

Minutes

Business Committee Meeting

Date	11 October 2017	Time	12.00pm – 2.00pm
Location	ASX Offices – Level 1, 20 Bridge Street, Sydney		

1. **Lunch served on arrival**
2. **Service Performance**
 - a. Cash Market Clearing and Settlement - Operating Performance
 - b. ASX Customer Service Survey Results
3. **Regulatory Matters**
 - a. Markets in Financial Instruments Directive (MIFID II)
 - b. Response from the Boards of ASX Clear and ASX Settlement
 - c. Annual Cash Equities Clearing and Settlement Reports
4. **CHES Replacement Project**
 - a. Business Requirements Working Groups
 - b. Technology Assessment of Digital Asset's DLT Platform
 - c. ISO 20022 Technical Committee Report and Minutes
5. **Administration**
 - a. Minutes from the 3 August 2017 Business Committee Meeting
 - b. Forward work program
 - c. Other matters

Next Meeting: 30 November 2017

Business Committee Members

Company	Name	Job Title	Apologies
ABN AMRO Clearing	Barry Parker	Chief Executive Officer	
AFMA	David Lynch	Chief Executive Officer	
ANZ	Andrew Koudrin (delegate)	Head of Execution Assurance and Middle Office	Peter Mullin
ASX	Peter Hiom	Business Committee Chair, Deputy CEO	
BAML	Rhys Cahill	Global Markets COO	
Bell Potter Securities	Dean Surkitt	Managing Director Retail	
BNP Paribas	Luc Renard	Head of Clearing & Custody	
Chi-X Australia	Mike Aikins	Chief Operating Officer	
Citi	Miles O'Connor	Director, Direct Custody & Clearing Securities & Funds Services	
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	Jeremy Follett	Executive Director Operations	
HSBC	Peter Snodgrass	Head of Direct Custody and Clearing	
J.P. Morgan	Steve Hacker(delegate)	Markets Operations	Jon Evans
Macquarie Group	James Indge	Cash Equities Business Manager	
Morgans	Daniel Spokes (delegate)	Manager, Transactional Services & Settlement	Peter Chisholm
Morgan Stanley	Craig McGuire	Head of Operations	
National Australia Bank	Greg Bowrey	GM, Self-Directed Wealth Products & Markets	
NSX	Ann Bowering	Managing Director	
Pershing Securities	Rob Forbes	Chief Executive Officer	
SAFAA	Andrew Green	Chief Executive Officer	
Sydney Stock Exchange	Tony Sacre	Chief Executive Officer	
UBS	Conor Foley	Chief Operating Officer	



ASX Management

Name	Job Title
Tim Hogben	Chief Operating Officer
Hamish Treleaven	Chief Risk Officer
Daniel Moran	Acting General Counsel
Eloise Wett	Executive General Manager, Operations
Cliff Richards	Executive General Manager, Equity Post Trade Services
Nick Wiley	Deputy General Counsel, Post-Trade
Diane Lewis	Senior Manager, Regulatory and Public Policy
Gary Hobourn	Senior Economic Analyst, Regulatory and Public Policy
Katie McDermott	General Manager, Post Trade & Issuer Services Operations
Natalie Hewitt	Legal Counsel, ASX Legal
Jane Peter	General Manager, Customer Experience

AGENDA ITEM 1: INTRODUCTION

The Chair welcomed members and delegates to the fifth meeting of the year and noted that there were a few delegates representing members who were unable to attend: Andrew Koudrin (ANZ); Steve Hackers (JP Morgan); and Daniel Spokes (Morgans).

Four members dialled in to the meeting: Dean Surkitt (Bell Potter); Winston Loke (Credit Suisse); Geoff Plaisted (Deutsche) and Daniel Spokes (Morgans).

AGENDA ITEM 2: SERVICE PERFORMANCE

a) Operating Performance Report

The ASX Executive General Manager, Operations spoke to the September quarter performance report (up to end August) noting that:

