

Agenda

Business Committee

Date	18 July 2019	Time	12:00pm – 2:00pm
Location	ASX offices – Level 1, 20 Bridge Street, Sydney		
1. Service Performance			12:00pm-12:10pm
Cash Market Clearing and Settlement - Operating Performance			
2. Corporate Action STP			12:10pm-12:30pm
Update on the Corporate Action STP Phase 2 project			
3. CHES Replacement Project			12:30pm-1:15pm
a) CHES Replacement			
<ul style="list-style-type: none"> - Software development update - Customer engagement activities 			
b) Access pricing and clearing and settlement fee update (verbal update)			
c) ISO 20022 Technical Committee report and minutes			
4. Market innovation opportunities in DLT (no paper)			1:15pm-1:35pm
A presentation on the nature of innovations and associated industry benefits that can flow from the application of Distributed Ledger Technology (DLT).			
5. Regulatory Expectations - External Audit			1:35pm-1:45pm
Members will be updated on the upcoming external audit of ASX's compliance with the regulatory expectations			
6. Administration			1:45pm-2:00pm
a) Minutes from the 4 April 2019 Business Committee Meeting			
b) Forward work program			
c) Other matters			
7. Next Meeting - 19 September 2019			

Business Committee Members

Company	Name	Job Title	Apologies
ABN AMRO Clearing	Barry Parker	Chief Executive Officer	
ACSA	Rob Brown	Chief Executive Officer	
AFMA	David Lynch	Chief Executive Officer	
AIRA	Ian Matheson	Managing Director	Ian Matheson
ASX	Peter Hiom	Business Committee Chair, Deputy CEO	
ASA	Fiona Balzer	Policy & Advocacy Manager	
Automatic Group	Astrid Raetze	Executive Director	
Bank of America Merrill Lynch	Rhys Cahill	Global Markets COO	
Bell Potter Securities	Rodd Kingham	Head of Operations – Transformation	
BNP Paribas	Mark Wootton	Head of Custody Product Aust & NZ	
Chi-X Australia	Mike Aikins	Chief Operating Officer	
Citi	Miles O'Connor	Director, Direct Custody & Clearing Securities & Funds Services	
CMC Markets	Andrew Rogers	Director Broking business	
Commonwealth Bank of Australia	Sheridan Thompson	Head of Strategic Development, CommSec	
Computershare	Scott Hudson (delegate)	Head of Intermediary Services	Greg Dooley
Credit Suisse	Winston Loke	Australia Equities COO	
Deutsche Bank AG	Geoffrey Plaisted	COO for MSASL/MSWMA, Equities	
Goldman Sachs	Yen Le	Executive Director	
GIA	Megan Motto	Chief Executive Officer	
HSBC	Peter Snodgrass	Head of Direct Custody and Clearing	
J.P. Morgan	Jonathan Evans	Head of Custody & Markets Operations	
Macquarie Group	James Indge	Cash Equities Business Manager	
Morgan Stanley	Rebecca Hill	COO for MSASL/MSWMA	
Morgans	Daniel Spoke (delegate)	Associate Director, Clearing & Settlement Manager	Peter Chisholm
National Australia Bank	Greg Bowrey	GM, Self-Directed Wealth & Markets	
NSX	Matthew Loughnan	Acting CEO	
Pershing Securities	Leigh Conder	Chief Operating Officer	
SAFAA	Andrew Green	Chief Executive Officer	
Sydney Stock Exchange	Antony Tolfts	Listings Director	
UBS	Conor Foley	Chief Operating Officer	

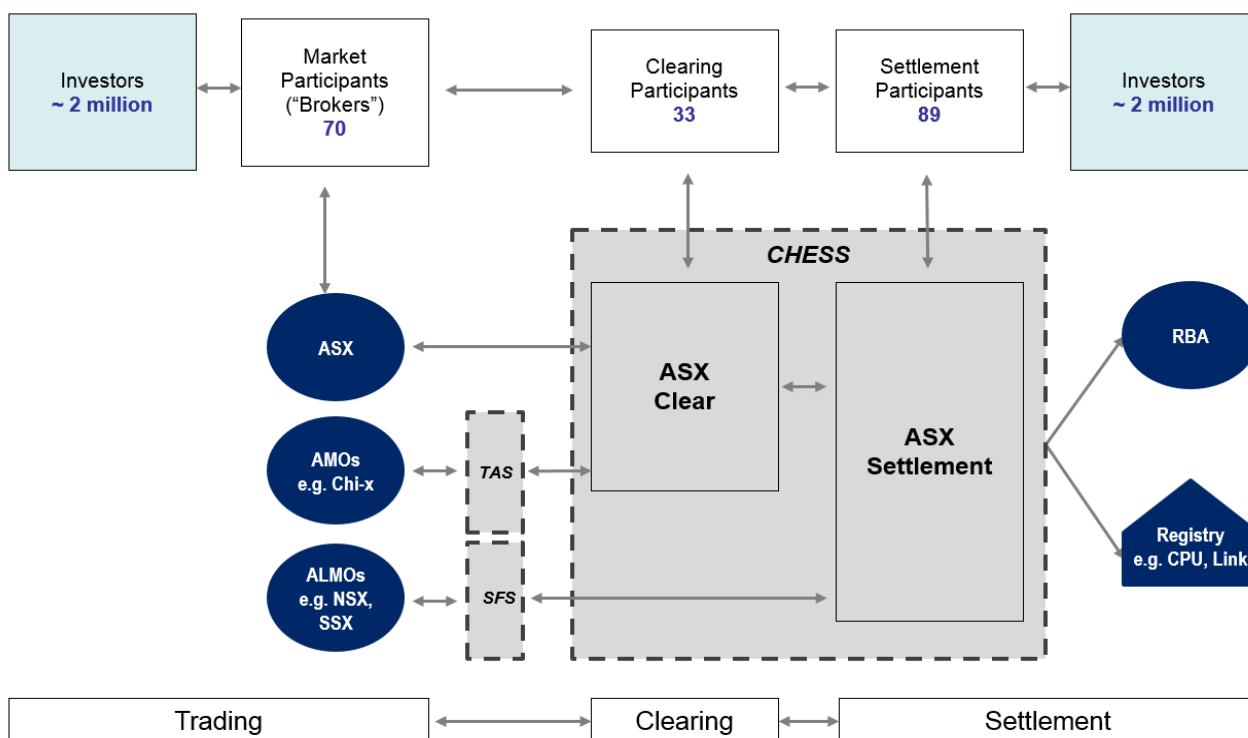
ASX Management

Name	Job Title	Apologies
Tim Hogben	Chief Operating Officer	
Daniel Moran	General Counsel	Daniel Moran
Hamish Treleaven	Chief Risk Officer	
Cliff Richards	Executive General Manager, Equity Post Trade Services	
Dan Chesterman	Chief Information Officer	
Val Mathews	Executive General Manager, Operations	
Katie McDermott	General Manager, Equity Post Trade Services	
Diane Lewis	Senior Manager, Regulatory and Public Policy	
Karen Webb	Senior Manager, Equity Post Trade Services	
Keith Purdie	Senior Manager, Equity Post Trade Services	

BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 1	
Topic	Cash market clearing and settlement services - Operational performance
Date	18 July 2019
Purpose of this paper	To report on key performance metrics for ASX's clearing and settlement services.

OVERVIEW

Market Structure Overview



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

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

Novation

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

- it replaces the clearing participants' credit exposures to other clearing participants by substituting the clearing house as the central counterparty; and

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- it maximises capital efficiency for clearing participants by permitting a single net exposure to be calculated and collateralised between the clearing house and each clearing participant.

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

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

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

Netting

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

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

Settlement

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

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

Service availability

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

For the June 2019 quarter, the average monthly system availability was 100.00% for CHES. The average monthly availability of CHES has been 99.99% between November 2011 and June 2019.

Trade Acceptance Service

ASX Clear and ASX Settlement's Trade Acceptance Service (TAS) provides a mechanism for Chi-X to submit trades into CHES. The CHES system performs the clearing and settlement functions.

The Trade Acceptance Service availability target for TAS is 99.80% (the same as CHES).

For the June 2019 quarter, the average monthly system availability was 100.00% for the TAS. The average monthly availability of the TAS has been 99.99% between November 2011 and June 2019 (which is the same as CHES).

