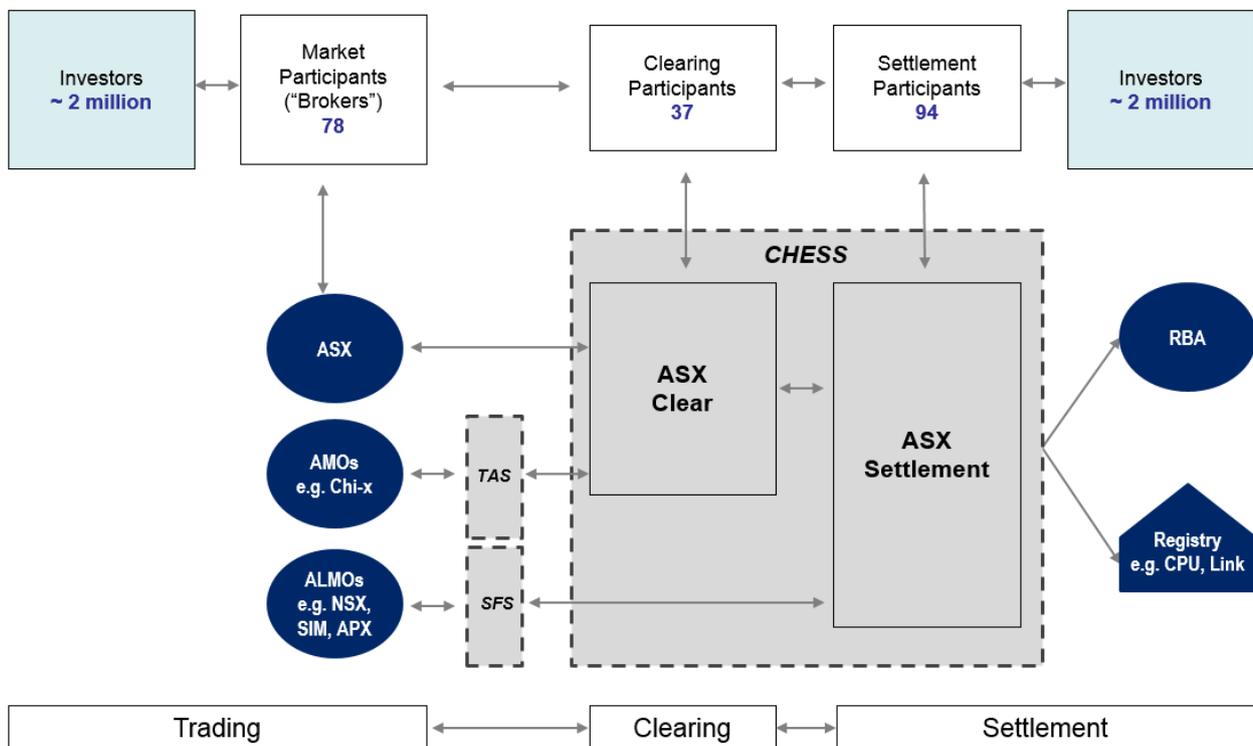


BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 2A

| | |
|------------------------------|--|
| Topic | Report on the operational performance of cash market clearing and settlement services |
| Date of the Meeting | 2 March 2017 |
| Purpose of this paper | To report on key performance metrics for ASX's clearing and settlement services. |
| Action required | To note the agenda paper. |

BACKGROUND

Market Structure Overview



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

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

Novation

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

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

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

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

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

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

Netting

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

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

Settlement

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

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

Service availability

ASX's critical processes of novation, netting and settlement 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 period November 2016 to January 2017¹, the average monthly system availability was 100% for CHES. The average monthly availability of CHES has been 99.99% between November 2011 and January 2017.

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 period November 2016 to January 2017, the average monthly system availability was 100% for the TAS. The average monthly availability of the TAS has been 99.99% between November 2011 and January 2017 (which is the same as CHES).

¹ December 2016 meeting reported to 31 October 2016.

