for its participation and contributions, and the additional questions and conversation. Further feedback on ways to enhance engagement throughout the meeting was welcomed, and welcomed any requests for topics or questions for input to the next meeting.

c) Next meeting – 8 December 2021

The next meeting is currently scheduled for 8 December 2021, at a later time of 4-6pm to accommodate Christmas drinks post meeting, COVID restrictions permitting.

The meeting closed at 1.45pm.

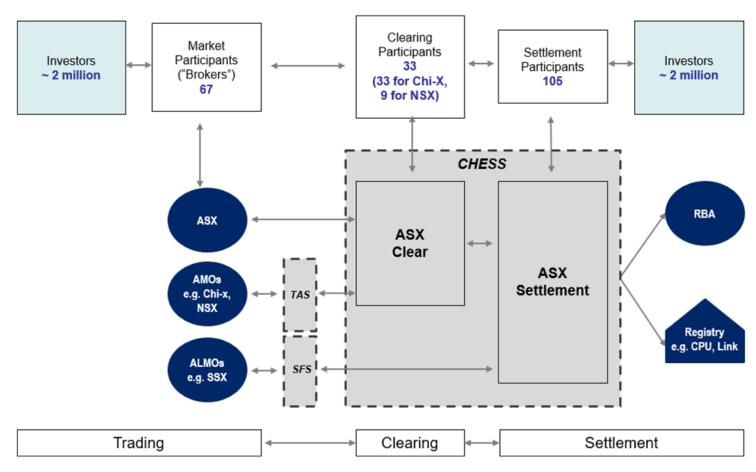
Signed as a correct record of the meeting.		
Chair	Date	

Committee	Business Committee
Agenda title	Cash market clearing and settlement services - Operational performance
Item	2a
Purpose	To report on key performance metrics for ASX's clearing and settlement services.
Meeting date	08 December 2021
Prepared by	Chief Customer and Operating Officer (Val Mathews)
	General Manager, Securities & Payments Operations (Suzy Munro)
	Senior Manager, Settlement Operations (Brendan Laird)

OVERVIEW

Market Structure Overview





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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.

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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 December 2021 quarter¹, the average monthly system availability was 100% for CHESS. The average monthly availability of CHESS has been 99.99% between November 2011 and October 2021. There was a delay to CHESS schedule - extension of 3 hours to Batch Settlement completion on 17th November 2020.

Trade Acceptance Service and Settlement Facilitation Service

ASX Clear and ASX Settlement's Trade Acceptance Service (TAS) provides a mechanism for Chi-X and NSX to submit trades into 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 December 2021 quarter¹, 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 October 2021 (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 December 2021 quarter¹ are reported in Attachment A. They are also supported by charts demonstrating a longer reporting period in Attachment B.

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¹ As of 31 October 2021

Settlement Performance

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

For the December 2021 quarter¹, the daily average fail performance has increased to 0.335% and averaged 0.285% for the previous twelve months, between November 2020 and October 2021.

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

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

Month	October	September	August	July	June	Мау
Average Fail Rate	0.335%	0.357%	0.294%	0.229%	0.178%	0.241%
Maxi mum Fail Rate	1.113%	1.839%	1.51%	0.668%	0.337%	0.522%
Mi ni mum Fail Rate	0.157%	0.132%	0.091%	0.099%	0.094%	0.115%
# of days Fail rate > 0.50%	3	4	1	1	0	1
Batch Settlement Extensions	1	0	0	0	0	0
Fall back of Payment Provider	0	1	0	0	0	1

The Maximum Fail Rate has increased in August September and October due to the below items which resulted in the Average Fail Rate to also increase.

- 1. August a Participant failed a large number of lines of unilateral transaction (MT107) across 237 securities due to an internal processing issue. There was no market impact of these fails.
- 2. September Netting was turned off for a security due to Equal Access Buyback offer, which caused 2509 market fail lines. Majority of the fails was initiated by one Participant.
- $3. \quad \text{October Netting was turned off for a security due to Renounceable Rights offer, which caused 1105 market fail lines.}$