- Availability across CHES and the TAS was 100% for the period.
- ASX (+4.5%) and Chi-X (+8%) saw increases in the number of trades processed through the settlement facility compared to the June quarter, NSX (-10%) experienced a decline, while there no settlements for SSX.
- Overall trade value (on and off-market) decreased 7% to a daily average of \$6.3bn.
- Daily average cleared value fell 7% to \$4.55bn with netted value down 6% to \$1.8bn. Netting efficiency was steady at 99.94% on volume and 60% on value.
- The average daily settlement value was \$9.9 billion.
- ASX had a four trade rejections and Chi-X had none in the period.
- Failed trade rates remained very low around 0.24% for the period, down from the average fail rate of 0.33%. This equated to around 194 fails a day.
- There were two extensions to the batch settlement cut-off time during the quarter. Since the batch was moved to 11.30am the incidence of extensions has been very low, a total of three this year, generally relating to a participant technical issue.
- Daily average cash market margin was \$132m over the quarter, with a high of \$181m.
- There were no instances of delays in margin payments during the quarter.
- There were 4,500 transactions (up 35%) worth \$122m (up 18%) through the mFund service in the quarter. There are currently 182 funds on the platform across 56 fund managers with FUM of \$419m.

Members had no questions on the performance report

b) ASX Customer Service Survey Results

The General Manager Customer Experience provided members with feedback from the 3rd annual ASX customer survey conducted earlier this year.

She noted the encouraging results reflected ASX's continued focus on customer service improvement and building better relationships with customers. The results highlighted areas that have improved in the last year, in particular support from the technical account management team and the focus on assisting customers with the transition to the new futures trading platform.

There will be continued focus in these areas as well those where feedback indicated improvement was needed. For example: developing stronger relationships with customers at a strategic, whole of business level; understanding and addressing key pain points; and continuing to improve service levels, particularly online services.

She encouraged customers to reach out and provide direct feedback to her on the things that ASX is doing well and areas where we may be able to things to help them add value to their business.

In response to questions from members it was noted that ASX had received 219 responses out of a total of 2,400 online surveys sent out to individuals that had interacted with the ASX in the previous 12 months. Responses were

received from a cross-section of trading, clearing and settlement participants from both the cash equities and futures markets. Customers remain focused on ASX improving the consistency of their day-to-day interactions and the need to get quick answers to questions.

A member asked about any specific feedback on the introduction of the new trading platform, particularly given some features such as options filters have yet to be implemented. In response, it was noted that there was generally positive feedback on the implementation and that communication with customers had improved from the early days of the project. There had been some feedback around what was going to be in the next service release.

AGENDA ITEM 3: Regulatory Matters

a) Markets in Financial Instruments Directive (MIFID II)

Members were briefed by an ASX Legal Counsel and the General Manager, Post-Trade and Issuer Services Operations on ASX's activities in relation to the Markets in Financial Instruments Directive (MiFID) II and Markets in Financial Instruments Regulation (MiFIR) which come into effect on 3 January 2018.

ASX, as a non-EU trading venue and CCP, does not itself have any compliance obligations under the MIFID II legislation. However, ASX has been assisting customers in respect of their compliance obligations. These activities have been focused on providing input to assist in achieving equivalence decisions in relation to a number of obligations (share trading, derivatives trading, etc) and ASX's role as the National Numbering Agency (NNA) for Australia.

The effect of the share trading obligation is that EU investment firms will be unable to trade ASX shares (with limited exceptions) that are cross-listed on European trading venues unless ASX is recognised as an equivalent non-EU trading venue. This will apply from 3 January 2018. ASX's assessment is that just under 10% of ASX 200 listed shares are cross-listed on European trading venues.

ASIC is seeking an equivalence decision from the European Commission in relation to the share trading obligation, covering all relevant Australian trading venues. A decision is expected before the end of the year.

ASX is not aware of any significant issues that would prevent the equivalence decision being granted, but will need to wait for the actual decision. In this regard, it was noted that the equivalence assessment is not a line-by-line assessment against the entirety of the MiFID regime. It is a material equivalence test that will examine broad criteria such as the rules around effective supervision of the market, fair and orderly trading, investor protection and market integrity.

The derivative trading obligation is different in that EU investment firms will be unable to trade derivatives that are subject to the trading obligation on non-EU trading venues, unless the trading venue is recognised as an equivalent non-EU trading venue. Derivative products may only be determined to be subject to the derivative trading obligation if they are: subject to the EMIR clearing obligation; admitted to trade on at least one EU trading venue; and sufficiently liquid to trade on any EU trading venue. ESMA will publish a register of derivatives that are subject to the derivative trading obligation. ASX's assessment is that the derivative trading obligation will not apply to any ASX derivative products when MiFIR comes into force on 3 January 2018 because they're not currently subject to the EMIR clearing obligation. So there is no day one impact in the same way as there is for the share trading obligation. Nevertheless, ASIC is seeking an equivalence decision in relation to the derivative trading obligation, covering all relevant Australian trading venues, which is expected before the end of the year.