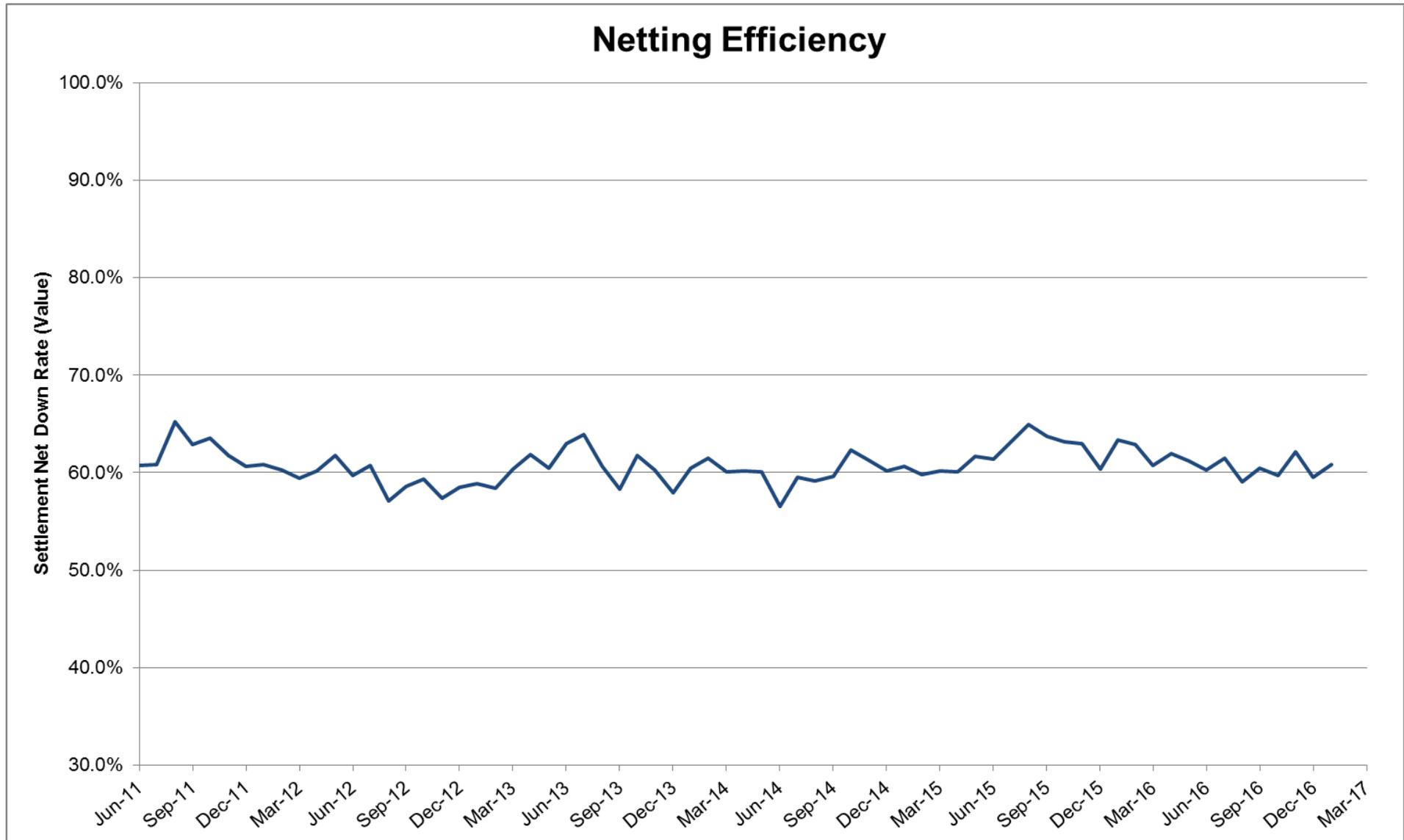
REPORTING ON CLEARING AND SETTLEMENT SERVICE PERFORMANCE

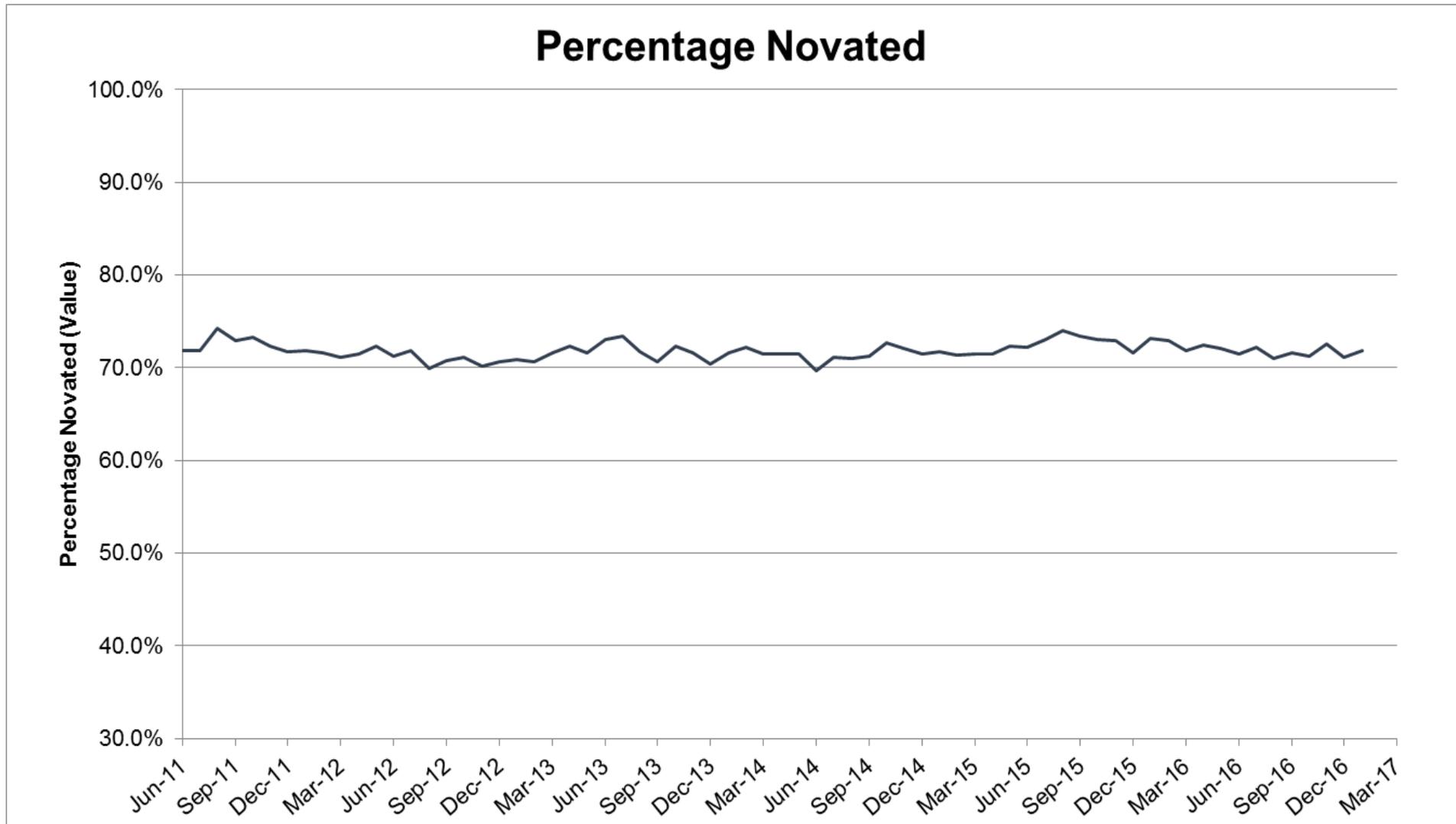
The key metrics noted above on novation, netting efficiency and settlement efficiency for the period November 2016 to January 2017 are reported in Attachment A. They are also supported by charts demonstrating a longer reporting period in Attachment B.

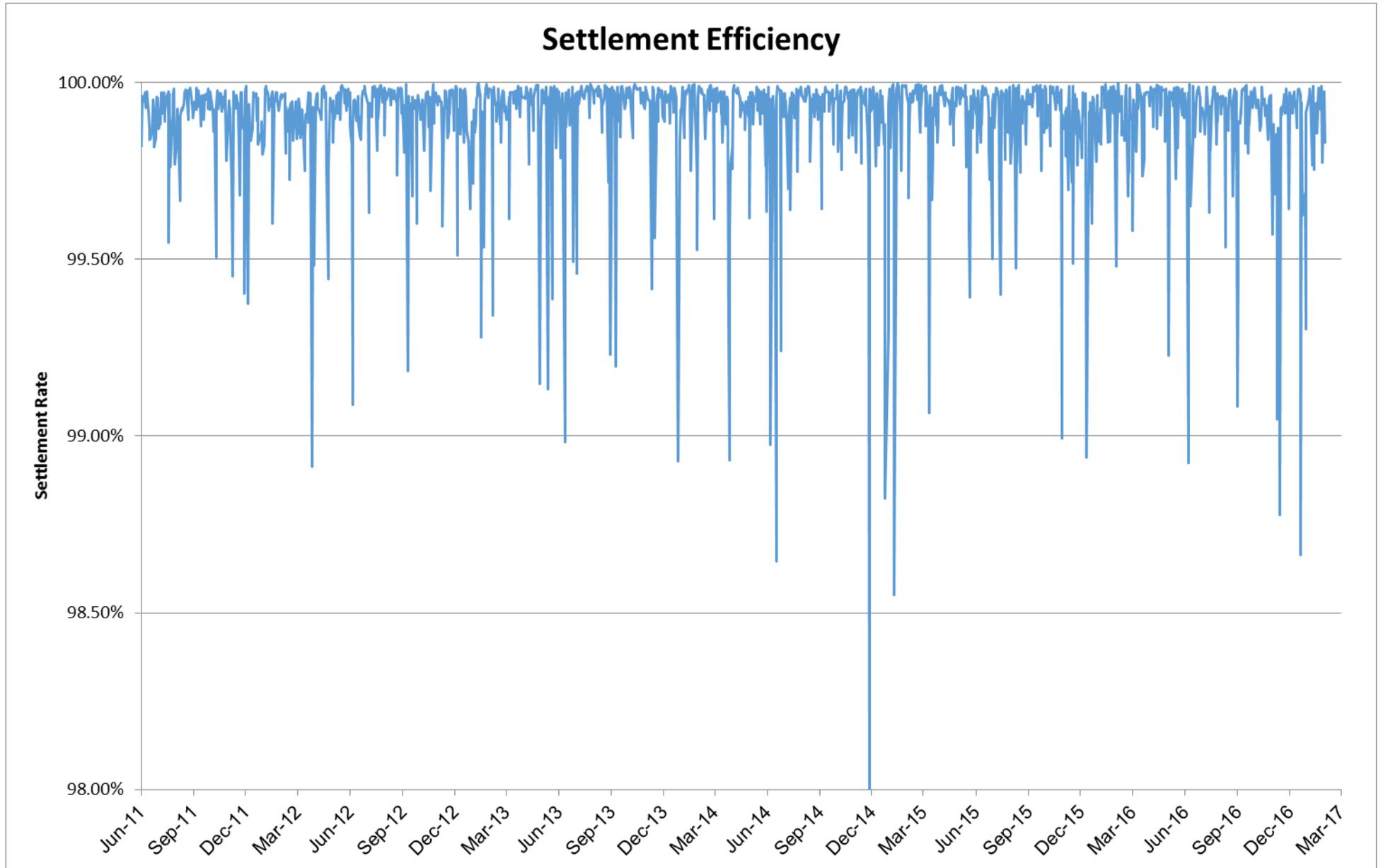
ATTACHMENT A – SUMMARY METRICS RELATING TO THE PERFORMANCE OF ASX'S CLEARING AND SETTLEMENT SERVICES

| | January 2017 | December 2016 Quarter | September 2016 Quarter |
|---|----------------|-----------------------|------------------------|
| System Availability (CHES) | 100% | 100% | 100% |
| System Availability (TAS) | 100% | 100% | 100% |
| Total Trades Accepted (ASX) | 19,588,353 | 66,042,882 | 66,861,781 |
| Total Trades Rejected (ASX) | 0 | 0 | 4 |
| Total Trades Accepted (Chi-X) | 6,537,267 | 21,957,234 | 20,458,781 |
| Total Trades Rejected (Chi-X) | 0 | 2 | 0 |
| Total Settlements (SSX) | 6 | 8 | 1 |
| Total Value of Settlements (SSX) | \$0 | \$0 | \$0 |
| Total Settlements (NSX) | 143 | 402 | 389 |
| Total Value of Settlements (NSX) | \$281,770 | \$2,099,543 | \$1,728,613 |
| Daily Average Traded Value (On and Off Market) | \$5.3 billion | \$6.9 billion | \$6.28 billion |
| Daily Average Cleared Value | \$3.82 billion | \$4.95 billion | \$4.49 billion |
| Percentage Novated | 71.9% | 71.7% | 71.6% |
| Daily Average Cleared Value Post-Netting | \$1.49 billion | \$1.95 billion | \$1.78 billion |
| Netting Efficiency | 60.9% | 60.5% | 60.3% |
| Daily Average Settled Value (Including Non-Novated) | \$7.2 billion | \$9.9 billion | \$9.3 billion |
| Settlement Efficiency | 99.92% | 99.84% | 99.89% |

ATTACHMENT B – PERFORMANCE OF ASX'S CLEARING AND SETTLEMENT SERVICES FROM JUNE 2011 TO JANUARY 2017







BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 2B

| | |
|------------------------------|--|
| Topic | Management Accounts |
| Date of the Meeting | 2 March 2017 |
| Purpose of this paper | To inform the Business Committee of the cash market clearing and settlement management income statements for the half-year ended 31 December 2016. |
| Action required | To note the agenda paper. |

On 17 February 2017, ASX published, together with ASX Limited's half-year financial results, cash market clearing and settlement management income statements for the half-year ended 31 December 2016.