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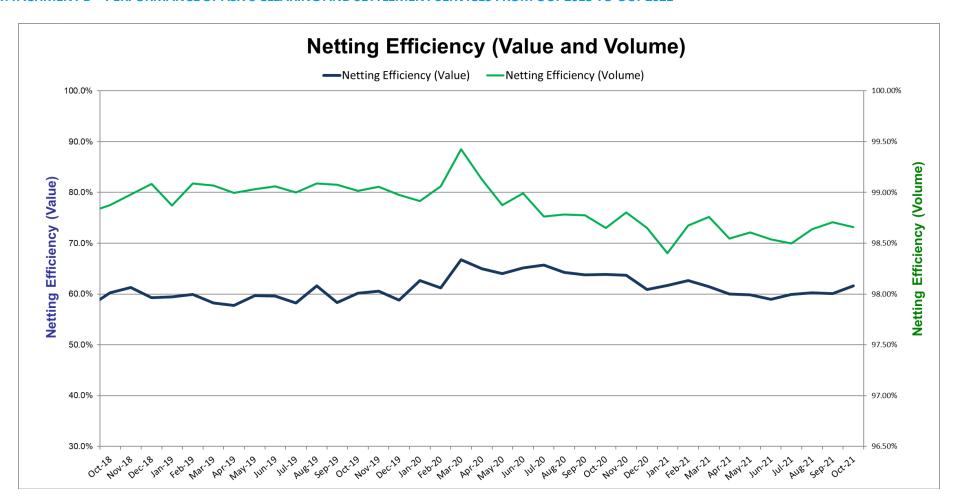
ATTACHMENT A – SUMMARY METRICS RELATING TO THE PERFORMANCE OF ASX'S CLEARING AND SETTLEMENT SERVICE

	December 2021 Quarter ¹	September 2021 Quarter	June 2021 Quarter
System Availability (CHESS)	100%	100%	100%
System Availability (TAS)	100%	100%	100%
Total Trades Accepted (ASX)	34,719,540	108,230,266	93,450,951
Tota l Tra des Rejected (ASX)	0	0	0
Total Trades Accepted (Chi-X)	11,326,327	35,118,039	31,755,054
Total Trades Rejected (Chi-X)	0	0	0
Tota l Tra des Accepted (NSX via TAS)	80	347	224
Tota l Tra des Rejected (NSX via TAS)	0	0	0
Total Settlements (SSX)	0	0	0
Total Value of Settlements (SSX)	\$0	\$0	\$0
Daily Average Traded Value (On and Off Market)	\$9.45 billion	\$9.24 billion	\$8.08 billion
Daily Average Cleared Value	\$6.82 billion	\$6.60 billion	\$5.76 billion
Percentage Novated	72.3%	71.5%	71.2%
Daily Average Cleared Value Post-Netting	\$2.62 billion	\$2.64 billion	\$2.33 billion
Netting Efficiency (Value)	61.6%	60.1%	59.6%
Netting Efficiency (Volume)	98.66%	98.62%	98.56%
Daily Average Settled Value (Including Non-Novated)	\$13.8 billion	\$13.1 billion	\$11.7 billion
Settlement Efficiency (Value)	99.93%	99.89%	99.89%
Average Daily CHESS Fail Rate (% Rescheduled to the next settlement date)	0.335%	0.293%	0.253%