There is a second category of equivalence decisions which do not go to whether particular products can be traded by EU investment firms, but they do have the potential to make the products more commercially attractive. In particular, the MIFID II post-trade transparency regime does not apply to trades on non-EU trading venues with equivalent post-trade transparency regimes. The MIFID II commodities position limits regime does not apply to commodity derivatives traded on equivalent non-EU venues.

The application for these two equivalence decisions are made by an EU national regulator on request from an EU investment firm. The Dutch financial regulator is seeking an equivalence decision from ESMA for ASX and ASX 24, for both the post-trade transparency and commodities position limit regimes. It is expected that the application will be considered in the first tranche of applications by ESMA. These two equivalence applications are venue specific.

ASX as the NNA for Australia is supporting the Association of National Numbering Agencies (ANNA) in the provision of security identifiers required for MIFID II transaction reporting and post trade transparency obligations.

ASX is responsible for issuing International Security Identification Numbers (ISINs) for each security issued in Australia. There are also new security identifiers required, the Classification of Financial Instrument (CFI) provides additional detail on the classification of the product and the Financial Instrument Short Name (FISN) provides a standard and consistent description of the product across different venues.

For the existing cross-listed securities, ASX will create the additional identifiers and provide them to ANNA prior to 3 January 2018. ASX has also established a project to provide security identifiers for the full suite of securities we currently provide ISINs for by the end of Q1 2018.

In its role as NNA for Australia, ASX will also facilitate Australian issuers providing Legal Entity Identifiers (LEIs) on a voluntary basis to ASX to provide to ANNA. This is intended to assist issuers in connection with international reporting regimes where the issuer LEI is mandated.

A member asked about the scope of cross-listed securities that ASX will provide identifiers for prior to 3 January 2018. ASX invited Business Committee members that have assessed the cross-listed securities to be wider in scope to provide details of those securities (with the underlying rationale) for further consideration by ASX.

b) Response from the Boards of ASX Clear and ASX Settlement

The Deputy General Counsel, Post-Trade advised members that at its last meeting the ASX Clear and ASX Settlement Boards had considered and accepted the recommendation from the August Business Committee meeting on the inclusion of AMOs in the CHES Replacement Working Groups. He noted that the Board's formal response was included in the meeting papers.

Members had no questions or comments.

c) Annual Cash Equities Clearing and Settlement Reports

The Chair noted that the meeting pack for the meeting includes a clearing and settlement service developments report and a copy of the external audit on ASX's compliance with CFR's Regulatory Expectations.

The Executive General Manager Equity Post-Trade Services spoke to the services development report, identifying that the CHES replacement project had consumed a considerable amount of industry and ASX time and resources. However there had also been other service enhancements including: improvements to the process for transferring tax file numbers through CHES messages; introduction of a payment providers report; and establishing the ability to clear and settle transferrable custody receipts.

Members had no comments or questions on the clearing and settlement service developments report.

In relation to the audit report, the Senior Manager, Regulatory and Public Policy noted that ASX commissioned PwC to do the external audit of ASX's compliance with CFR's Regulatory Expectations, for the period October 2016 to June 2017. She reminded members that the Business Committee had considered the draft audit terms of reference in the May 2017 meeting.

The audit involved an assessment of documentation from ASX, including policies and procedures, as well as feedback sought by PwC from members of the Business Committee. The auditors undertook a reasonable assurance audit, which had a positive form of opinion in accordance with Australian Auditing and Accounting Standards.

PwC provided an unqualified audit opinion that found that ASX had complied in all material respects with the Regulatory Expectations. The full audit report has also been provided to the CFR regulatory agencies.

The auditors also made two recommendations around ASX appropriately documenting the annual review of Business Committee membership and putting in place separate accountability arrangements for the area responsible for the compliance framework and the area responsible for the internal assessment of ASX's compliance with the framework.

A member asked how the comments received from the Business Committee were incorporated into the audit report as he didn't see them reflected in the conclusions or in the analysis as to whether the policies are effective. He noted that the audit report indicated that the auditor would be discussing some issues raised with ASX management. Two members commented that there did not seem to be a formal channel for reporting back on ASX's response to these comments to the Business Committee.

In response, it was noted that the feedback from Business Committee members that was within the scope of the audit was tested to reach their conclusions around ASX's compliance with the relevant Regulatory Expectations. PwC also included a high level summary of the themes from the feedback received from nine members in the audit report. However, the auditors were not required to assess the operation of the Business Committee.