Both management income statements have been prepared based on management information provided in accordance with ASX's internal cost allocation and transfer pricing policy between ASX group entities for clearing and settlement of cash equities in Australia. The ASX internal cost allocation and transfer pricing policy is available on the [ASX website](#).

The cash market clearing and settlement management income statements for the half year ended 31 December 2016 are provided in Attachments A and B.

CASH MARKET CLEARING

The cash market clearing management income statement reflects a profit after tax of \$15.1 million, an economic profit after capital charge of \$4.4 million and a return on capital of 12.6%.

Total capital allocated to cash market clearing is \$238.1 million, consistent with the level at 30 June 2016 and up on the 31 December 2015 level. The increase reflects the additional business risk capital required to support the CCP under the ESMA standards, as ASX Clear received accreditation from ESMA. It comprises default capital, business / operational risk capital and invested capital representing the value of fixed assets and intangibles supporting this activity.

The management accounts do not include clearing of equity options.

CASH MARKET SETTLEMENT

The cash market settlement management income statement reflects a profit after tax of \$14.1 million, an economic profit after capital charge of \$7.4 million and a return on capital of 19.5%.

Total capital allocated to cash market settlement is \$143.9 million. This comprises business / operational risk capital and invested capital.

ATTACHMENTS

Attachment A – Cash Market Clearing Management Income Statement

Attachment B – Cash Market Settlement Management Income Statement

Management Income Statement – Cash Market Clearing

| | 1H17 \$ Million | 1H16 \$ Million |
|---|---------------------------|---------------------------|
| Revenue | | |
| Cash market clearing | 26.7 | 28.8 |
| Revenue sharing rebate | - | (1.7) |
| Participation fees and technical services | 0.2 | 0.2 |
| Operating revenue | 26.9 | 27.3 |
| Expenses | | |
| Staff | 4.1 | 3.8 |
| Equipment | 0.7 | 0.8 |
| Occupancy | 0.6 | 0.5 |
| Administration | 0.5 | 0.6 |
| Cash operating expenses | 5.9 | 5.7 |
| EBITDA | 21.0 | 21.6 |
| Depreciation and amortisation | 1.0 | 1.0 |
| EBIT | 20.0 | 20.6 |
| Net interest income | 1.6 | 2.0 |
| Total net interest income | 1.6 | 2.0 |
| Profit before tax | 21.6 | 22.6 |
| Tax expense | (6.5) | (6.8) |
| Profit after tax | 15.1 | 15.8 |
| Capital charge | (10.7) | (10.0) |
| Economic profit after capital charge | 4.4 | 5.8 |
| EBITDA margin | 78.1% | 79.1% |
| Total Capital | 238.1 | 218.1 |
| Return on capital (per annum) | 12.6% | 14.4% |

Management Income Statement – Cash Market Settlement

| | 1H17 \$ Million | 1H16 \$ Million |
|---|--------------------|--------------------|
| Revenue | | |
| Cash market settlement | 26.1 | 23.5 |
| Revenue sharing rebate | (1.1) | (0.8) |
| Settlement access revenue | 0.1 | 0.1 |
| Participation fees | 0.2 | 0.2 |
| Settlement fail fees | 0.9 | 0.9 |
| Technical services | 0.3 | 0.2 |
| Operating revenue | 26.5 | 24.1 |
| Expenses | | |
| Staff | 4.6 | 4.3 |
| Equipment | 1.1 | 1.1 |
| Occupancy | 0.7 | 0.6 |
| Administration | 0.7 | 0.9 |
| Cash operating expenses | 7.1 | 6.9 |
| EBITDA | 19.4 | 17.2 |
| Depreciation and amortisation | 0.1 | 0.1 |
| EBIT | 19.3 | 17.1 |
| Net interest income | 0.9 | 1.2 |
| Total net interest income | 0.9 | 1.2 |
| Profit before tax | 20.2 | 18.3 |
| Tax expense | (6.1) | (5.5) |
| Profit after tax | 14.1 | 12.8 |
| Capital charge | (6.7) | (6.8) |
| Economic profit after capital charge | 7.4 | 6.0 |
| EBITDA margin | 73.1% | 71.5% |
| Total Capital | 143.9 | 143.2 |
| Return on capital (per annum) | 19.5% | 17.8% |

BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 3A

| | |
|------------------------------|---|
| Topic | Business Committee Charter and Revised Code of Practice |
| Date of the Meeting | 2 March 2017 |
| Purpose of this paper | To provide a revised Charter for the Business Committee that reflects its role in providing input to the Boards of ASX Clear and ASX Settlement under ASX's updated Code of Practice. |
| Action required | To note the revised Charter of the Business Committee. |

Charter of the Business Committee

The Charter of the Business Committee has been revised to reflect the role of the Business Committee under the updated ASX Code of Practice in providing input to ASX Management and the Boards of ASX Clear and ASX Settlement on the ongoing operation and development of cash equities clearing and settlement infrastructure and services.

The Charter draws from the commitments made by ASX in the 2016 Code of Practice and the Council of Financial Regulators' Policy Statement 'Regulatory Expectations for Conduct in Operating Cash Equity Clearing and Settlement Services in Australia' (Regulatory Expectations). It sets out the role, membership and administrative matters for the effective functioning of the Business Committee.

As set out in the revised Charter, the role of the Business Committee is to provide:

- input for consideration by ASX Management and the Boards of ASX Clear and ASX Settlement on the ongoing operation of cash equities clearing and settlement infrastructure and services provided by ASX;
- input for consideration by ASX Management and the Boards of ASX Clear and ASX Settlement on setting the ASX investment strategy for cash equities clearing and settlement infrastructure and services development, and the system design, operational arrangements and implementation plan for new cash equities clearing and settlement infrastructure and services provided by ASX;
- advice to ASX Management to assist in progressing cash equities clearing and settlement initiatives of interest to the industry, with the aim of facilitating service innovation and improving overall market efficiency; and
- a mechanism for ASX Management and the Boards of ASX Clear and ASX Settlement to consult clearing participants, settlement participants and other market operators regarding their strategic plans and investment decisions in relation to the design, operation and development of the core clearing and settlement infrastructure and services for the Australian cash equities market.

The new Charter of the Business Committee is provided in Attachment A.

Updated Code of Practice

ASX has clearly set out its commitment to comply with the Regulatory Expectations on the front page of its updated Code of Practice. The purpose of the Code of Practice is not to duplicate all of the wording from the Regulatory Expectations. Instead, it provides a summary of ASX's key commitments to users of ASX's cash equities clearing and settlement infrastructure and services.

At the last meeting, two members questioned whether the wording of the updated Code of Practice, particularly in relation to the concept of 'users', was consistent with the wording in the Regulatory Expectations. ASX has updated the Code of Practice to emphasise that the term 'users' in the Code of Practice has the same meaning as in the Regulatory Expectations.

ASX has also explained who is encompassed by the terms 'end users' and 'other relevant stakeholders' in the definition of 'users'. In the Regulatory Expectations, users are broadly defined to 'include participants of the ASX CS facilities; end

users; unaffiliated market operators, central counterparties and settlement facilities; technology service providers; and other relevant stakeholders'. ASX takes the term 'end users' to include issuers and investors, and the term 'other relevant stakeholders' to include share registries and payment providers.