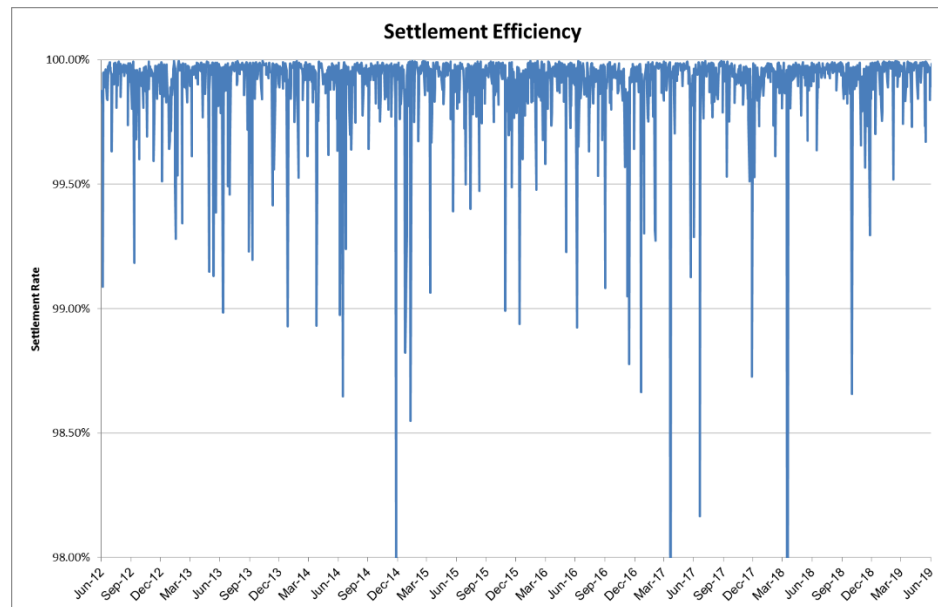
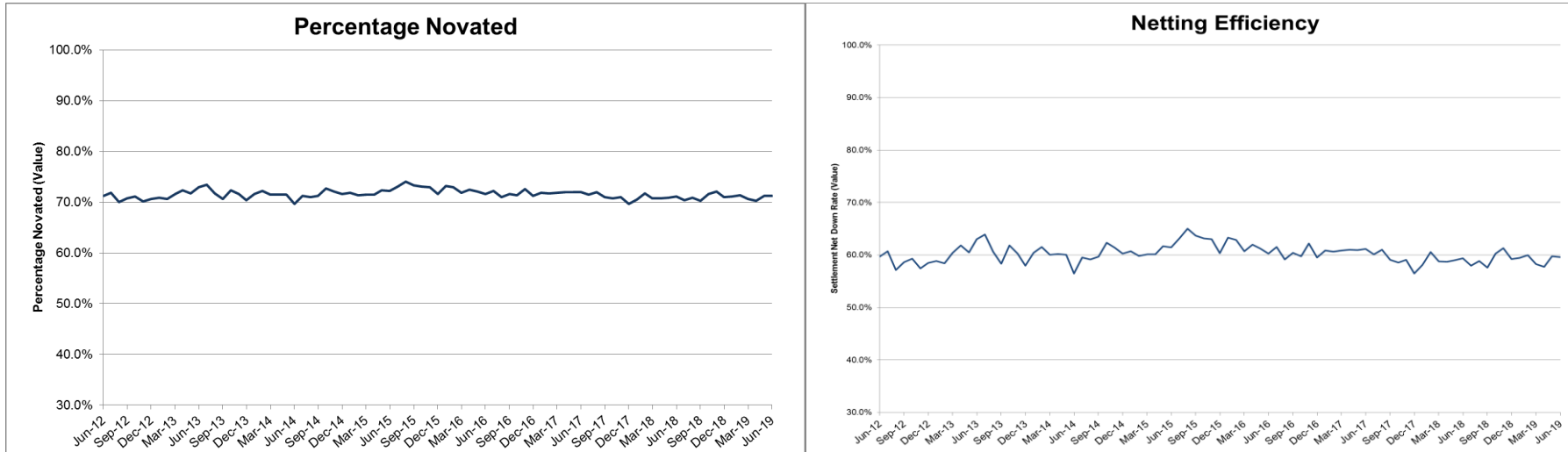
Reporting on clearing and settlement service performance

The key metrics noted above on novation, netting efficiency and settlement efficiency for the June 2019 quarter are reported in Attachment A. They are also supported by charts demonstrating a longer reporting period in Attachment B.

ATTACHMENT A – SUMMARY METRICS RELATING TO THE PERFORMANCE OF ASX’S CLEARING AND SETTLEMENT SERVICES

	June 2019 Quarter	March 2019 Quarter	December 2018 Quarter
System Availability (CHESS)	100%	100%	100%
System Availability (TAS)	100%	100%	100%
Total Trades Accepted (ASX)	97,937,232	92,472,062	89,266,278
Total Trades Rejected (ASX)	0	0	2
Total Trades Accepted (Chi-X)	35,025,795	33,680,077	29,462,225
Total Trades Rejected (Chi-X)	0	0	0
Total Settlements (SSX)	0	0	0
Total Value of Settlements (SSX)	\$0	\$0	\$0
Total Settlements (NSX)	189	215	266
Total Value of Settlements (NSX)	\$514,305.70	\$762,626.87	\$958,920.00
Daily Average Traded Value (On and Off Market)	\$7.5 billion	\$6.8 billion	\$7.14 billion
Daily Average Cleared Value	\$5.30 billion	\$4.83 billion	\$5.11 billion
Percentage Novated	70.94%	71.03%	71.6%
Daily Average Cleared Value Post-Netting	\$2.17 billion	\$1.97 billion	\$2.03 billion
Netting Efficiency	59.0%	59.2%	60.3%
Daily Average Settled Value (Including Non-Novated)	\$10.9 billion	\$10.2 billion	\$10.7 billion
Settlement Efficiency	99.94%	99.95%	99.87%

ATTACHMENT B – PERFORMANCE OF ASX'S CLEARING AND SETTLEMENT SERVICES FROM JUNE 2011 TO June 2019



BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 2	
Topic	Corporate Actions STP Phase 2 project
Date	18 July 2019
Purpose of this paper	To provide Business Committee members with a recap on the project objectives and solution, and an update on progress of the Corporate Actions STP Phase 2 project.

RECAP ON THE PROJECT OBJECTIVES AND SOLUTION

ASX will provide a presentation during the meeting to provide a recap on the project objectives and solution.

UPDATE ON PROJECT PROGRESS

ASX is progressing the detailed work on the project with activities during the last quarter focused on:

- Confirmation of the 1 December 2019 target effective date for ASX’s Listing Rule changes (outlined in ASX’s consultation paper “Simplifying, clarifying and enhancing the integrity and efficiency of the ASX listing rules” released on 28 November 2018), subject to regulatory approval. ASX also confirmed the associated project delivery timeline. Refer to the Delivery timeline section for further details.
- Amendments to the Phase 1 event online forms for the announcement of dividend, interest payment, consolidation, split and cash return of capital events. The Phase 1 requirements, development and system testing are complete and the functionality is currently in internal User Acceptance Testing.
- Detailed requirements, development and testing of four new online forms related to the announcement of issues of securities and changes to securities on issue. Progress on each of the four new forms includes:
 - Appendix 2A (application for quotation of securities): Requirements in progress, development in progress, system testing in progress
 - Appendix 4A (statement of CDIs on issue): Requirements completed, development completed, system testing completed, internal User Acceptance testing in progress
 - Appendix 3B (notification of proposed issue of securities): Requirements in progress, development in progress, system testing in progress
 - Appendix 3G (notification of issue, conversion or payment up of equities securities): This is an additional form proposed by ASX to ensure adequate coverage of announcements across all issues of securities, focused on unquoted securities. Requirements in progress.
- Continue to progress the detailed review and updates to the Phase 1 event ISO 20022 messages including adopting the latest version of the base message, and additional data changes where relevant.
- Commenced detailed review of ISO 20022 messages (schemas) for all Phase 2 corporate action events, working closely with the CHESS Replacement project team.

Delivery timeline

The project is now tracking to three releases – the first in December 2019, the second in Q2 2020 and the third in Q3 2020.

Indicative Timeline - Corporate Actions STP Phase 2	2018				2019				2020				2021	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Corporate Actions STP Phase 2 - Delivery period														
Listing Rule changes consultation														
Industry Working Group meetings (every 4-6 weeks)														
Customer Testing available														
Target Go-Live* (3 releases)														
CHES Replacement Go-Live														

*1st release dependent on effective date for Listing Rule changes

The first release is tied to the target effective date of the proposed ASX listing rule changes, given the related changes to the Phase 1 online forms and associated events, and the proposed four new online forms. ASX submitted its final amendments to the Listing Rules to ASIC in April, who advised they would not be able to complete their review by the end of May, and hence ASX was not in a position to meet the previously communicated July target. The confirmed target effective date for the rule changes is now 1 December 2019. The first release will focus on the online form changes for issuers and the associated ASX database changes, and will also now include one additional change, inclusion of the new Appendix 3G.

Subject to regulatory approval, ASX expects to release its final marked up listing rule changes and consultation response by early October 2019. At the same time ASX will provide issuers with access to the updated and new online forms in a test environment, with associated training and guidance material. ASX is also working through the detail of the transition arrangements for issuers, moving from the existing Appendix 3B to the new 4 online forms.

The updated and new ISO 20022 messages are targeted for release in Q2 2020. However for the benefit of existing and new subscribers to the ISO 20022 service, ASX will progressively make available the updated and new ISO 20022 schemas from August 2019, with message test availability in an industry wide testing environment from October 2019.

ASX will communicate to industry in due course the contents of the second and third releases, which will cover the remaining scope of the project.

Stakeholder engagement

The Corporate Actions STP Phase 2 industry working group has continued to meet regularly with meetings held on 11 April, 9 May and 20 June 2019. The next meeting is planned for 1 August 2019. A sub-working group meeting was also held on distribution elements on 4 July 2019.