It was noted that ASX did not have access to all of the survey responses as some had been submitted in confidence. It was also noted that on particular issues, divergent views were provided from different respondents making it difficult to draw conclusions. ASX's Senior Manager, Regulatory and Public Policy, did indicate that ASX was willing to have bilateral meetings with interested members to discuss their feedback on the Business Committee.

The Chair confirmed that to the extent that the discussion with the auditor raised issues that should be conveyed to the relevant ASX Boards, then ASX management would do that.

ASX's Acting General Counsel noted that once the upcoming milestones on the CHES Replacement Project had been met, it might make sense to review how the Business Committee process is working, including the topics raised by members during the audit process, and considering whether changes could be made to improve the processes for getting industry input.

A member suggested that, as an example, it may be worth considering whether next year the auditor should attend the Business Committee meeting to discuss their process and conclusions.

AGENDA ITEM 4: CHES Replacement Project

a) Business Requirements Working Groups

The Executive General Manager, Equity Post-Trade Services indicated there has been continuing active engagement by working group attendees which have made the sessions very productive. The participants have said they find the process useful, particularly the sharing of information and perspectives between different stakeholder groups.

The Transfers and Conversions and the Settlement Enhancements working groups have completed their work and the overall working group process is running ahead of schedule. There are two remaining working groups: Data storage, Delivery and Reporting; and Non-Functional Requirements.

Following the last of the functional working groups ASX will be asking working group participants to assign a high, medium or low ranking to the 40-odd business requirement inputs likely to be come out of the working groups.

Many excellent business requirements have been identified but some of them may eventually sit outside of Day 1 CHES replacement, as they will require significant industry and/or regulatory consultation before being progressed.

The themes coming out of the transfers and conversions groups were: the significant appetite for the standardisation of formats and structure of information and the elimination of, or significant reduction in, paperwork in the process and replacing it with standardised electronic notifications.

The settlement enhancements working group highlighted: customer demand for a single point of access to view the issuer sub-register to identify SRNs associated holdings; and facilitating the option to elect for early settlement. Although it was acknowledged that different groups place different priorities from some of these enhancements.

The Chair referred members to significant detail in the meeting pack on each of the business requirements. He suggested that this material will assist members to prepare for the November Business Committee meeting where the relative priorities of the business requirements will be discussed.

The Executive General Manager Post-Trade Services advised the Committee that an electronic survey will be sent out to working group participants to get their feedback on the relative priorities. This prompted a discussion about who might be the appropriate people within firms to receive the survey and whether there were benefits in having a single person coordinate the response for each firm.

The Chair committed to ASX communicating with all the organisations who took part in, or expressed interest in attending, any of the working groups so they could nominate the appropriate person within their organisation.

He emphasised that while the survey is an important input, ASX will take into consideration a broad set of stakeholder views before it determines the final Day 1 functionality for CHES replacement.

A member asked about how the prioritisation process would operate for functional requirements that can deliver benefits outside of CHES replacement. As an example, it was noted that for issues which are likely to be classified as a high priority, such as corporate action STP, these would be de-coupled from CHES replacement and pursued separately.

b) Technology Assessment of Digital Asset's DLT Platform

The Executive General Manager, Equity Post-Trade Services addressed the process that ASX has been undertaking to assess distributed ledger technology (DLT). He noted the process fits within ASX's normal governance framework for assessing technology projects and follows best-practice used to make decisions on the choice of technology and vendor.

There is a schedule of 12 software deliveries for this year. So far there have been nine high quality software releases with very low defect levels, with those resolved within the service level agreements agreed with the vendor.

To date the focus of the software deliveries has been the functional requirements around: trade registration; pre-settlement activities; the creation of securities, participants and other users in the system; and executing workflows associated with DVP settlement and selected corporate actions (rights issues and dividend payments). Modelling those two corporate actions allows an assessment of the system's ability to handle examples of complex workflows (rights issues) and high frequency events (dividend payments).

The focus will shift in the next couple of months to the non-functional assessment of that software. It is important to test, in a production-like environment, how the system performs under heavy transaction volumes and executing complex real-life transactions. For example, assuming double the volumes of the busiest day ever experienced on the market and assessing if the system performs better, or at least as well, as the existing CHES system

The resilience of the system also needs to be tested. For example, how the system is recovered following a component failure and if that can be achieved without interrupting system performance or if the system can be recovered quickly and efficiently. Another scenario to be tested relates to if there is a critical site outage how long does the system take to failover and failback and does it do so efficiently. It was noted that such tests would be conducted regardless of the technology being used.