At the last meeting, a member queried the use of the terms 'market' and 'meaningful engagement' in the Code of Practice. These two terms are used in the introductory paragraph to the list of commitments in 'Section 1 Customer and Stakeholder Engagement' in the Code of Practice. The introductory paragraph is immediately followed by ASX's express commitments to users, including:

- ASX will invest in the ongoing operation and development of the core cash equities clearing and settlement infrastructure promptly and efficiently. Such investments will seek to meet the needs of users, recognising the diversity and differing needs of users;
- ASX will maintain an advisory Business Committee consisting of representatives of key users of cash equities clearing and settlement services;
- ASX will hold quarterly Business Committee meetings for the purpose of providing input to Management and the Boards of ASX Clear and ASX Settlement on the ongoing operation and development of cash equities clearing and settlement infrastructure and services (additional meetings will be convened if deemed necessary by members);
- The Boards of ASX Clear and ASX Settlement will give due consideration to any material matters raised by, or recommendations of, the Business Committee. The Boards of ASX Clear and ASX Settlement will jointly provide a written response to Business Committee recommendations, including an explanation of why any recommendations had not been followed;
- ASX will consult the Business Committee on its investment decisions in relation to the design, operation and development of new cash equities clearing and settlement infrastructure and services, including the development of a transition and implementation plan for new infrastructure; and
- ASX will report annually to the Business Committee on the cash equities clearing and settlement service developments and investment projects progressed, and how it has taken into consideration the views of users.

At the last meeting, the same member queried the lack of a reference to a 'comply or explain' mechanism or other accountability arrangements to users in the Code of Practice. The Code of Practice incorporates the following accountability mechanisms:

- The Boards of ASX Clear and ASX Settlement will give due consideration to any material matters raised by, or recommendations of, the Business Committee. The Boards of ASX Clear and ASX Settlement will jointly provide a written response to Business Committee recommendations, including an explanation of why any recommendations had not been followed
- ASX will report annually to the Business Committee on the cash equities clearing and settlement service developments and investment projects progressed, and how it has taken into consideration the views of users

The same member also queried the lack of a reference to the term 'user input to governance'. ASX meets this aspect of the Regulatory Expectations through the commitments relevant to the Business Committee set out in the Code of Practice and the arrangements that are in place governing the operation of the Business Committee, including its Charter, which provide the basis for user input from a key set of users in to ASX's governance. The Technical Committee is another forum for user input in to ASX's governance. The membership of the Technical Committee is wider than that of the Business Committee to allow it to draw on other relevant expertise, for example, software vendors and share registries are members of the Technical Committee. The Charter of the Business Committee explicitly provides for the Business Committee to bring other expertise in to the Technical Committee. ASX will also engage with, and seek input from, the other relevant user groups on an ongoing basis through other forums. The input obtained from other user groups will also be provided to the Boards of ASX Clear and ASX Settlement.

The updates to the Code of Practice are included in mark-up in Attachment B. The updated Code of Practice will be provided to the Council of Financial Regulators.

CHARTER OF THE ASX BUSINESS COMMITTEE

The ASX Business Committee was convened by ASX Limited (ASX) under its Code of Practice in August 2013. In October 2016, ASX updated its Code of Practice (the ASX Cash Equities Clearing and Settlement Code of Practice) to set out its commitment to comply with the Regulatory Expectations for the Conduct of Cash Equity Clearing and Settlement Services in Australia (Regulatory Expectations), and its commitments to users in managing clearing and settlement infrastructure and services for the Australian cash equities market. Under the revised Code of Practice, the role of the Business Committee was updated as a mechanism for input in to ASX's governance framework.

This charter draws from the commitments made by ASX in the Code of Practice and the Regulatory Expectations. It sets out the role, membership and administrative matters for the effective functioning of the Business Committee.

1. Role of the Business Committee

1.1. The role of the Business Committee is to provide:

- input for consideration by ASX Management and the Boards of ASX Clear and ASX Settlement on the ongoing operation of cash equities clearing and settlement infrastructure and services provided by ASX;
- input for consideration by ASX Management and the Boards of ASX Clear and ASX Settlement on setting the ASX investment strategy for cash equities clearing and settlement infrastructure and services development, and the system design, operational arrangements and implementation plan for new cash equities clearing and settlement infrastructure and services provided by ASX;
- advice to ASX Management to assist in progressing cash equities clearing and settlement initiatives of interest to the industry, with the aim of facilitating service innovation and improving overall market efficiency; and
- a mechanism for ASX Management and the Boards of ASX Clear and ASX Settlement to consult clearing participants, settlement participants and other market operators regarding their strategic plans and investment decisions in relation to the design, operation and development of the core clearing and settlement infrastructure and services for the Australian cash equities market.

2. Membership

2.1. The Business Committee will comprise representatives of clearing participants, settlement participants, alternative market operators and relevant industry organisations. ASX Clear and ASX Settlement will appoint members of the Business Committee.

2.2. Each Business Committee member is expected to:

- nominate a representative to attend meetings of the Business Committee who has the authority to speak on its behalf and has the expertise to make a meaningful contribution at such meetings;
- represent the views and interests of its organisation or constituency, as the case may be, on matters being considered by the Business Committee; and
- share with the Business Committee appropriate and useful information relevant to the role of the Business Committee.

2.3. The objective is for the Business Committee to comprise executives with a deep understanding of clearing and settlement, for example, Chief Operating Officers. In some circumstances, it may be appropriate for the Business Committee to appoint and convene technical committees to assist in the

performance of its role. Technical committees will report to the Business Committee. Members of the Business Committee and ASX Management may nominate technical committee members. The technical committees may comprise representatives of Business Committee members and/or other individuals with appropriate expertise.

- 2.4. A member of the Business Committee may resign its membership by giving notice in writing to the Chair of the Business Committee.

3. Chair of the Business Committee

- 3.1. ASX shall appoint the Chair of the Business Committee.

- 3.2. The role of the Chair is to:

- convene, set the agenda for, and preside over meetings of the Business Committee;
- take a leadership role in facilitating discussion and forging a consensus among Business Committee members on matters being considered by the Business Committee;
- keep and approve the minutes of meetings of the Business Committee; and
- report to, and from, the Boards of ASX Clear and ASX Settlement in relation to recommendations of the Business Committee and other matters raised by the Business Committee.

4. Meetings of the Business Committee

- 4.1. The Business Committee will meet at least four times a year.
- 4.2. The Chair may determine, in consultation with members of the Business Committee, that more than four meetings be held in a year.
- 4.3. The Chair may invite ASX management, or other organisations, to attend meetings of the Business Committee.
- 4.4. Draft meeting agendas will be electronically circulated to members prior to meetings of the Business Committee to provide members with an opportunity to contribute to the agenda setting process.
- 4.5. Meeting agendas and associated papers will be circulated to members one week prior to the relevant meeting.
- 4.6. A quorum for a meeting of the Business Committee is a majority of its members and the Chair. All recommendations of the Business Committee to ASX Management and the Boards of ASX Clear and ASX Settlement shall be made on the basis of a broad consensus of those members present at the relevant meeting of the Business Committee.
- 4.7. The Chair will determine whether a broad consensus has been achieved. In making this determination, unless notified to the contrary by the member concerned, the Chair shall be entitled to assume that a member who does not attend a meeting is prepared to accept any recommendation on a matter, of which notice was given in the agenda for the meeting, made by those members who are present at the meeting.
- 4.8. All meetings of the Business Committee are to be minuted. The minutes will be circulated to members electronically following each meeting for comment and approval to allow the minutes to be included in the agenda for the next meeting of the Boards of ASX Clear and ASX Settlement.
- 4.9. Any reports from the Business Committee to the Boards of ASX Clear and ASX Settlement will be prepared by the Chair and will be circulated to members electronically following each meeting for

comment and approval to allow the reports to be included in the agenda for the next meeting of the Boards of ASX Clear and ASX Settlement.

5. Business Committee Secretariat

5.1. ASX shall provide a secretariat service to the Business Committee, and will provide the facilities and services required to convene meetings of the Business Committee.

5.2. The secretariat will:

- arrange the venue and circulate notices for meeting of the Business Committee;
- prepare agendas, minutes and other documents for meetings of the Business Committee;
- maintain the pages of the ASX website dedicated to the Business Committee; and
- arrange the publication of meeting agendas, minutes and other relevant documents of the Business Committee.

ASX Cash Equities Clearing and Settlement Code of Practice

ASX CLEAR AND ASX SETTLEMENT

Customer and stakeholder commitments

In October 2016, the 'Regulatory Expectations for the Conduct of Cash Equity Clearing and Settlement Services in Australia' (Regulatory Expectations) were released by the Council of Financial Regulators. This Code of Practice sets out ASX's commitment to comply with the Regulatory Expectations, and its commitments to customers and other stakeholders in managing cash equities clearing and settlement infrastructure and services for the Australian market.