The key discussion points during the last quarter have been:

- An overview of the proposed ASX listing rule changes, including feedback ASX received to its consultation and the timeframe within which the rule changes would become effective (amended to 1 December 2019).
- Detailed discussion on distribution elements, including tax. Feedback is currently being solicited from sub-working group members, for further consideration.
- Discussion on the changes ASX would be making to the ISO 20022 messages and agreement on the ISO event types that should be applied to each event, with particular discussion around entitlement offers.
- Announcements of issues of securities and subsequent quotation – revised Appendix 3B and new Appendices 2A, 3G and 4A, including ASX progress with development and particular questions of interest for members.

Members have been asked to provide responses to specific questions raised by ASX within the meeting or within two weeks of a meeting to assist ASX's progression of requirements. A number of members have also been forthcoming with example information from their own operations to assist with ASX's analysis and solution design.

BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 3A	
Topic	CHES Replacement – Program Update
Date	18 July 2019
Purpose of this paper	Members will be provided with a program update including software development and stakeholder engagement activities.

OVERVIEW

The project continues to deliver on its key milestones. This included the customer development environment (CDE) opening as scheduled on 30 April. CDE allows ASX participants and their back office vendors to connect to available functions, which will be progressively released in tranches, for the CHES Replacement system. To date, ASX has received over 20 CDE connectivity order forms, with several participants and software vendors now connected and testing across all available connection types – Ledger API, AMQP and SWIFTNet.

CDE has since been updated with a second drop of code on 28 June, progressively building on the available functions for testing. The technical documentation portal has also been updated with the third tranche of functional and messaging specifications.

On 18 June, Digital Asset (DA) announced the integration of DAML onto two new distributed ledger solutions – R3 and Fabric, thereby continuing to expand the number of ledgers upon which its technology will be able to be used.

Software Development Update

The project continues to track to plan to deliver on its key software delivery milestones. This includes the delivery of the fourth tranche of technical documentation at the end July 2019 and the third drop of code into CDE, which is targeted for end August 2019. Any emerging risks or issues continue to be managed to keep the project to schedule for delivering the final tranche of software into CDE in May 2020 and the planned commencement of industry wide testing (IWT) from July 2020.

To date, final solution design has been released into CDE for the following functionality:

- Unilateral demand transfers
- Bilateral demand transfers
- Bilateral demand settlement instructions
- Settlement locks
- Payment facilities
- Trade capture
- Trade registration
- Novation

The ISO 20022 work on ‘to-be’ message mapping state is in progress. See agenda item 3c for further details.

Stakeholder Engagement Activities

Technical Documentation

The second tranche of technical documentation was released to the market on 29 March 2019. This included functional and messaging specifications covering market trades (trade capture, trade registration and novation), and payment facilities for batch settlement.

The third tranche of technical documentation was released to the market in two parts. Part I was released, as planned, at the end of May 2019 and comprised updated specifications for account and holder creation, and modification and settlement locks. It also included new documentation for account and holder locking and unlocking, netting, reporting of price information by AMOs and associated FIX specifications. Part II was released at the end of June, and included participant to / from issuer sponsored transfer, participant to / from issuer sponsored conversion and SRN enquiry. This was originally scheduled to be included as part of the May 2019 documentation release but given the ongoing market feedback ASX received at the time through various stakeholder engagement forums, delivery of this documentation was deferred by one month. However, the delivery of the associated code has not changed and is on target to be released as scheduled.

The fourth tranche of technical documentation will be released end July and will include specifications for batch settlement (settlement obligation eligibility, aggregate unit position, aggregate funds obligation, movement of units, notifications), encumbrance on HIN (for the purpose of settlement), and a framework for corporate actions (including events with an ex-period, changes to security, sub-register or settlement instruction as a result of deferred settlement, sub-register state changes or creation of a corporate action event).

Technical documentation is available to all ~600 (non-ASX) registered users and any significant updates continue to be communicated by email notification. ASX endeavours to make technical documentation available in tranches three months prior to each software drop into CDE.

Customer Development Environment (CDE)

CDE went live on 30 April 2019. CDE is an ASX hosted development environment which supports early access development and low volume transaction and functional testing. Each connected organisation has their own dedicated environment to ensure segregation of activities. A basic set of test data has been seeded into CDE which is refreshed with each release to allow for the use of additional functions.

To date, ASX has received over 20 CDE connectivity order forms and several software vendors and participants have already connected to CDE and are accessing available functions for testing. ASX anticipates additional users will continue to be on-boarded as more functions are released as part of CDE drop 3, including allowing share registries to begin testing transfers and conversions (participant to issuer and issuer to participant) and SRN enquiries. Payment providers are anticipated to connect and begin testing functionality as part of CDE drop 4, which is scheduled for October 2019.

To date, ASX has announced the functionality to be included up to CDE drop 5. In response to stakeholder feedback and to assist with their planning and preparations for the commencement of IWT from July 2020, ASX is working to make available the release plan for all remaining functions. ASX notes this plan may be subject to some change taking into consideration stakeholder feedback through the focus groups and ISO 20022 Technical Committee as well as the results from ASX's internal testing.

Final solution design released to CDE is detailed in Attachment A – CDE Function Availability.

Connectivity & Integration Working Group

Since the last Business Committee meeting on 4 April, ASX has held a further four Connectivity & Integration working groups.

The working group held on 1 May focused on node connectivity, providing attendees with additional technical information including the different Ledger API services available and building a client application and guidelines to building a command.

The working group held on 5 June focused on multi-channel access. For example, multiple host systems that connect to the new solution.

The working group held on 3 July focused on providing more detail on AMQP design patterns. This working group was split into two parts due to the volume of information, with a follow up working group to be scheduled for 11 July.

The next working group meeting will be held on 7 August and focus on CDE 3 testing. Future topics from September will be published to the stakeholder engagement calendar of events on the CHES Replacement website.

All Connectivity and Integration working group materials continue to be made available through the CHES Replacement website. The presentation materials to the more recent working group meetings can be found here:

- 1 May 2019 <https://www.asx.com.au/documents/settlement/ci-1-may-2019.pdf>
- 5 June 2019 <https://www.asx.com.au/documents/settlement/ci-5-june-2019.pdf>
- 3/11 July 2019 <https://www.asx.com.au/documents/settlement/ci-3-july-2019.pdf>

Implementation & Transition Working Group

Details on the next Implementation & Transition working group will be published in due course on the CHES replacement website, the monthly newsletter to all stakeholders as well as by email notification to all relevant stakeholders.

Focus Groups

Focus Groups continue to be held on a regular basis with an appropriate cross section of industry participants. Since the last Business Committee meeting on 4 April, ASX have held a further five Focus Groups.

The Focus Group held on 10 April revisited the previously proposed solution for transfers and conversions (participant to issuer and issuer to participant) and introduced the solution for SRN enquiry. ASX also presented the key changes to transfers and conversions taking into consideration earlier stakeholder feedback.

The Focus Group held on 7 May discussed the new functionality to allow obligations under novated equity transactions to be transferred between clearing participants and also focused on explaining the rationale for the proposed solution design.

The Focus Group held on 18 June was the first out of three on Corporate Actions. This focus group looked at the proposal for new functionality to allow for electronic elections of dividend reinvestment plans and bonus share plans.

An additional Focus Group was also held on 18 June specifically with the payment providers as part of ASX's engagement with the Equity Settlement Payment Providers Sub Committee (ESPPSC). The main focus of this meeting was to share ASX's decision to move forward with the Real Time Gross Settlement (RTGS) payments proposal, as opposed to NPP.

The Focus Group held on 9 July was the second meeting dedicated to the topic of Corporate Actions. This focus group looked at the proposed new functionality to facilitate standardised electronic acceptances by settlement participants (on behalf of holders) for entitlements in respect of holdings for financial products to an issuer. The meeting also looked at changes to holding adjustment processes for issuers and participants.

As part of ASX's stakeholder engagement process, ASX also published the feedback it has received from stakeholders from the relevant Focus Groups and ISO 20022 Technical Committee meetings on the solution design of the functionality listed below. This feedback has been presented in the form of a table, and lists the key topics raised by stakeholders across both forums. The table provides a summary of stakeholder feedback and ASX's response to that feedback, highlighting where relevant the evolution of the functional specifications of each new business requirement based on stakeholder feedback and further analysis performed by ASX. The table does not identify any organisation or individual who raised a particular topic or question for discussion, nor does it intend to capture individual responses received from stakeholders; rather it is intended to be a summary only. This summary can be found on the CHES replacement technical documentation portal under the relevant functional specification. A copy can also be found here:

Standardised Registration Details
(Account and Holder creation,
modification)

<https://asxchessreplacement.atlassian.net/wiki/spaces/CSP/pages/82183674/Stakeholder+Feedback+and+ASX+Response+Standardised+Registration+Details+Account+and+Holder+creation+modification>

Transfers & Conversions; SRN Enquiry

<https://asxchessreplacement.atlassian.net/wiki/spaces/CSP/pages/82216212/Stakeholder+Feedback+and+ASX+Response+Transfers+and+Conversions+SRN+Enquiry>

Demand and Settlement Instructions

<https://asxchessreplacement.atlassian.net/wiki/spaces/CSP/pages/82249140/Stakeholder+Feedback+and+ASX+Response+Demand+and+Settlement+Instructions>

Communication

To increase the level of project communication, ASX issued in June its first monthly newsletter to all registered stakeholders, ~1,100 individual email addresses. The newsletter aims to keep stakeholders better informed on project progress by consolidating the latest project news and announcements, providing an update on recent working groups and other project forums and promoting upcoming activities and milestones.