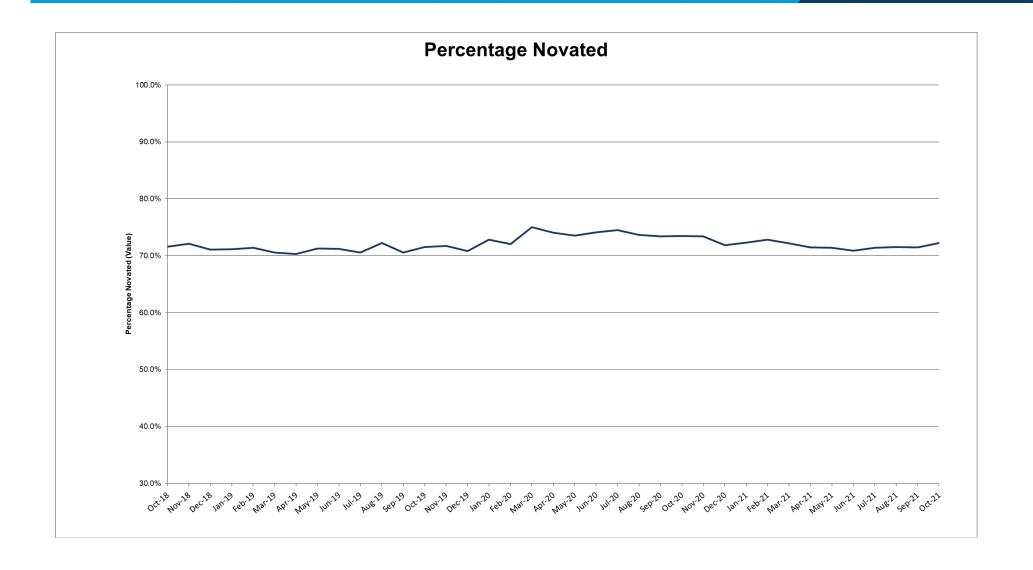
¹ As of 31 October 2021

HIGHLY PROTECTED 6/10

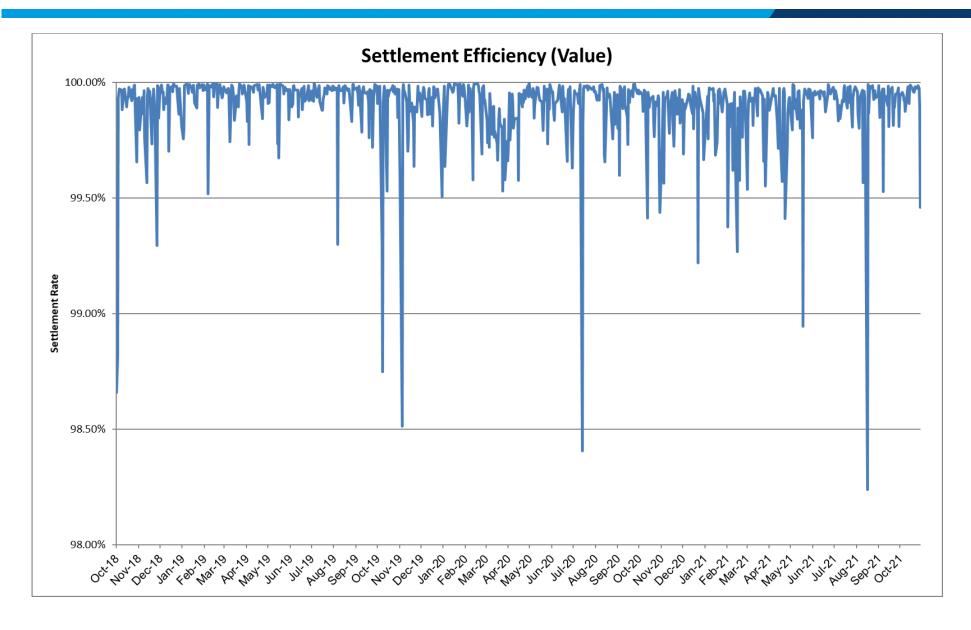
ATTACHMENT B - PERFORMANCE OF ASX'S CLEARING AND SETTLEMENT SERVICES FROM OCT 2018 TO OCT 2021



HIGHLY PROTECTED 7/10

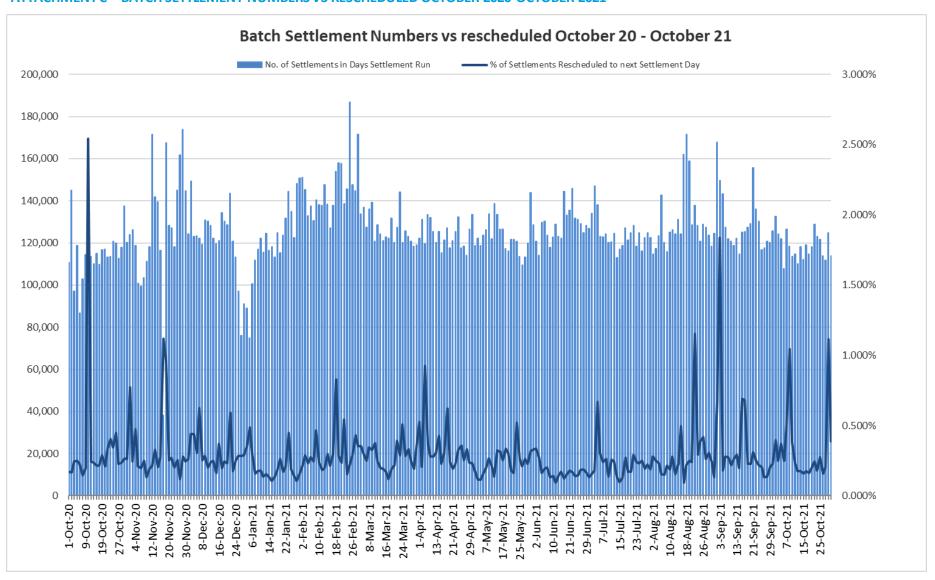


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HIGHLY PROTECTED 9/10

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



HIGHLY PROTECTED 10/10



Committee	Business Committee	
Agenda title	CHESS Replacement	
Item	3a, 3b, 3c	
Purpose	To provide Business Committee members with a project update	
Meeting date	8 December 2021	
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