In terms of DLT specific testing, ASX has commissioned two reviews by external experts of the cybersecurity and privacy features of the cryptography that underpins the distributed ledger component of the technology. Once the reviews have been completed, ASX will present the Business Committee with the high level outcomes.

A member asked series of questions regarding the DLT assessment process including whether the:

- replacement system will be cheaper to run than CHES system; if ASX is commissioning a third-party assessment of those costs; and how ASX is managing any conflicts of interest given their investment in the vendor, Digital Asset?
- non-functional working group will examine system capacity, resilience, and the structure of the DLT solution?
- representatives of the third-party reviewers of the security aspects of the technology would present to the next Business committee meeting?

The Chair noted that ASX would be assessing the costs of CHES replacement and had no plans to conduct a third-party assessment of those. The Executive General Manager Equity Post-Services stated that the investment in Digital Asset did not raise any conflict of interest issues. It was also confirmed that the two external reviewers of the security aspect of the DLT assessment would not be available for the next Business Committee meeting.

The Executive General Manager Equity Post-Trade Services noted that the non-functional working group would focus on the feedback raised in response to the earlier consultation processes, including system resilience. However, if there are other items that participants want included they should let ASX know, recognising that the workshops are designed to identify problem statements.

He explained that, for security reasons, if ASX proceeds with a DLT-based solution, participants that connect through a node would not have a (encrypted) copy of the entire database that exists within ASX. However they would have access to a copy of information relevant to their customer transactions. That is, effectively the same situation that a participant would find itself under existing CHES arrangements. The DLT distribution model would not be discussed at the non-functional working group as that would presuppose a positive decision on DLT.

c) ISO 20022 Technical Committee Report

The ASX Chief Operating Officer noted the high levels of engagement by members of the technical committee with around 60 to 80 people participating in each meeting. The input of participants has been important in what is a highly complex area and will be critical in reaching a solution of benefit to the industry.

The Committee is now focused on mapping the second tranche of messages. The first tranche focused on mapping 133 CHES messages to an ISO standard and the committee is now working on the balance of the CHES messages. The work is proceeding at a rapid pace, about 30 messages a fortnight, in consultation with SWIFT.

The Committee is focused on matters such as: transaction IDs; timestamps; delivery of reporting; settlement instructions; layers of identification needed on settlement messages; use of supplementary data; etc.

The mapping work remains on track to be completed by the end of February 2018. The business requirement inputs coming out of the working groups will also need to be factored in to the mapping exercise at the appropriate time.

The technical committee met on 10 October and endorsed ASX participating in a global ISO standards securities evaluation group. Both SWIFT, the ISO registration authority, and Standards Australia have endorsed ASX's participation.

It is important that Australia has a seat at the ISO standards table to enable us to have an input to decisions that are made around securities transaction services. It will provide a voice for Australia in the decisions that will shape any changes to global ISO 20022 schemas or fields in the messaging structures that will impose costs on industry.

ASX has undertaken to advise the technical committee and the broader industry of the proposed governance arrangements to capture industry views prior to our attendance at those meetings and to advise industry of the outcomes of those discussions. This will be discussed at the November technical committee meeting.

A member asked about the estimated 10 per cent of CHES messages which don't map neatly to ISO messages and how these would be handled. In response, it was noted that 10 new messages developed so far don't fit into an ISO standard or current schema. These messages are currently being reviewed and the intention is to test them with the

technical committee. At that point we will make a decision, based in-part on advice from SWIFT, on whether to seek registration with the ISO authority given the rigorous process and an assessment of the probability of success.

AGENDA ITEM 5: Administration

a) Forward work program updated

The Chair noted that there would be more focus on the forward work program for 2018 at the next meeting particularly given the focus for CHES replacement will shift to implementation during the period. Progressing Corporate Action STP Phase 2 is one area that has already been identified. He also reminded members to advise ASX if they had any additional items to suggest for the work program.

b) Minutes from the 3 August 2017 meeting

The minutes of the 3 August meeting were approved without change.

c) Other matters

The Chair noted that the 3 August Business Committee minutes would be placed on the ASX website and the FY17 Management Accounts have already gone up on the website.

Next meeting

The next meeting is scheduled to be held on Thursday 30th November 2017.

The meeting closed at 1.40pm.

Signed as a correct record of the meeting.



Chairman

1/12/17

Date