In addition to the project information available via the newsletter, a new page has been added to the CHES Replacement web page to detail all recent project communication as well as provide an archive of past communications.

The CHES Replacement website also continues to be kept up to date including relevant working group materials and presentations.

ATTACHMENTS

Attachment A – CDE Function Availability

Attachment B – Calendar of events for stakeholder engagement

ATTACHMENT A – CDE Function Availability

Function	Drop 1 (April'19)	Drop 2 (June'19)	Drop 3 (Aug'19)	Drop 4 (Oct'19)	Drop 5 (Dec'19)
Unilateral Demand Transfers	X	X	X	X	X
Bilateral Demand Transfers	X	X	X	X	X
Bilateral Demand Settlement Instructions	X	X	X	X	X
Settlement Locks	X	X	X	X	X
Payment Facilities		X	X	X	X
Market Trade (Capture, Registration, Novation)		X	X	X	X
Account and Holder Creation			X	X	X
Netting & Reversal			X	X	X
Participant to / from Issuer Sponsored Transfer			X	X	X
Participant to / from Issuer Sponsored Conversion			X	X	X
SRN Enquiry			X	X	X
Unilateral Settlement Instruction				X	X
Bilateral Settlement Instruction				X	X
Batch Settlement				X	X
Corporate action framework for ex-period				X	X
Takeovers / Buy Backs					X
Collateral Management / ETO Cover					X

ATTACHMENT B - Calendar of events for stakeholder engagement

	2019												2020	2021
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Dec	Jan - Dec
Business Committee				4/4			18/7		19/9		28/11		Dates TBC	Dates TBC
ISO 20022 Technical Committee		8/2: Transfers & conversions – Participant to Issuer	26/3: Standardised registration details		7/5: Transfers & conversions; SRN enquiry 28/5: Change of controlling participant, holding adj, warrants	25/6: Batch settlement	23/7: Takeovers and collateral creation	27/8: TBC		1/10 - TBC 29/10 : TBC	26/11: TBC		Dates TBC	Dates TBC
Connectivity & Integration Working Group		5/2: ASX Net & ISO message signing	6/3: CDE overview and application process	3/4: Accreditation and Attestation	1/5: Direct Connectivity – ISO to DAML	5/6: AMQP design pattern	3/7 & 11/7: Multi-Channel Support	7/8: CDE 3 testing	4/9: Topic TBC from list below	9/10: Topic TBC from list below	6/11: Topic TBC from list below	4/12: Topic TBC from list below	Dates TBC	
	Future topics include: (i) infrastructure requirements (hardware); (ii) security; (iii) non-functional requirements; (iv) browser; (v) reporting; (vi) state contracts													
Implementation & Transition Working Group			20/3: Kick-off						Date TBC				Dates TBC	
	Future topics include: (i) planning & preparation; (ii) communication & documentation; (iii) testing & rehearsals and (iv) cutover & post cutover													
Focus Groups	29/1: Trade registration & AMO connectivity	14/2: Transfers & conversions (follow up to 8 Feb Technical Committee)	12/3: Payment provider workflows/connectivity 19/3 & 26/3: Accounts & std registration details	10/4: Transfers & conversions, SRN enquiry	7/5: Transfer of novated equity transactions between Clearing Participants	18/6: Electronic elections for DRPs and BSP	9/7: Electronic acceptance of entitlement offers & holding adjustments	13/8: Corporate actions related topics	17/9: mFunds	15/10: Investor information	12/11: Optional early settlement	10/12: Electronic statements	Dates TBC	
Technical documentation			28/3: Drop 2 - trade capture, trade registration, novation & payment facilities		30/5: Drop 3 Part I - Netting; Account & Holders (revised)	28/6: Drop 3 Part II - Participant to/from Issuer Sponsored transfer & conversion; SRN enquiry	Drop 4 - Batch settlement; encumbrance on HIN; Corporate Actions framework		Drop 5 - Takeovers; buy-backs; collateral management (ETO cover and cash market margin cover)		Drop 6		Feb - Drop 7	
Drops of code				30/4: Drop 1 - Unilateral demand transfers, bilateral demand transfers and bilateral demand settlement instructions		28/6: Drop 2 - trade capture, trade registration, novation & payment facilities	Drop 3 - Participant to/from Issuer Sponsored transfer & conversion; SRN enquiry, account & holders, netting		Drop 4 - Batch settlement; encumbrance on HIN; Corporate Actions framework			Drop 5 - Takeovers; buy-backs; collateral management (ETO cover and cash market margin cover)	Feb - Drop 6; May - Drop 7	
Customer Dev Environment (CDE)	Available												Available	Available until go-live
Industry Wide Testing													July 2020 onwards	Until go-live
Accreditation & operational readiness, migration rehearsals													Q3 2020 onwards	Until go-live
Target go-live														Mar/Apr

NB: all meetings, including dates and sequencing of topics, are subject to change. This includes further topics and/or additional meetings based on stakeholder feedback and requirements.

BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 3C	
Topic	ISO 20022 Technical Committee Report and Minutes
Date	18 July 2019
Purpose of this paper	To provide Business Committee members with a copy of the report and minutes from recent meetings of the ISO 20022 Technical Committee

OVERVIEW

The ISO 20022 Technical Committee met on 7 May, 28 May and 25 June 2019. The Technical Committee's report for these meetings is provided in Attachment A.

The minutes from the meetings held on 26 March, 7 May and 28 May are available through the CHES Replacement website.

26 March 2019	https://www.asx.com.au/documents/settlement/ISO20022_Technical_Committee_Meeting_26Mar2019_Minutes.pdf
7 May 2019	https://www.asx.com.au/documents/settlement/ISO20022_Technical_Committee_Meeting_7May2019_Minutes.pdf
28 May 2019	https://www.asx.com.au/documents/settlement/ISO20022_Technical_Committee_Meeting_28May2019_Minutes.pdf

The Forward Work Plan for the ISO 20022 Technical Committee is provided in Attachment B.

ATTACHMENTS

Attachment A – ISO 20022 Technical Committee Report – 7 May, 28 May and 25 June 2019 meetings

Attachment B - Forward Work Plan for the ISO 20022 Technical Committee

ISO 2022 Technical Committee Report to the Business Committee

This report provides an overview of the ISO 2022 Technical Committee meetings held on 7 May (Sydney and webinar), 28 May (Melbourne and webinar) and 25 June 2019 (Sydney and webinar). During the period ASX welcomed two additional member organisations to the committee (a participant, share registry).

MEETING AGENDA (NON STANDARD ITEMS) – Business and Technical Matters for Consideration

7 MAY 2019	28 MAY 2019	25 JUNE 2019
a) Review of member feedback on published 'to-be' messages	a) Focus Group update – Give-Ups	a) Focus Group update – Corporate actions
b) Overview – Registration Reference and Account Notification	b) Re-cap on Transfers, Conversions, SRN Enquiry	b) Review of member feedback on published 'to-be' messages
c) Transfers & conversions	c) Preliminary review of member feedback on published 'to-be' messages	c) Batch Settlement
d) SRN / SRN balance enquiry	d) Change of controlling participant	d) 'To-be' messages for review
e) 'To-be' messages for review	e) Holding adjustment	
	f) Warrants	
	g) 'To-be' messages for review	

ACTION ITEMS

- Five additional action items were raised in the 7 May meeting, two additional action items at the 28 May meeting, and three additional action items at the 25 June meeting.
- At the conclusion of the 25 June meeting, seven action items remain open, while 81 actions have been closed (12 of these actions closed at the 7 May and 28 May meetings).

KEY ISSUES DISCUSSED

- At each meeting committee members were provided with a general update on the CHES Replacement project.
- At all three meetings, ASX provided an **overview of the topics** presented at the most recently held **Focus Group meetings** including:
 - the new functionality of transfer of novated equities transactions between clearing participants (give-ups and take-ups);
 - transfers, conversions and SRN enquiry; and
 - corporate actions (DRP and BSP elections).



ASX

Agenda item 3C – Attachment A

Where feedback had already been provided by Focus Group members to ASX, key themes were also shared with Technical Committee members.