- ITE1 opened on 30 November 2021; software providers will now progressively transition from CDE into ITE1 from December to end of February 2022 in readiness for technical accreditation
- Software providers testing of CDE 10, which includes the netting and settlement changes, continues to progress
- The third of three tranches of operating rule amendments, together with the combined package of rule amendments consultation period closes on 14 December 2021
- New documentation published including ITE1 Accreditation Guide, uplift to Guide to Testing Services for
 (i) performance testing; (ii) inflight migration; and (iii) ITE1 test tools. Cutover and Migration strategy to
 be published by end of the year
- A series of focus groups were hosted in early November with the aim to provide clarity on key cutover and
 migration activities such as market dress rehearsal activity, rollback expectations and migration approach.
 This allowed stakeholders to raise any potential issues or concerns with the proposed plans and for ASX to
 understand what additional information needs to be provided to help software providers and CHESS users
 with their planning and preparation for cutover and migration
- EY has completed an assessment of the IBM Review recommendations on the ASX Trade outage against the CHESS replacement program. Key observations from the assessment will be shared with Business Committee members at the 8 December meeting (agenda item 3b)
- The project remains on track for go live in April 2023.

PROJECT UPDATE

Application Design, Build and Test

ASX is working with all software providers to determine the appropriate time to transition from CDE to ITE1 from December to end February 2022, depending on the status of their development and accommodating any planned downtime over the Christmas and New Year period. This phased approach also takes into account the time required for implementing connectivity including installing and signing certificates. It also allows for development and testing for the new netting and settlement changes to complete before moving to the new fully integrated test environment. In the interim, developers can maintain connectivity in CDE until they have fully migrated across to ITE1 by end February 2022.

Similar to CDE, ITE1 is also a test environment, and it is likely defects will be identified and from time-to-time ASX may need to reset / refresh the environment in the event of both scheduled and unscheduled maintenance.

ITE1 opens with code drop 10, with corporate action events scheduled to start from mid-December. A significant new feature of ITE1 is the release of the CHESS UI for those organisations who are electing to use the CHESS UI for parts of their business (for example account management) along with general testing.

Moving forward, there will be no further code drops into CDE.

It is also worth highlighting ASX's partners, Digital Asset and VMware, are collaborating with Deutsche Börse Group to develop a digital post-trade platform. Further information can be read <u>here</u>.

Stakeholder Engagement

Consultation on operating rule amendments

The consultation period for feedback from impacted stakeholders on the third tranche of operating rule amendments, together with the combined package of rule amendments across all three tranches closes on 14 December 2021.

Members will have an opportunity to provide any feedback as part of agenda item 3c. ASX ask that any feedback is also included as part of an organisation's written response to the consultation.

Software Provider Readiness working group

ASX has recently hosted two software provider readiness working group meetings.

On 13 October, working group members were provided with an introduction to the new Customer Service Account Management (CSAM) portal which would allow software providers to manage, on a self-serve basis, the security certificates required for each connectivity channel. Other updates included (i) changes to ITE for Ledger API users; (ii) an overview on the technical accreditation phase for ITE1; and (iii) Q&A on the netting and settlement changes.

On 17 November, working group members were provided with an update on ITE1 and some of the key features including how all organisations will be operating in a single environment (unlike CDE which is a unique sandbox environment for each user), whilst test kits will be exclusive to each software provider to provide a level of segregation in testing. Updates were also provided on CDE 10 corporate actions frequently asked questions and an interim process for ITE1 open for CSAM application.

Presentation slides and Q&A from these sessions continue to be shared on the CHESS replacement website and can be found here:

Software provider working group presentation materials and Q&A - 17 November 2021

Focus groups

ASX held focus groups on 3, 4 and 9 November with share registries, software providers and clearing and settlement participants respectively to discuss certain aspects for cutover and migration. The focus groups provided clarity on market dress rehearsal activity, rollback expectations and the migration approach. This allowed for an open discussion around any challenges with the timeline, the "as at" date for taking a snapshot of data, and considerations for the environment to be used to support market dress rehearsals.