ASX is committed to ensuring Australia's clearing and settlement infrastructure is efficient, well capitalised, and well regulated. ASX recognises the importance of working collaboratively with customers and other stakeholders to deliver world class financial infrastructure and clearing and settlement services that meet the needs of a diverse range of users in the Australian cash equities market.





Customer and stakeholder engagement

ASX is committed to meaningful engagement with customers and other stakeholders about the ongoing development of cash equity clearing and settlement infrastructure. ASX recognises the importance of engagement on the design and functionality of the infrastructure to ensure it continues to meet the needs of ~~the~~ market users, and is consistent with relevant international best practice



Transparent and non-discriminatory pricing

ASX's group structure supports the efficient delivery of services to all of its customers. ASX is committed to the principles of transparency and non-discrimination in pricing its cash equities clearing and settlement services



Transparent and non-discriminatory access

ASX is committed to providing access to clearing and settlement services on transparent and non-discriminatory terms, and will respond to requests for access in a fair and timely manner



Protection of confidential information

ASX Clear and ASX Settlement will not misuse any confidential information acquired in the course of providing clearing and settlement services





1. Customer and stakeholder engagement

ASX is committed to meaningful engagement with customers and other stakeholders about the ongoing development of cash equity clearing and settlement infrastructure. ASX recognises the importance of engagement on the design and functionality of the infrastructure to ensure it continues to meet the needs of ~~the market~~ users, and is consistent with relevant international best practice

Commitments

- ASX will invest in the ongoing operation and development of the core cash equities clearing and settlement infrastructure promptly and efficiently. Such investments will seek to meet the needs of users¹, recognising the diversity and differing needs of users
- ASX will maintain an advisory Business Committee consisting of representatives of key users of cash equities clearing and settlement services
- ASX will hold quarterly Business Committee meetings for the purpose of providing input to Management and the Boards of ASX Clear and ASX Settlement on the ongoing operation and development of cash equities clearing and settlement infrastructure and services
- The Boards of ASX Clear and ASX Settlement will give due consideration to any material matters raised by, or recommendations of, the Business Committee. The Boards of ASX Clear and ASX Settlement will jointly provide a written response to Business Committee recommendations~~ports~~, including an explanation of why any recommendations had not been followed
- ASX will consult the Business Committee on its investment decisions in relation to the design, operation and development of new cash equities clearing and settlement infrastructure and services, including the development of a transition and implementation plan for new infrastructure
- ASX will report annually to the Business Committee on the cash equities clearing and settlement service developments and investment projects progressed, and how it has taken into consideration the views of users
- ASX will commission an annual independent review of its governance, pricing and access arrangements benchmarked against the Regulatory Expectations. A report prepared by the reviewer will be provided to the Business Committee and the Agencies (ACCC, ASIC, RBA and Treasury)
- Any interested party may provide information to ASX Clear and ASX Settlement in respect of the operation and development of cash equities clearing and settlement infrastructure and services by sending a written submission to the Chair of the Business Committee or the ASX Group General Counsel
- ASX will respond to any complaints relating to the provision of cash equities clearing and settlement services or this Code of Practice by users in a timely manner in accordance with its Complaints Handling Procedures.

¹ The term 'users' in this document has the same meaning as that set out in the Regulatory Expectations. In the Regulatory Expectations, users are broadly defined 'to include participants of the ASX CS facilities; end users; unaffiliated market operators, central counterparties and settlement facilities; technology service providers; and other relevant stakeholders'. ASX takes the term 'end users' to include issuers and investors, and the term 'other relevant stakeholders' to include share registries and payment providers.



2. Transparent and non-discriminatory pricing

ASX's group structure supports the efficient delivery of services to all of its customers. ASX is committed to the principles of transparency and non-discrimination in pricing its cash equities clearing and settlement services

Commitments

- ASX will publish on its website fee schedules for all clearing and settlement services, including a brief description of each service
- The published fee schedules will set out the details, including eligibility criteria, of any rebates, revenue-sharing arrangements and discounts applicable to each service
- ASX Clear and ASX Settlement will not implement price changes with the purpose of materially shifting revenue streams between other trading, clearing and settlement services
- ASX will publish any increases in its fee schedules for clearing and settlement services, and attest to their reasonableness
- ASX will provide customers with information to assist them to assess the expected cost impacts of pricing changes and the expected cost impacts associated with new products and initiatives
- ASX will annually publish management accounts in respect of the clearing and settlement of cash equities in Australia. The management accounts will be subject to review by an external auditor
- ASX will publish a cost allocation and transfer pricing policy that describes the methodology used for allocating revenue, directly attributable costs, indirect and common shared costs and capital that relates to the clearing and settlement of cash equities in Australia. This policy will be reflected in the published management accounts
- ASX will maintain an appropriate method for determining the prices of its cash equities clearing and settlement 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
- ASX Clear and ASX Settlement will provide non-discriminatory pricing to all customers, including ASX-affiliated entities, and potential users of clearing and settlement services
- ASX Clear and ASX Settlement will charge all users, including ASX-affiliated entities, non-discriminatory prices for materially equivalent services
- ASX will negotiate on commercial grounds and in good faith with other market operators regarding fees and other financial contributions charged for any extensions to the Trade Acceptance Service and the Settlement Facilitation Service.



3. Transparent and non-discriminatory access

ASX is committed to providing access to clearing and settlement services on transparent and non-discriminatory terms, and will respond to requests for access in a fair and timely manner

Commitments

- ASX is committed to ensuring its investments in the systems and technology that support its cash equities clearing and settlement infrastructure are not designed in such a way as to raise barriers to access to other market operators or clearing and settlement facilities
- ASX Clear and ASX Settlement will publish transparent standard terms and conditions for access to cash equities clearing and settlement services by participants, and access to clearing and/or settlement arrangements for cash equities to other market operators through either the Trade Acceptance Service or the Settlement Facilitation Service
- ASX Clear and ASX Settlement will provide access to clearing and settlement services on a non-discriminatory basis
- ASX Clear and ASX Settlement will not unreasonably prohibit, condition or limit (directly or indirectly) access by a person or company to clearing and settlement services
- ASX Clear and ASX Settlement will consider requests for access to clearing and settlement services by other market operators, including requests for changes to clearing and settlement services, in a timely manner
- ASX Clear and ASX Settlement will provide access to clearing and settlement services to other market operators on operational and commercial terms and service levels that are materially equivalent to those that apply to ASX's market
- Where a request for a change in the clearing and/or settlement services provided under the Trade Acceptance Service or Settlement Facilitation Service has been agreed, ASX Clear and/or ASX Settlement will provide in writing to the customer the scope of any technical development and any changes to the ASX operating rules and procedures required. An indicative cost and timeline for implementing the change and the internal project priority will also be provided in writing
- ASX Clear and ASX Settlement will consult other market operators on the service levels under the Trade Acceptance Service and the Settlement Facilitation Service from time to time
- ASX Clear and ASX Settlement will publish protocols which set out target timeframes for responding to requests for access to cash equities clearing and settlement services
- ASX Clear and ASX Settlement will publish protocols for dispute resolution processes for other market operators regarding pre-access disputes. Post-access dispute processes will be provided in the legal terms for the Trade Acceptance Service and the Settlement Facilitation Service.





4. Protection of confidential information

ASX Clear and ASX Settlement will not misuse any confidential information acquired in the course of providing clearing and settlement services

Commitments

- ASX Clear and ASX Settlement will comply with ASX's published Conflict Handling Arrangements policy
- ASX Clear and ASX Settlement will comply with the published Information Handling Standards for the protection of confidential and competitively sensitive information acquired by ASX Clear and ASX Settlement in the course of providing the Trade Acceptance Service and the Settlement Facilitation Service
- ASX Clear and ASX Settlement will periodically review the Information Handling Standards to ensure that they remain effective
- ASX Clear and ASX Settlement will not use any confidential or competitively sensitive information acquired in the course of providing clearing and settlement services for any other purpose than that for which it was provided
- ASX Clear and ASX Settlement will not use any confidential or competitively sensitive information acquired in the course of providing clearing and settlement services to provide an advantage to an affiliated entity of ASX Clear or ASX Settlement
- ASX Clear and ASX Settlement will be comprised of at least 50 per cent of non-executive directors that are not also directors of ASX Limited
- ASX will ensure that a quorum for the Boards of ASX Clear and ASX Settlement can be constituted by directors that are not also directors of ASX Limited to consider competitively sensitive information provided by another market operator.