- The process of obtaining user input on solution design for certain business requirements (significantly new and materially changed functionality) via Focus Groups, and then sharing the outcome in business process and ISO messages with the Technical Committee has been an ongoing topic of discussion at the meetings. This process of engagement preceded ASX's finalisation of Technical Documentation and submission of finalised requirements for development.
- ASX also confirmed it would provide in its Technical Documentation a summary of the feedback received from the Focus Groups and Technical Committee on specific functional topics, and ASX's responses and outcomes.
- Responding to a number of member questions and requests on Technical Documentation, ASX confirmed that it would not support backwards compatibility to EIS messages in its implementation of ISO 20022 messaging, including any detailed mapping between the two message sets. Where possible the ISO 20022 usage guideline annotations referred back to the equivalent EIS message and fields.
- ASX provided an overview of key functional areas and associated message sets at the meetings:
 - 7 May meeting:
 - > Proposed amendments to the processing of **Transfers and Conversions** for Participant to Issuer and Issuer to Participant flows. ASX's originally proposed solution (including messages) was presented to the committee at the 8 February 2019 meeting, and subsequently revised due to the feedback received. At the 7 May meeting members raised a number of additional questions for ASX's consideration, including the creation of temporary accounts (Registration Identifier Accounts); the introduction of an additional step (as required by ISO); how the new temporary account identifier (RGID) interacted/related to another identifier HIN; and the workflow where a message was rejected or housekept by ASX.
 - > An overview of the **SRN and SRN balance enquiry** solution design and message flows. During the meeting a share registry member stressed the importance for participants to be aware that a match of the registration details provided by a participant against the record in the registry's system would need to occur, and if it did not match it would be rejected.
 - At the 28 May meeting topics were presented that had not warranted a prior Focus Group meeting, given the carry forward of existing process and low level of change, including:
 - > The proposed solution design and messages for **change of controlling participant**, noting there would be no changes to the existing workflow used in CHESS today in the replacement system. Member queries ranged across topics including authorisation timeframes; whether the functionality could be applied at the holding level without a transfer; the applicable reject message in the case of a non-existent HIN; inclusion of investor identity in details to the potential recipient of the HIN throughout the message flow; and bulk transfer functionality and cancellation reason code.
 - > An overview of **holding adjustment** functionality and messages. Members discussed the potential future use of this functionality for code changes, use of the Balance field, the Corporate Action Event Identification field and populating the Posting Date field with the current date.

- > **Issuer’s agent transfer flow (warrants)** was also presented for member feedback. ASX was aware of the limited use of this functionality, and acknowledged it had engaged issuers to confirm whether these messages should be carried forward.
- At the 25 June meeting the focus of discussion was on the business process flow and messages associated with **batch settlement**. ASX expected to carry forward existing functionality, albeit in a more consolidated suite of messages. Key changes included the expected availability of some other functions during the processing of batch settlement. As payment providers were key actors in a number of messages in the process, ASX requested members to turn their attention to these messages particularly if they were or provided support to payment providers, and ASX committed to further engagement with this group of stakeholders.

ASX also confirmed to members that the finalisation of the holding adjustment message discussed at the last meeting would be delayed, and would require further discussion. It was expected the message would change pending feedback from the Focus Group on various topics including corporate actions.

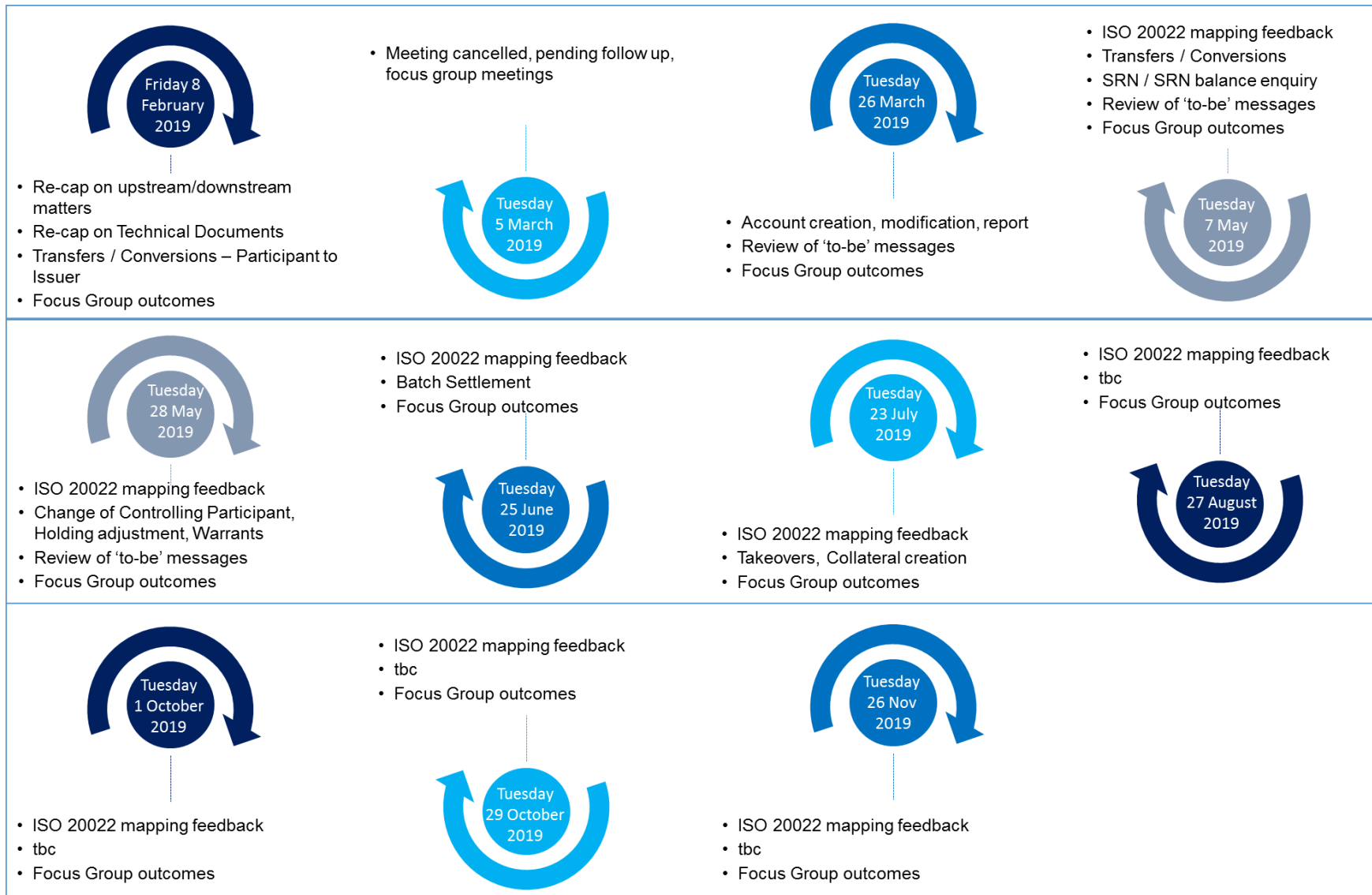
The current status of finalised ISO 20022 messages is presented in the table below (@28 June 2019 Technical Documentation drop):

Business area	EIS 'as-is' in scope Total number of relevant EIS messages	ISO 20022 messages done					EIS 'as-is' covered in 'to-be' drops		
		Drop 1 14Dec18	Drop 2 29Mar19	Drop 3(a) 30May19	Drop 3(b) 28Jun19	Total	Confirmed descope EIS messages	Confirmed EIS messages covered in Drops**	Total EIS messaged covered
Account management (acct)	14		1	4*		5	1	6	7
Operations Admin (admn)	11								
Common (comm)	2	3				3		2	2
RTGS (gset)	60								
Holding movement (hold)	88	9			9	18		62	62
mFund Service (mfnd)	73								
Pledge and Lodge Management (pldg)	85								
Reporting (rptg)	36								
Settlement (sett)	51	16	2	3	9	21	4	22	26
Total	420	28	3	7	9	47	5	92	97 / 23%

Additional drafts shared with Technical Committee	
TC only: not yet in Tech Docs	Equiv. EIS
9	18
9	18

* Removed account from DROP 1

**Includes consolidation of a number of EIS messages into a lower number of equivalent ISO 20022 messages



BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 5	
Topic	Regulatory Expectations - Audit
Date	18 July 2019
Purpose of this paper	To advise the Business Committee that the external audit of ASX's compliance against the Regulatory Expectations is expected to commence soon.

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

The first two audits were conducted in 2017 and 2018. The third audit, covering the 2018-19 financial year, is due to commence shortly and some Business Committee members will be contacted by PwC as part of their review.

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

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

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

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

The Terms of Reference are provided in Attachment A.

ATTACHMENT

Attachment A – Terms of Reference

Regulatory Expectations External Audit Terms of Reference

Background

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

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

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

Objective

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

Scope

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

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

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

Approach

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

The external audit will be performed using a range of subject matter professionals.

The approach will include, but not be limited to:

- a comparison of the compliance framework put in place by ASX against the requirements of the Regulatory Expectations;
- testing of policies and procedures on a sample basis to assess whether they were designed appropriately and are operating effectively in accordance with the Regulatory Expectations;
- consultation with members of the Business Committee and other relevant user governance arrangements;
- providing management with a report of findings, and seeking responses where required; and
- annually, track the progress of previous audit recommendations and management action.

Timing and reporting

The external audit subject to these Terms of Reference will be performed in July 2019 covering the period from 1 July 2018 to 30 June 2019.