Working group members were encouraged to provide feedback both during and after the sessions for ASX's consideration in advance of publishing the cutover and migration strategy by end of this year.

See below for further information on some key themes from stakeholder feedback.

Implementation and transition working group

ASX hosted its most recent webinar on 27 October which provided around 120 working group members with a recap on some key aspects for cutover and migration as well as new information on customer migration reports in advance of Focus Groups held in early November (as noted above). A project update was also provided on both recent and upcoming events and activities.

The audio recording, presentation materials and ASX's published reply to questions asked during the live broadcast can be found here:

Implementation and transition working group presentation materials – 27 October 2021

Share registries

Following the joint client session with Link Market Services, ASX is planning to co-host a similar event with Boardroom and Computershare in December 2021 and February 2022 respectively. This will include updates on CHESS replacement, specific issuer related changes, electronic CHESS holding statements, corporate actions STP and DLT solutions.

On 7 October ASX circulated a questionnaire to all share registries to gauge their technical and operational readiness and to understand the level of support to be provided to CHESS users testing in ITE2 and industry wide testing. Key themes included general satisfaction with the current level of engagement activities and most are willing to support CHESS users testing of share registry workflows such as transfers and conversions and corporate actions.

As previously noted, ASX will also prepare a checklist of activities to help share registries with their planning and preparations.

Payment Providers

On 16 November, ASX attended the quarterly Equity Settlement Payment Providers Sub-Committee (ESPPSC) to provide a project update, including discussing cutover and migration considerations, and updating the payments provider deed.

ASX has also hosted bilateral meetings, specifically with those intending on using the CHESS UI, building internal software and/or supporting the CHESS RTGS service.

Additionally, ASX continued engagement with the RBA through regular project update meetings held every 6 weeks. ASX and the RBA have also successfully completed the first round of RITS integration testing, with another round to be scheduled early in the New Year.

Approved Market Operators

ASX continues to engage bilaterally with ASX (Markets), Chi-X, NSX and SSX. The next AMO working group is scheduled for mid-December with a following meeting expected to be scheduled late January/early February 2022.

Project documentation

On 27 September, ASX published release notes to accompany the latest CDE code release for those developing software (CDE10).

On 31 September 2021, ASX published new documentation for a guide to testing services for ITE1, failover and recovery details for ITE1, as well as uplifting connectivity details to include future test environments (ITE-M and ITE2). ASX also published a dedicated 'home page' for AMOs to navigate relevant project documentation.

On 29 October 2021, ASX published new information for security credential details in advance of ITE1, and additional details added to our Connectivity Guide specifically for those connecting with FIX or AMQP. ASX published a dedicated 'home page' for Payment Providers and PISPs, similar to the AMO page.

On 30 November 2021, ASX published a new guide to support accreditation in ITE1 for software providers, an uplift to the guide to testing services with details for inflight migration testing, performance testing and application connectivity for Ledger API. ASX also published full release notes to accompany the opening of ITE1, including details for test tools, ASX assisted testing, as well as known issues/observed behaviours to support the market testing in this new environment.

Before the end of 2021, ASX will be publishing new documentation to support the market with a cutover and migration strategy, and the initial release of operational readiness scenarios to be used in CHESS user testing in ITE2.

Newsletters

ASX last published a project update to all stakeholders via the CHESS Replacement Project Newsletter on 15 October 2021. This newsletter primarily focused on CDE10, the new software provider readiness working group and recently published documentation. A copy of the newsletter can be found here: CHESS Replacement Project Update - October 2021.

KEY THEMES ON CUTOVER & MIGRTION

In advance of ASX publishing the approach to cutover and migration by end of this year, the focus groups held in early November invited feedback to a series of questions relating to market dress rehearsals (MDRs) and the cut-over weekend, including any potential challenges and issues.

Key themes from the feedback provided by focus group attendees are set out below.

What further information can ASX provide to facilitate stakeholders activities and planning?