**For general enquiries,
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As the sole licensed operator of clearing and settlement facilities for the Australian cash equities market, ASX Clear and ASX Settlement are committed to providing clearing and settlement services in accordance with the principles of meaningful customer and stakeholder engagement, transparent and non-discriminatory pricing, transparent and non-discriminatory access and the protection of commercially sensitive information. The commitments set out in this document builds on the principles contained in the Customer Charter of ASX in which ASX commits to:

1. Work with customers to deliver products and services that meet their needs and that provide them with choice
2. Support Australia's aspiration to be globally competitive and become one of the leading financial centres in the Asia Pacific region
3. Make its products and services available on a non-discriminatory basis and on reasonable commercial terms
4. Manage its businesses and operations on a commercial basis to benefit its customers and provide appropriate returns to ASX shareholders
5. Recognise its role as a provider of critical financial infrastructure to the Australian financial markets, and make the necessary investments to ensure it can fulfil this role and provide confidence to market participants, investors and regulators
6. Run its operations in compliance with all legal and regulatory obligations
7. Maintain conflict handling arrangements that provide assurance and transparency about the way ASX conducts its business.

Visit asx.com.au/cs/

ASX has a section of its website dedicated to providing customers and other stakeholder's information on its cash equities clearing and settlement infrastructure and services. This information can be obtained by visiting.



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BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 4A

| | |
|------------------------------|--|
| Topic | CHES Replacement – Public Consultation Feedback Summary |
| Date of the Meeting | 2 March 2017 |
| Purpose of this paper | To provide the Committee with an embargoed copy of ASX's responses to feedback by respondents to the CHES Replacement Consultation Paper |

An embargoed copy of ASX's response to the CHES Replacement Consultation Paper feedback is attached. It is expected the paper will be released publicly following the Business Committee meeting and should be treated as confidential until that time.

In the attached paper, ASX outlines a number of actions in the response to the feedback provided. These actions have been input into the detailed forward work plan that is included as a separate paper to this meeting.

ASX anticipates that the forward work plan will be further modified throughout 2017 as further progress is made in defining market users' requirements and in response to further formal consultation.

Supplementary Questionnaire

At the request of the Business Committee, ASX issued a supplementary questionnaire on the 21 December 2016. The deadline for submissions was 14th February, and several requests were granted for extensions until 24th February. ASX is now in the process of analysing those responses, almost all of which were provided on a confidential basis.

Where the questionnaire responses identify additional matters or other relevant information, these will be fed into the forward work plan. Where cash market clearing and settlement issues are raised that fall outside the scope of CHES replacement, ASX will seek input from the Business Committee regarding prioritisation. Where issues raised fall outside of the scope of cash equities clearing and settlement, ASX will engage with respondents separately on these topics.

ATTACHMENTS

Attachment A – CHES Replacement Consultation Response

Please Note: this Consultation Paper is available at - <http://www.asx.com.au/services/chess-replacement.htm>

BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 4B

| | |
|------------------------------|---|
| Topic | CHES Replacement – Forward Work Program |
| Date | 2 March 2017 |
| Purpose of this paper | To provide the Committee with the forward work program to determine the business requirements for CHES replacement. |

Introduction

An embargoed copy of ASX's response to the CHES Replacement Consultation Paper feedback was provided in a separate paper to this meeting.

In the consultation response, ASX outlines a number of actions that have been incorporated into the forward work plan detailed in this paper.

ASX anticipates that it will be further modified throughout 2017 as further progress is made in defining market users' requirements and in response to further formal consultation. Details of the process and key milestones for the CHES replacement project, including the user engagement plan, are provided in Attachment A.

Business Committee

A total of six Business Committee meetings are planned for 2017. A schedule of the meetings and specific topics for discussion are included in Attachment B.

The increased number of meetings is necessary to discuss key aspects of users' requirements for CHES replacement as well as to accommodate other topics relating to cash market clearing and settlement that are of importance to the Business Committee. The meetings are generally spaced between 6 and 8 weeks apart to allow sufficient time to prepare papers and to enable the Technical Committee on CHES Messaging and ISO 20022 to make progress between meetings. The Business Committee will also be updated on the discussions in each of the working groups (the detail on the working groups is set out below) throughout the year. Input from the Business Committee will be sought in relation to the priorities identified by the working groups.

For the November 2017 meeting, the Business Committee will be provided with a report setting out what ASX has established through its various consultative processes as the high level business requirements of users and the relative prioritisation of those requirements. This will provide the Business Committee the opportunity to provide input on the high level business requirements gathered ahead of a decision by ASX in March 2018 on the scope of the 'day 1' business requirements for the system that replaces CHES.

A number of subjects have been identified through the consultation on the replacement of CHES that raise issues that go beyond the scope of CHES replacement. These issues will be considered as additional items for the Business Committee forward work program and will be progressed separately, subject to priority.

Technical Committee

The Technical Committee is currently tasked with examining the technical and business aspects for the adoption of international standard messaging using ISO 20022, including mapping CHES and ISO 20022 messaging and the most appropriate approach to managing the transition to ISO 20022. This work is focussed in a number of areas but ultimately aims to ensure that best practice is applied to the development of the ISO 20022 standards. This work is scheduled to be continued in the Technical Committee throughout 2017. The forward work program for the Technical Committee is provided in Attachment C.

Working Groups

Given the complexity of the functionality of CHES and the detailed nature of the feedback that has been received to date, ASX will convene working groups to capture and prioritise the business requirements of users in six key areas which have been identified through the consultation as requiring further examination and industry input.

The six working groups that will be convened will cover the following topics:

1. Account Structures and Participant Models
2. Corporate Actions
3. Transfers, Conversions & Data Migrations
4. Settlement Enhancements
5. Data storage, delivery and reporting
6. Non-Functional Requirements

The objective of each of the working groups is to identify, define and prioritise the business requirements for users in each of these areas by the end of 2017. Working Group discussions will be minuted to provide an appropriate level of transparency of the meetings and provide useful input to ASX.

For each working group, ASX will:

- Hold a series of several 1 – 2 hour workshops to discuss, capture and prioritise users' business requirements.
- Invite relevant user subject matter experts to attend. The number of attendees will generally be limited to no more than 12 to ensure the workshops are efficient and productive.
- Working Group attendees will be required to:
 - Provide detailed input into the definition of the specific user requirements.
 - Recommend the relative priority of each requirement.
 - Perform intercessional work to review and on occasion prepare material in advance of each workshop.

Organisations represented in the Business Committee are invited to nominate an attendee to participate in working groups of interest to their organisation. ASX will seek to ensure that there is appropriate representation in each of the working groups, including representation from other user groups, to ensure the required depth of expertise and breadth of perspectives is captured.

As the amount of work to gather and prioritise users' business requirements over 2017 is significant, ASX will arrange working group meetings in a logical sequence to minimise, where possible, numerous parallel work-streams involving the same representatives, and to allow the input of other user groups where relevant to be sought.

An indication of the timeframe and sequencing of this work is contained in Attachment A. The current scope of issues for consideration for each working group is contained in Attachment D.

Next Steps

1. ASX to execute the forward work plan as outlined in this paper.
2. Business Committee to confirm availability for 2017 Business Committee meetings by 10 March 2017.
3. Business Committee organisations to provide nominations for the working groups by 17 March 2017.
4. ASX to invite other relevant users to participate in the working groups.
5. ASX to determine working group attendees, schedule meetings, and commence activities.