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

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

Commitment from the ASX

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

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

Audit Scope - Regulatory Expectations

<p>1. User input to governance</p> <p>To ensure responsiveness to users' evolving needs, transparent formal mechanisms should be maintained within ASX's governance framework to give users a strong voice in strategy setting, operational arrangements and system design, and to make ASX's monopoly cash equity CS services directly accountable to users. As part of this:</p>	
1(a)	ASX should make an explicit public commitment to investing promptly and efficiently in the design, operation and development of the core CS infrastructure for the Australian cash equity market, including the Clearing House Electronic Sub-register System (CHES) and any future replacement system. This commitment should be supported by governance processes that enable users to provide input on the setting of the investment strategy. Investments should ensure that, to the extent reasonably practicable, the performance, resilience, security and functionality of the core CS infrastructure meet the needs of users, recognising the diversity and differing needs of users. At a minimum, the core CS infrastructure should accommodate internationally accepted communication procedures and standards.
1(b)	ASX should ensure that the membership of its user governance arrangements is representative of the user base of its CS services, and that members are able to have a strong input into the agenda and format of meetings or other user governance mechanisms and the setting of priorities.
1(c)	ASX should demonstrate that it has had regard to the views of members in setting the terms of reference for the external audits of its governance, pricing and access arrangements carried out in accordance with the Regulatory Expectations. This may take the form of members' non-objection of the proposed terms of reference. These terms of reference may change following any review of the Regulatory Expectations.
1(d)	<p>ASX should maintain accountability arrangements that provide for regular public attestations as to the effectiveness of its interactions with users. For example, the following arrangements would be appropriate:</p> <p>ASX's user governance mechanisms operate on a 'comply or explain' basis; that is, the relevant Board would take actions in accordance with recommendations from the user governance mechanisms, or else explain why such actions had not been taken.</p> <p>ASX report, on at least an annual basis, the service developments and investment projects that it has progressed and how it has taken into consideration the views of users.</p>
1(e)	ASX should formally commit to retaining a Board structure for ASX Clear and ASX Settlement that comprises a minimum of 50 per cent of non-executive directors that are also independent of ASX Limited, and where a subset of these independent directors can form a quorum.
1(f)	ASX should establish governance structures and reporting lines at the management and operational levels that promote access to its CS services on commercial, transparent and non-discriminatory terms. These arrangements should ensure that the interests of users are upheld in accordance with Regulatory Expectation 3. This may be demonstrated, for example, through the key performance indicators set for relevant management.
<p>2. Fair, transparent and non-discriminatory pricing of CS services</p> <p>ASX should publicly commit to an appropriate minimum level of transparency of pricing across its range of monopoly cash equity CS services. The pricing of these services should not discriminate in favour of ASX-affiliated entities (except to the extent that the efficient cost of providing the same service to another</p>	

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

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

BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 6A	
Topic	Minutes from 4 April 2019 Business Committee Meeting
Date	18 July 2019
Purpose of this paper	To provide Business Committee members with the minutes and Business Committee report to the ASX Boards from the 4 April 2019 meeting.

OVERVIEW

Draft minutes and the draft report to the Boards of ASX Clear and ASX Settlement from the 4 April 2019 Business Committee meeting were emailed to all members of the Business Committee on 8 May 2019 for comment. The Secretariat did not receive any comments from members.

The Business Committee report and minutes will be formally presented to the next meeting of the ASX Clear and ASX Settlement Boards.

ATTACHMENTS

Attachment A – Business Committee Report and Minutes from the 4 April 2019 Meeting.

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

Business Committee Meeting

At its 4 April 2019 meeting, the Business Committee was updated on the:

- implications for the operation of industry advisory groups (e.g. Business Committee) of the introduction of the concerted practices prohibitions under the competition laws;
- operating performance of CHES for the March Quarter 2019 to date;
- CHES replacement and Corporate Action STP Phase 2 projects;
- ISO 20022 Technical Committee's progress in developing the new message standards; and
- intention to expand the membership of the Business Committee to include representatives of issuers and investors.

KEY ISSUES DISCUSSED

Drawing on earlier presentations to other ASX hosted industry advisory groups, Elizabeth Avery (Gilbert + Tobin) advised members that they should avoid sharing commercially sensitive information amongst themselves in the course of, or in the margins of, the Committee's work, particularly where another party may act on the basis of that information.

The Committee was updated on CHES replacement activities undertaken since the last meeting including the release of the second drop of technical documentation and the upcoming opening of the customer development environment for the testing of the new software. There have also been a number of working and focus group meetings to assist with the development of the final design on some new feature solutions.

There was also a preliminary discussion on pricing of services once the new system is implemented. ASX outlined the recent announcement of pricing for different modes of access to the new system and noted that work on developing alternative pricing models for clearing and settlement fees is ongoing. Some members noted that they required longer term indications of the price of the direct node-based access (currently fee free for the first 3 years) before they could make a commitment to exploring that option. Members were also interested in understanding the potential pricing models for clearing and settlement fees and the principles that those models would be assessed against.

ASX also noted that, given the stage that the CHES replacement project is now at, it was appropriate to extend the membership of the Business Committee to industry bodies representing the interests of, and companies providing services to, issuers and investors. As such, ASX indicated that it would be shortly issuing invitations to industry associations and share registries.

Agreed Actions

ASX agreed to:

- offer any interested members with a presentation (deferred from this meeting) on the Corporate Action STP Phase 2 project in advance of the next Business Committee meeting; and
- revise the Business Committee Charter to remove the requirement for industry associations to confirm which of its members supported a particular recommendation.

Minutes

Business Committee Meeting

Date	4 April 2019	Time	12:00pm – 2:00pm
Location	ASX Offices – Level 1, 20 Bridge Street, Sydney		

Governance of industry advisory committees

1. Presentation by Elizabeth Avery (Gilbert + Tobin) on the impact on industry-based advisory committees of changes to the Competition and Consumer Act, for the information of committee members.

Service Performance

2. Cash Market Clearing and Settlement - Operating Performance

CHES Replacement Project

- a) CHES Replacement
 - Software development update
 - Customer engagement activities
3.
 - b) Pricing and fee information update
 - c) ISO 20022 Technical Committee Report and Minutes

Clearing and settlement services

4. Recap and update on Corporate Action STP Phase 2

Administration

- a) Minutes from the 29 November 2018 Business Committee Meeting
5.
 - b) Business Committee Membership
 - c) Forward work program
 - d) Other matters

6. **Next Meeting** - 18 July 2019

Business Committee Members

Company	Name	Job Title	Apologies
ABN AMRO Clearing	Matt McMahon (delegate)	Head of Operations	Barry Parker
ACSA	Rob Brown	Chief Executive Officer	
AFMA	David Lynch	Chief Executive Officer	
ASX	Peter Hiom	Business Committee Chair, Deputy CEO	
BAML	Rhys Cahill	Global Markets COO	
Bell Potter Securities	Rodd Kingham	Head of Operations – Transformation	
BNP Paribas	Mark Wootton	Head of Custody Product Australia & New Zealand	
Chi-X Australia	Mike Aikins	Chief Operating Officer	
Citi	Miles O'Connor	Director, Direct Custody & Clearing Securities & Funds Services	
CMC Markets	Andrew Rogers	Director, Broking	
CBA	Sheridan Thompson	Head of Strategic Development, CommSec	
Credit Suisse	Winston Loke	Australia Equities COO	
Deutsche Bank AG	Geoffrey Plaisted	Chief Operating Officer, Equities	
Goldman Sachs	Yen Le	Executive Director	
HSBC	Peter Snodgrass	Head of Direct Custody and Clearing	
J.P. Morgan	Craig Twentymen (delegate)	Head of Custody & Products	Jonathan Evans
Macquarie Group	James Indge	Cash Equities Business Manager	James Indge
Morgan Stanley	Rebecca Hill	Chief Operating Officer	
Morgans	Daniel Spokes (delegate)	Associate Director, Clearing and Settlement Manager	Peter Chisholm
National Australia Bank	Greg Bowrey	General Manager, Self-Directed Wealth Products & Markets	
NSX	John Williams	Head of Admissions	Ann Bowering
Pershing Securities	Leigh Conder	Chief Operating Officer	
SAFAA	Andrew Green	Chief Executive Officer	
Sydney Stock Exchange	Antony Tolfts	Listings Director	
UBS	Conor Foley	Chief Operating Officer	

ASX Management

Name	Job Title	Apologies
Tim Hogben	Chief Operating Officer	
Daniel Moran	General Counsel	
Hamish Treleaven	Chief Risk Officer	
Cliff Richards	Executive General Manager, Equity Post Trade Services	
Dan Chesterman	Chief Information Officer	
Kevin Lewis	Chief Compliance Officer (Agenda Item 3b)	
Sally Palmer	Deputy General Counsel	
Katie McDermott	General Manager, Equity Post Trade Services	
Gary Hobourn	Senior Economic Analyst, Regulatory and Public Policy	
Karen Webb	Senior Manager, Equity Post Trade Services	
Keith Purdie	Senior Manager, Equity Post Trade Services	
Suzy Munro	General Manager, Post Trade Operations	

Guest

Name	Job Title	Apologies
Elizabeth Avery	Partner, Gilbert + Tobin (Agenda item 1)	

INTRODUCTION

The Chair welcomed members and delegates to the first meeting of the year. He noted that Rebecca Hill was replacing Craig McGuire as Morgan Stanley's representative on the Committee.