A number of focus group members are seeking more granular information to help them prepare and plan for MDRs and the cut-over weekend including:

- More granular information on the timing of activities to be provided earlier than July 2022, including all CHESS user actions to be performed prior to CHESS end of day, with defined check points
- To allow CHESS users to check end of day reports are functioning as expected on the Sunday evening
- A few have asked that ASX give consideration to running a settlement batch post MDR to provide a significant measure of confidence that a settlement batch can be executed in the new environment including pre and post settlement obligation status reports
- Detail on the entry and exit criteria for the go/no go decision
- More information on how the ASX will communicate updates during MDRs and cutover

High level timing for the cutover weekend

While a number of stakeholders did not express concerns with the high level timeline presented for the cutover weekend, some concerns were expressed including:

- Timeline is very tight and internal stakeholder dress rehearsals and market dress rehearsals will be key to confidently confirm the timeline allows stakeholders to complete the required activities in the allocated time
- Timing of the go/no go decision needs to be confirmed to allow stakeholders to understand if this affords enough time to perform their internal rollback processes and to be 'production ready' for start of day Monday in the event of a 'no go' decision

 There is less concern on the timing of the MDRs if prior dated snapshots are used (as opposed to current date data)

Snapshot of data to support Market Dress Rehearsals

There are mixed views in using current date data on the MDR weekend versus some prior dated data and potential risks associated with each. While on balance more stakeholders prefer 'current date' as this most closely aligns to the go-live plan, others have expressed strong views on technical constraints including the time taken to complete a backup and restore which may be logistically challenging immediately preceding a MDR weekend if using current date data.

This item will require more time to understand if current date is a feasible option to plan for.

CHESS user environments for Market Dress Rehearsals

There are strong views that CHESS users cannot use their current production environment for MDRs as it needs to be retained and untouched for production processing.

Many CHESS users will also not be able to stand-up a separate "to be" production environment that will then become their production environment at go-live.

The majority of responses received highlighted that CHESS Users will primarily use a Prod like test environment to participate in MDRs, rather than a 'to-be' production environment. In these situations, ASX will need to prove CHESS users can connect their production environment to ASX's 'to be' production environment prior to go-live.

Other factors for ASX's further consideration

- More detailed information needs to be provided on the migration of NBO batch instructions from old CHESS that will be settled in the CHESS replacement system
- Consideration should be given to making limited CHESS functions available on the Sunday post a go
 decision to facilitate CHESS user business verification testing of CHESS user systems
- Samples of customer migration reports should be made available early to allow CHESS users the option to plan for reconciliation processes including the option to automate reconciliation processes
- Potential resourcing and environment challenges in supporting both MDR2 and IWT2 in February 2022
- Consideration to a potential blackout period for non-urgent corporate action events on the Friday pre migration and the Monday post migration
- Consideration for a non-settlement day on the Friday (pre migration) and the Monday (post migration)
- ASX should convene cohort specific focus groups or working groups to collectively work through the requirements and plan for a successful cutover and migration

Next steps

ASX is carefully considering all feedback in advance of publishing the Cutover and Migration Strategy, targeted to be released in December 2021. Where relevant, ASX will address the feedback as part of this publication. In addition, ASX will also present the key themes from the feedback in the 15 December Implementation and Transition working group webinar.

KEY THEMES FROM RECENT STAKEHOLDER ENGAGEMENT ACTIVITIES

From 1 October to 30 November, ASX has held 71 bilateral engagements. Key themes raised by stakeholders include:

- 1. Opportunity for progress updates on CDE 10 testing and to clarify workflows for netting and settlement changes
 - ASX is allowing software providers to complete their functional development in CDE and transition to ITE1 up until end February 2022
- 2. Next steps in remediating data issues for migration
 - ASX has provided controlling participants with unmasked reporting in November
 - ASX have revised the expected completion date for this remediation from the end of 2021 to the end of February 2022
 - There are a small number of exceptions that ASX are not yet reporting as they relate to the go-live of the CHESS electronic statements project (planned for mid-December 2021); ASX will provide updates in the next run of customer reports
- 3. Use of the registration details tool for data migration
 - ASX is considering changes to the tool in the new year in response to customer feedback
- 4. Scope of ITE-M testing for share registries
 - ASX has agreed with share registries that all relevant workflows can be tested as part of ITE1 testing and ITE-M does not provide any additional reassurances
- 5. Follow up meetings post payment provider questionnaire
 - Opportunity to discuss commitments to provide the CHESS RTGS service and utilise the CHESS UI for payment provider functions.
 - ASX has presented some dedicated demos and Q&A sessions on the CHESS UI for those seeking further information on its application

POTENTIAL QUESTIONS FOR DISCUSSION IN THE MEETING

- 1. For those organisations that are vendor backed, are there any challenges with how you are engaging with your software vendor as you prepare for CHESS user testing in ITE2?
- 2. What would you like to see ASX doing more of in 2022 to help with your planning for CHESS replacement?