ATTACHMENTS

Attachment A: CHESS Replacement Program of Work – Process and Milestones

Attachment B: Business Committee Work Program

Attachment C: Technical Committee on ISO 20022 Forward Work Program

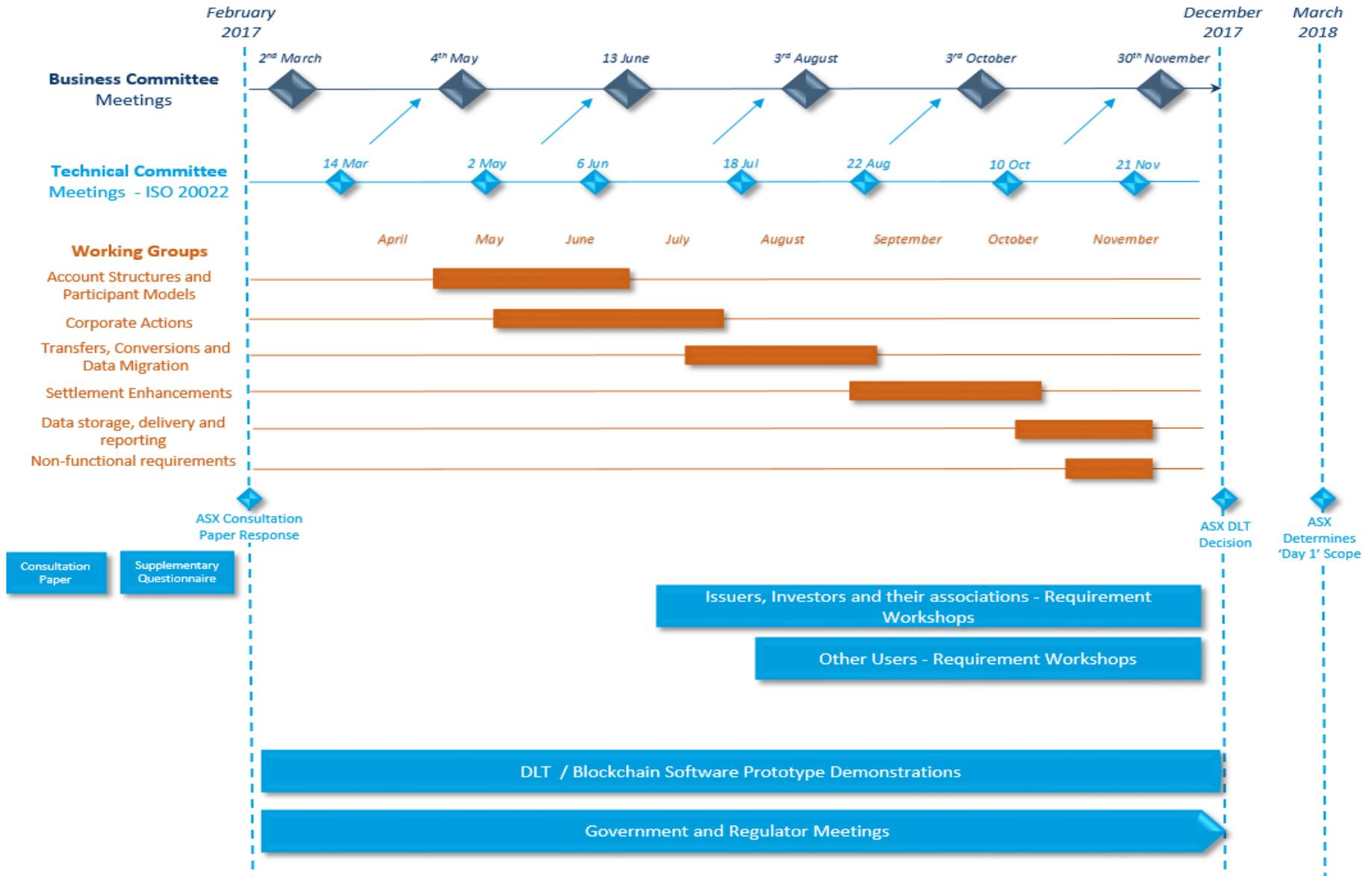
Attachment D: Working Groups – Topics for Consideration

Attachment A: CHES Replacement Program of Work – Process and Milestones

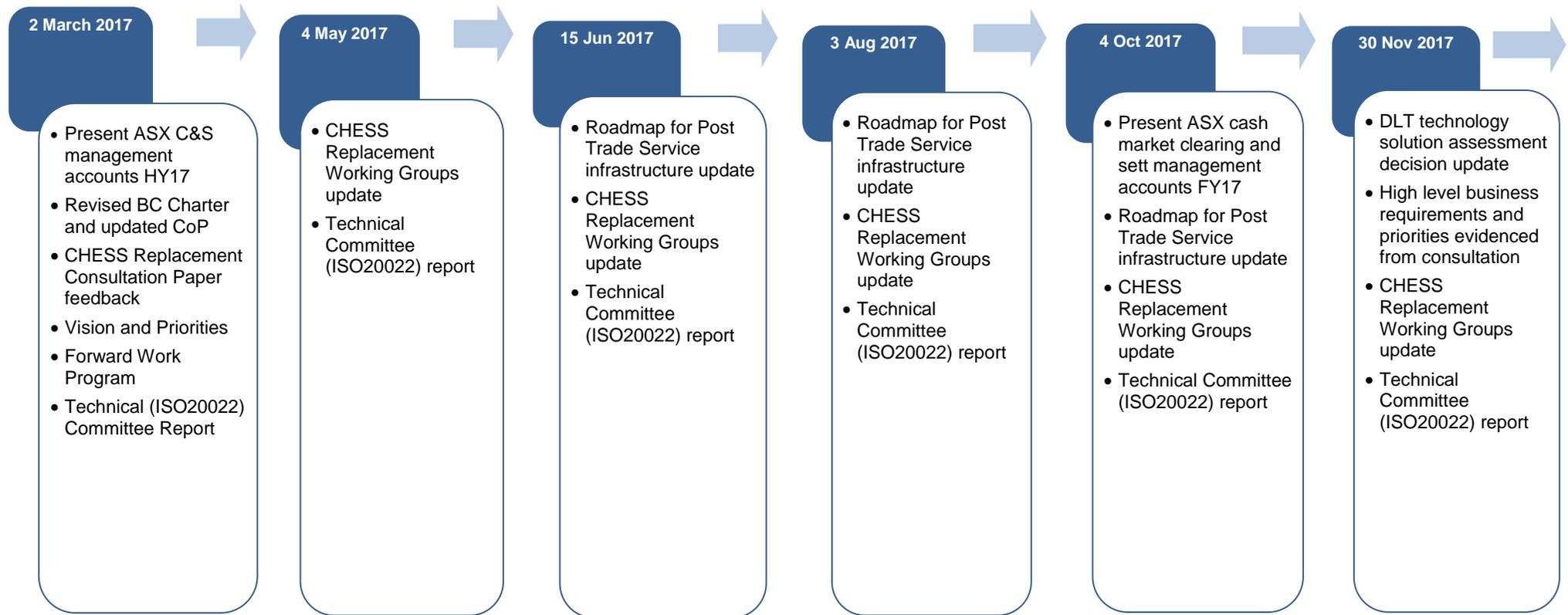
The following table sets out the process that ASX is undertaking in order to replace CHES.

| Milestone | Activity | Dates and Status |
|--|---|---|
| Develop a starting hypothesis | ASX began this project on the basis that CHES needs to be replaced in the next few years, that users are facing structural cost pressures, and that new technologies such as DLT could assist in addressing both these issues. | Complete |
| Educate users on the possibilities of DLT technology | ASX has built a prototype system to demonstrate the potential features and uses of DLT. Demonstrations have been provided in a purpose built facility to a range of users, and will continue | Commenced in mid-2016, ongoing throughout 2017 |
| Engage with users to document their requirements | ASX has developed a forward work plan to document users' business requirements. This process commenced with the CHES Replacement consultation paper in September 2016 and will continue throughout 2017. The forward work plan sets out how ASX will gain input from the Business Committee, the Technical Committee and other working groups that represent users. It will also include further formal consultation and bilateral meetings. | Commenced in September 2016, ongoing throughout 2017 |
| Establish users' high level business requirements and priorities | ASX will report on the high level business requirements and priorities of users evidenced from its consultation processes, and provide the Business Committee and other users with the opportunity to provide further input ahead of a decision by ASX on final 'day 1' business requirements. | By end November 2017 |
| Explore technology choices to replace CHES | ASX is investigating the use of Distributed Ledger Technology (DLT) as well as other technology solutions to replace CHES. This commenced with the building of a DLT prototype (outlined above) as well as investigating other contemporary technologies familiar to ASX through its other businesses. ASX is now building enterprise grade DLT software with base level clearing and settlement functions to test the capabilities of DLT further. | Commenced in early 2016 and scheduled to complete at the end of 2017 |
| Establish the Day 1 scope of work for CHES replacement | Following the documentation and prioritisation of business requirements, ASX will be in a position to define the scope of 'Day 1' business requirements. This will be finalised in consultation with users, including the Business Committee. | By March 2018 |
| Design, Build, Test and Deployment Activities | These are all the software development practices required to develop the solution to meet the scope of business requirements – 'Day 1' scope. | Unknown – to be established after Day 1 scope finalised and technology decision |
| Migration / Transition Activities | These planning activities would be conducted with users in parallel to build and test activities. These cover all client and data cleansing, migration planning, impact analyses, contingency and run-book planning. It also includes whether the migration is phased or 'hard cutover'. | Unknown – to be established after Day 1 scope finalised and technology decision |
| Production readiness, implementation and Business as Usual Support | These are the activities of starting to operate in production with the new system. Eventually it would also result in the decommissioning of the current CHES system. | Unknown – to be established after Day 1 scope finalised and technology decision |