The Chair noted James Indge (Macquarie Group) was an apology for the meeting. In addition there were a number of delegates for members: Matt McMahon (ABN-AMRO), Craig Twentymen (J.P. Morgan), Daniel Spokes (Morgans); and John Williams (NSX).

Two members dialled in to the meeting: Geoffrey Plaisted (Deutsche Bank AG) and Winston Loke (Credit Suisse).

AGENDA ITEM 1: GOVERNANCE OF INDUSTRY ADVISORY COMMITTEES

The ASX General Counsel introduced Elizabeth Avery from the Competition and Regulatory Group, Gilbert & Tobin to brief the Committee on the impact on the operation of industry advisory committees of the concerted practices prohibition sections of the competition law.

Ms Avery outlined the context for the presentation, including the operation of the concerted practices prohibition and the heightened regulatory scrutiny of financial services.

Ms Avery acknowledged the important and legitimate functions of the Business Committee, but noted that the concerted practices prohibition would apply even in this context in relation to interactions such as information exchanges between competitors and potential competitors with the purpose or effect of substantially lessening competition.

Ms Avery outlined measures that could be taken to mitigate this risk, including through good meeting governance and mindfulness by Committee members of the requirements of the law. This did not prevent the legitimate functioning of the Committee, or appropriate consultation with and among Committee members in relation to matters under consideration by the Committee.

Committee members discussed the presentation and questioned Ms Avery on aspects of the concerted practices prohibition particularly as it applied to activities of the Committee.

AGENDA ITEM 2: SERVICE PERFORMANCE

The ASX General Manager, Post-Trade Operations spoke briefly to the report included in the paper which covered the first two months of the year. She noted that volumes during that period were steady with those in the previous quarter. If the figures for March were included the numbers are consistent with a stronger March quarter.

In relation to other key metrics:

- Netting and settlement efficiency improved to 99.95% during the quarter
- Average daily batch value in CHES throughout the quarter was over \$10 billion; and
- Fail rates fell to below 0.2%.

She advised members that on 1 March 2019 the Registered Holder Collateral Cover Authorisation form changes came into effect, moving from a paper-based to an email solution. She thanked the committee who worked with ASX through the consultation and implementation phases of that solution.

There were no questions from members.

AGENDA ITEM 3: CHES REPLACEMENT PROJECT

a) CHES Replacement

The ASX Executive General Manager, Equity Post-Trade Services indicated that the system build is on track, both the work with Digital Asset and the integration of that software into other upstream and downstream ASX systems. He thanked those members and their teams that have actively contributed to the current focus and working groups that are helping to refine the final solution design.

The ASX General Manager, Equity Post-Trade Services reported that the project has been tracking to plan and hitting all its milestones, including DA software delivery, development of the test environments and the second release of technical documentation.

The Customer Development Environment (CDE) is on track to be made available at the end of April, providing participants with the opportunity to test the available functionality. The CDE provides an individual application development environment for each participant and enables users to test all the connectivity options as well as each piece of functionality as it is added to the CDE approximately every eight weeks.

The test environments will be populated with core static data including business calendars, test securities and specific user data including PIDs and participants can also request additional PIDs for internal testing. The CDE also includes auto-test responders to allow participants to simulate specific test scenarios such as auto-matching bilateral messages.

She noted that ASX had received a number of application forms from participants and vendors indicating their connectivity choices and encouraged others who have not yet submitted their applications to do so as soon as possible.

She also highlighted that the focus groups have been helpful in testing solution designs, facilitating practical feedback from customers that has prompted changes to simplify system design (e.g. account creation).

The ASX Senior Manager, Equity Post-Trade Services updated members on customer engagement activities since the Committee last met at the end of November. He noted that the December release of the first tranche of technical documentation has been supplemented with incremental releases of functional specs and more recently message and usage guidelines. The second technical documentation release took into account feedback from participants and provided clarifications, corrections or updates to the first set of documentation.

He reminded members that there would be a total of seven technical document releases with the last occurring in February 2020. The next (third) release in May 2019 will cover transfers, conversions and netting.

Over 450 known users have registered to receive the technical documentation and ASX has set up a dedicated email address for any queries or questions from stakeholders on technical documentation.

A webinar attended by 150 people in December outlined the new technical documentation library and how to navigate the site.

Since the Business Committee last met there have been five connectivity and integration working groups held covering topics including: the CDE, connectivity options and the application process. The next meeting will be held on 1 May. A forward plan for the working group was included in the Committee papers and provides more detail on the topics for the meetings out to July and listing the range of topics to be covered during the remainder of this year.

He noted that the connectivity and integration working groups have been opened up to allow additional attendees to attend via Skype. For example, 59 participants dialled into the latest meeting in addition to those present in the room.

The implementation and transition working group, which focuses on the operational readiness for the cut-over weekend in March or April 2021 met for the first time during March and over 120 people dialled into that webinar. The next session will take place in May. The recording of the initial webinar and the associated slides are available on the CHES replacement webpage. A range of other information (e.g. forward calendars, topics, and materials) is also publicly available on that webpage.

The Chair asked members if they had comments on the updates, the matters being discussed in the working groups, or if they had identified any topics that weren't being dealt with in those working groups or should be raised here.

A member asked how, in practice, the matters being discussed in the focus groups were being integrated into the more technical work streams dealing with the ISO 20022 standards. The ASX General Manager, Equity Post-Trade Services noted that in some cases the same firm representatives attended both the functional and technical work streams. The Technical Committee has the specific technical messages presented to them so, the groups work in conjunction. The plan is to, where possible, run the focus groups prior to the Technical Committee to enable the functional design solution to be discussed.

A member noted the earlier comment that the project is currently on track but asked if there are any dependencies that are outside of ASX's control (e.g. vendor preparedness, regulatory approvals) that might impact on the expected timelines.

The ASX Executive General Manager, Equity Post-Trade Services noted that ASX runs a risk matrix which identifies factors (internal and external) that could impact on the schedule. Most of the external dependencies are similar to other large transformation projects where there is a reliance on vendor and participant readiness, accreditation etc. He indicated that it is too early to identify any actual pressure points, but if there are any, they may emerge in a few months as testing in the CDE progresses.

A member asked about a recent article in the press referencing a report on views of some stakeholder groups about CHES replacement and if ASX could provide Committee members with a copy. The Chair noted that ASX had recently received a copy of the report, however it was not ASX's report to release.

b) Pricing and fee information update

The ASX Executive General Manager, Equity Post-Trade Services noted that ASX had sent participants advice on 12 March about access pricing for the new system. He noted that there were three broad categories of access for clearing and settlement services.

The first is direct access through a node-based connection to the distributed ledger which will be offered free for three years post go-live, and that, no later than 12 months prior to the end of that period, ASX would discuss with participants the subsequent charging regime.

A member indicated that the lack of clarity on the pricing after the three year free period makes it very difficult for participants to take a decision to commit resources to assessing the node based option. Another member agreed that if ASX was able to provide even a broad indication of the longer term pricing (a minimum of 5 years) for node access, it would be an important input to enable participants to decide whether to invest in the node based option. ASX agreed to review its pricing in light of this feedback.

The second connectivity option is traditional ISO 20022 messaging delivered either through an AMQP or SWIFTNet pathway. The pricing for AMQP connectivity will be \$495 per month. To offer the SWIFT option, ASX may need to upgrade its infrastructure to support the increased message volumes. Any increased infrastructure costs to support SWIFT connectivity will be passed back to those users that choose that method of access.

A third connectivity option, which would be similar to the current CHES PC service would mainly be of interest to lower volume users.

The three connectivity options are not mutually exclusive and participants may decide to use more than one option to architect workflows in the most efficient way for their needs.

The ASX Executive General Manager, Equity Post-Trade Services then turned to the framework for clearing and settlement pricing. He noted the existing structure of clearing fees (0.225 basis points of value cleared) was simple and does not drive customer behaviour. In contrast the structure of settlement fees did provide incentives for different business activity. ASX is talking to participants and undertaking analysis to better understand how they use the settlement service to assist ASX in developing alternate pricing models that may better suit the needs of customers.

The shift to ISO 20022 message standards and the availability of direct node-based access provides the opportunity to consider different ways to price these services. Moving away from a transactional basis of pricing to a value-based approach, a tiered fee structure, or a subscription-based model are all under consideration. However, more analysis by ASX is required to understand the impact these different structures could have on different types of settlement system users (e.g. high and low volumes users) and how it might impact usage of the system.

The Chair noted that once the analysis is further progressed, ASX will seek user input to understand which pricing structures fit best with their business models.

A member asked when ASX expected to have completed the detailed analysis and to finalise its new pricing arrangements. He noted that participants are fielding questions from their clients on pricing. The ASX Executive General Manager, Equity Post-Trade Services indicated that it would take several months to complete the work before

discussions with participants could begin, noting that the new fee regime would apply from the date of the new system going live in approximately 2 years.

A member asked if the ASX process was similar to the one that underpins the ASIC industry funding model whereby there is a cost to operate a system and the only question is how these costs are allocated amongst users in the most fair and efficient manner. If not, he asked what the basis would be for determining the costs of the new system now and into the future. In addition, he asked what principles ASX would use to determine the allocation of costs amongst users and whether these can be made available as it would be useful when communicating the rationale for the final pricing model to participants.