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	8 December 2021	
Prepared by	General Manager, Securities and Payments (Andrew Jones)	

ASX is on track to launch an electronic delivery option for CHESS Statements on 13 December 2021. This will include giving investors access to an investor portal with at least 12 months of historical statements and providing broker participants with an electronic means for monitoring returned emails.

Members will be provided with a verbal update on 8 December regarding progress and next steps on the CHESS holding statements (eStatements) project.



Committee	Business Committee	
Agenda title	Market Trends & Insights – settlement cycle changes	
Item	5a	
Purpose	To facilitate member discussion on proposed T+1 settlement cycle in the US	
Meeting date	8 December 2021	
Prepared by	Senior Manager, Issuer Services, Securities and Payments (Karen Webb)	

On 24 February 2021, the Depository Trust and Clearing Corporation (DTCC) released a white paper "<u>Advancing Together: Leading the Industry to Accelerated Settlement</u>" highlighting the benefits of moving to a T+1 settlement cycle in the US and detailing a two year industry road-map, acknowledging the change requires industry agreement and regulatory engagement. The US moved to T+2 settlement in 2017, a year after Australia and New Zealand. The paper states that a reduction in the settlement cycle is viewed as the most logical way to reduce the risks that drive margin requirements for clearing participants, particularly during times of high trade volatility and stress. The paper does outline barriers to achieving T+0 settlement, particularly for netting versus real time gross settlement, and possible increases in failed settlement.

While there was a global push over the last decade to adopt T+2 settlement, particularly for equities markets, a mix of settlement regimes remain in place. Besides the US, other markets are also considering shortening settlement cycles to T+1 or less.

ASX has previously consulted the Australian market on settlement optionality for the CHESS Replacement business requirements with mixed stakeholder reactions. Settlement optionality was descoped from Day 1 CHESS Replacement functionality, though ASX will introduce the optional line by line DvP settlement functionality in addition to the existing daily batch settlement.

ASX will provide a presentation to members during the meeting to facilitate a discussion on current market trends for settlement cycles, the proposed move to T+1 settlement in the US and other markets, the pros and cons, and how this may impact or influence future change in the Australian market.

HIGHLY PROTECTED



Committee	Business Committee	
Agenda title	Forward work program	
ltem	6a	
Purpose	To update Members on the forward work program of the Business Committee for 2022	
Meeting date	8 December 2021	
Prepared by	Business Committee Chair, Chief Customer and Operating Officer (Val Mathews)	

The Business Committee will meet for the final time in 2021 on 8 December. The Forward Work Program completed for the year is provided in Attachment A.

ASX proposes that the Business Committee meet four times in 2022. Member feedback indicated that a quarterly cadence was preferred. The proposed 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.

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 2021

Attachment B Business Committee Forward work program 2022

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Attachment A: Business Committee Forward work program 2021

14 April 2021

- · CHESS Replacement Update
- Corporate Actions STP Phase 2 Update
- Electronic CHESS Holding Statements Update
- ISO 20022 Technical Committee report

6 October 2021

- CHESS Replacement Update incl.
 Tranche 3 rules & consolidated draft rules consultation; access pricing, ITE1
- Electronic CHESS Holding Statements update
- Annual report on Cash Equity C&S Service developments
- Regulatory Expectations Audit

14 July 2021

- · CHESS Replacement Update
- Access pricing for non clearing & settlement participants
- · Corporate Actions STP Phase 2 Update
- Electronic CHESS Holding Statements Update
- · ISO 20022 Technical Committee report
- · Regulatory Expectations Audit ToR

8 December 2021

- · CHESS Replacement Update, including
 - independent assessment against the IBM ASX Trade recommendations
 - Member feedback on Tranche 3, combined rule amendments consultation
- · Electronic CHESS Holding Statements
- Discussion on proposed T+1 settlement cycle in US

Attachment B: Business Committee Forward work program 2022

13 April 2022

- CHESS Replacement Update
- Electronic CHESS Holding Statements update

5 October 2022

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

13 July 2022

- CHESS Replacement Update
- Electronic CHESS Holding Statements update
- Final CHESS Replacement rule amendments
- Clearing & Settlement pricing
- 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.