In response the ASX Executive General Manager, Equity Post-Trade Services indicated that ASX is examining the incentives and disincentives that the existing charging mechanism has on settlement and pre-settlement activities as well as the impact of different pricing models on different customers compared to today – and recognising that ASX has regulatory obligations to have a fair, transparent and non-discriminatory pricing model. The Chair also added that ASX will, in consultation with customers, determine the best pricing model in the context of the capital and operating costs of the business.

Another member asked if ASX would be recouping the costs of establishing node based connectivity through clearing and settlement fees. It was confirmed that the cost of providing node access would not be recouped through clearing and settlement fees.

c) ISO 20022 Technical Committee Report and Minutes

The ASX Chief Operating Officer advised that there had been three meetings of the Technical Committee since the last Business Committee meeting. He also noted that ASX and participants that use SWIFT have been going through a significant SWIFT-led attestation process around compliance with security protocols.

In December 2018, ASX made attestations with SWIFT across CHES, Austraclear, and ASX Collateral. There is an ongoing work program including independent verification of that work and dialogue with regulators and other third parties.

By the March 2019 Technical Committee meeting a total of 66 action items had been closed with 7 remaining open. The Committee broadly reconfirmed the principles underpinning the adoption of ISO messaging, although a couple of aspects were challenged, particularly the need to be mindful of the development effort required and the impact of the consolidation of messages.

ASX has committed to come back to the Technical Committee meeting on some of these issues. For example, ASX had redesigned the hierarchy of an account set up, in the context of improving the process for transfers and conversions, based on a cost benefit analysis of the initial proposal.

In the context of the earlier discussion on the risks to ASX achieving the target date for the new system the Chief Operating Officer noted that vendor development to the new ISO suite of messages and the associated SWIFT guidelines remains an area of potential risk as the project proceeds. There will be a particular focus on quickly bedding down critical messages and structures when the CDE opens.

There were no questions from Committee members on the report.

AGENDA ITEM 4: CLEARING AND SETTLEMENT SERVICES

a) Recap and Update on Corporate Action STP Phase 2

The Senior Manager, Equity Post Trade Services noted that given the time available she would provide an abbreviated version of the planned presentation of the Corporate Action STP Phase 2 project, suggesting that the section recapping the objectives and benefits be held over to the next Business Committee meeting. At this meeting she focused on the project update, with the first delivery of the project tied to the listing rule changes being targeted for July 2019.

ASX's Chief Compliance Officer spoke to the proposed listing rules changes, noting that the consultation period closed at the beginning of March and ASX had received 48 submissions. The nature of the proposed rule change and the significant amount of detailed feedback has required further consideration of the drafting of the rules.

The plan to have the rule changes in place for a 1 July 2019 start date are still on track, although this timing is contingent on regulatory approval. If it is not possible to achieve the 1 July start date it will probably be deferred to December.

The Chair indicated that it would be necessary to carry over the longer presentation on the project's objectives and benefits to the next meeting. However, given that a couple of Committee members had requested a broader discussion at this meeting, ASX was open to arranging separate meetings for any members who were interested prior to the next Business Committee meeting. One member indicated he thought there was sufficient interest from his members to justify a meeting.

AGENDA ITEM 5: Administration

a) Minutes from the 29 November 2018 Business Committee Meeting

The minutes of the 29 November 2018 meeting were approved without further change.

b) Business Committee Meeting Membership

The Chair informed the meeting that ASX, given the stage of the CHES replacement project, intends to invite additional members to join the Committee to provide input from issuers and investors. These would include industry associations representing these groups and share registries.

He asked if any members had any comments on the proposal. One member commented that he thought it was a good idea. Another asked if consideration had been given to inviting a representative of the Council of Financial Regulators to attend Business Committee meetings. The Chair noted that there was an open invitation for the regulators to attend any committee or working group meetings.

c) Forward work program

The Chair asked if members had any new items to add to the Committee's forward work plan. No additional items were proposed.

d) Other matters

A member asked about the status of the proposals raised in the Transfers and Conversions consultation paper last year. The Chair undertook to provide the member with an update on the current state of play with that process.

Another member noted that the revised Business Committee Charter (see agenda item 5b above) had not been amended to reflect an earlier agreed action to remove the requirement for industry associations to confirm which members supported particular recommendations. The Chair acknowledged that earlier discussion and agreed to include that amendment in the revised charter.

Next meeting

The next meeting is scheduled on 18 July 2019.

The meeting closed at 2.00pm.

Signed as a correct record of the meeting.

Chair

Date

BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 6B	
Topic	Forward Work Program
Date	18 July 2019
Purpose of this paper	To update Members on the forward work program of the Business Committee for 2019.

OVERVIEW

It is proposed to have two further meetings of the Business Committee over the course of 2019. The proposed Business Committee dates are:

- Thursday, 19 September 2019; and
- Thursday, 28 November 2019.

Subject to any input from members who wish to add additional items, the forward work program of the Business Committee in 2019 will be predominately focused on aspects of CHES replacement.

A second major stream of work which is expected to run until the first half of 2020 is Corporate Action STP Phase 2.

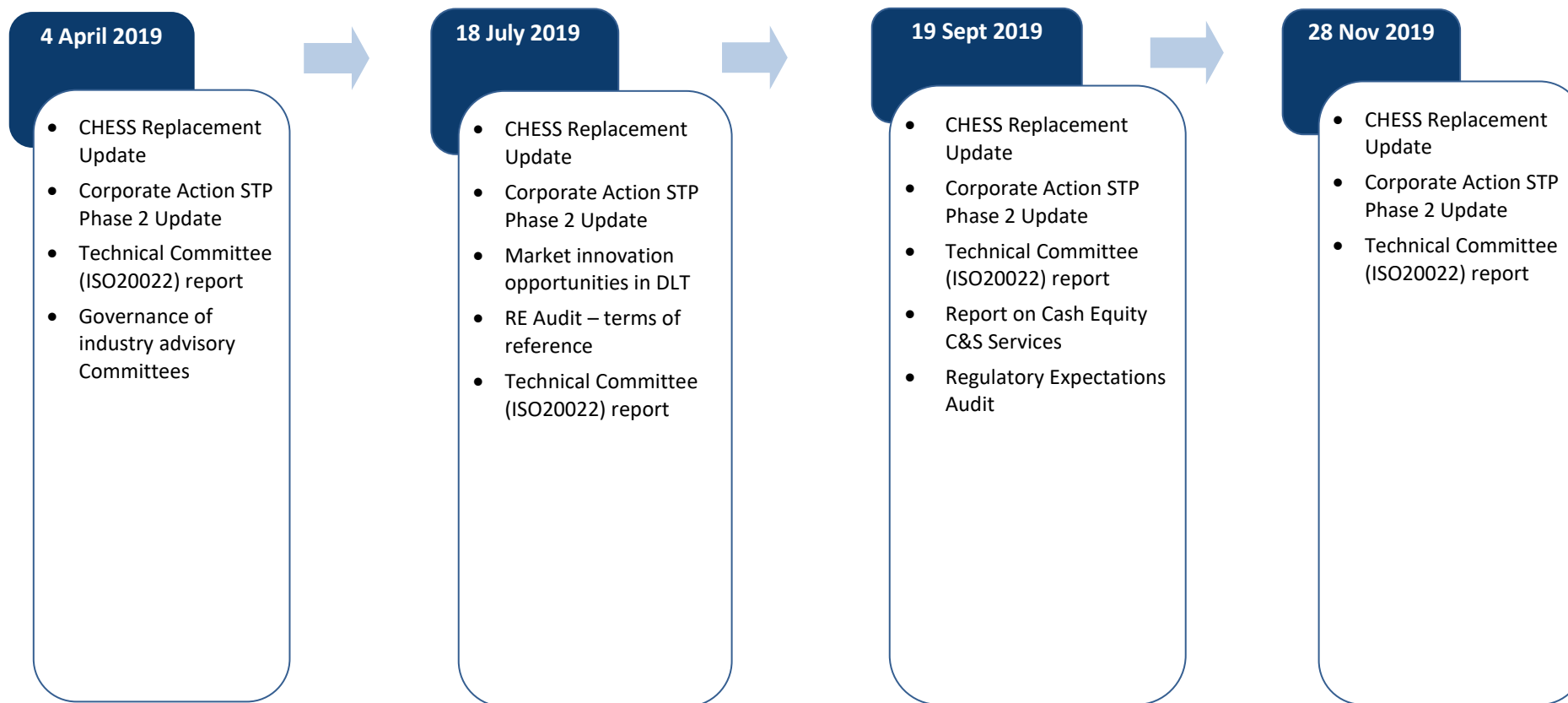
Members of the Business Committee are invited to suggest topics for inclusion in the forward work program at any time by contacting the Business Committee Secretariat.

Meetings of the ISO 20022 Technical Committee are expected to be held every month during 2019.

ATTACHMENTS

Attachment A – Business Committee Forward Work Program

Attachment A: Business Committee Forward Work Plan



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