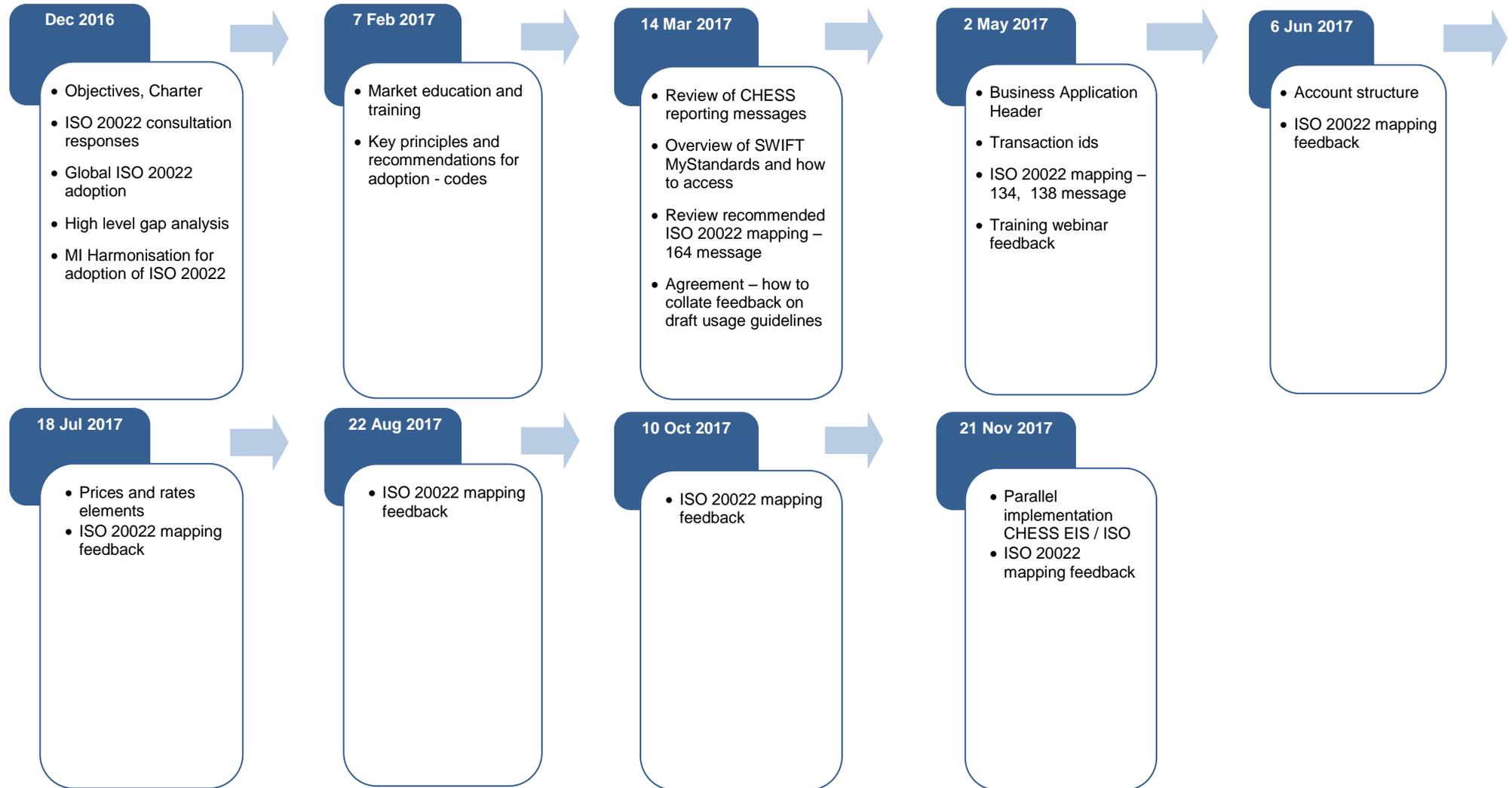
2017 User Engagement Plan



Attachment B: Business Committee Meetings and key topics for consideration (outside standing agenda items)



Attachment C: Technical Committee on ISO 20022 Forward Work Plan (matters for consideration)



Attachment D: Working Group topics – Proposed Business Requirement Scope Items

The table below lists the areas of business requirement scope to be covered within each working group.

| Working Group | Topics | |
|---|--|--|
| Account Structures | Client account structures (e.g. HIN, SRN, new?) | Participant models – separation of clearing and settlement with accompanying message support |
| | Depository model review (as opposed to the current name on register model) | |
| Corporate Actions | Paperless corporate action event processing | Income and sale proceeds – alternate methods such as New Payments Platform (NPP) and RTGS |
| | Corporate actions events – electronic dissemination and support for all event types | Proxy Voting |
| | Cum Entitlement Balances – ability to transfer separate to primary balance (e.g. manage stock lending recalls) | Allotment of new securities |
| | Electronic entitlement elections | Deferred delivery - removal of restrictions |
| | DRP (Dividend Reinvestment Plan) elections – automation | |
| Transfers, Conversions & Data Migrations | Paperless transfer and conversion processing | Basis of movement |
| | Transfers to / from the issuer sponsored sub-register | Methods of securities code allocation |
| | Processing bulk movement of HINs and holdings | Security transfer simplification (e.g. reduce number of message alternatives). |
| | Enhance HIN transfer messaging (E.g. allow changes to the registered name with no change in underlying beneficiary) | |
| Settlement Enhancements | Bilateral DVP settlements outside of normal batch settlement times | Deferred trading and settlement of new securities |
| | Give-up / take-up trade clearing and settlement | Off market settlements |
| | Stock lending and borrowing – <ul style="list-style-type: none"> • Automatic stock loan borrow service to balance daily net delivery position of participants • ASX facilitated stock loan borrow service • Enable use of client holdings into pooled service | Linking of turnaround settlements by participants |
| | Cash payments to other participants via RTGS | Matching criteria for free of payment securities movements across participants |
| | Payment processing via the New Payments Platform (NPP) | mFund application and redemption process |
| | Settlement optionality – early settlement, multi settlement cycles, rolling settlement | Client side netting |
| | Automated settlement preparation | |
| Data storage, delivery and reporting | Regulatory reporting | Tax, bank account and other data storage and transport |
| | ATO and foreign tax jurisdiction reporting | CHESS statements in electronic formats |
| | Real-time data interrogation | Data formats |
| Non-Functional Requirements | Business Continuity Plans | Test environments access hours |
| | End-to-end test environments | Connectivity Models |

BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 5A

| | |
|------------------------------|--|
| Topic | Minutes from 13 December 2016 ISO20022 Technical Committee meeting |
| Date of the Meeting | 2 March 2017 |
| Purpose of this paper | To provide Business Committee members with a copy of a Report and minutes from the ISO 200222 Technical Committee meeting. |
| Action required | To note. |

The ISO 20022 Technical Committee met on 13 December 2016.

A copy of the Committee's Report and the meeting minutes are attached.

ATTACHMENTS

Attachment A – ISO 2022 Technical Committee Report and Minutes 13 December 2016 Meeting.



TECHNICAL COMMITTEE REPORT TO THE BUSINESS COMMITTEE

TECHNICAL COMMITTEE – CHES MESSAGING AND ISO 20022

The Technical Committee was reconvened in December 2016. The Committee now has 28 member organisations including all market operators, a number of clearing and settlement participants, CHES software vendors, share registries, SWIFT and industry representative groups such as SAA and APCA.

TECHNICAL COMMITTEE MEETING 13 DECEMBER 2016

The agenda for the meeting on 13 December 2016 included:

- ASX's update from the 1 December 2016 Business Committee meeting;
- Overview and discussion of the Draft Charter for the Committee prepared by ASX, including the Committee's objectives and key activities;
- ASX's summary of the general themes from written responses to the ASX Consultation Paper – ASX's replacement of CHES for Equity Post Trade Services: Business Requirements, with reference to the 8 specific questions on the adoption of ISO 20022;
- SWIFT overview of Global ISO 20022 adoption;
- Overview of the High Level Gap Analysis between CHES and ISO 20022 messaging conducted by ASX and SWIFT during the fourth quarter 2016;
- Overview of Market Infrastructure Harmonisation for the adoption of ISO 20022;
- Outline of the ASX approach to ISO 20022 adoption and engagement roadmap; and
- Discussion regarding next steps for the Committee.

KEY ISSUES DISCUSSED

- Members agreed with the proposed Draft Charter for the group, including its key priorities, focused on the adoption of ISO 20022. It was agreed that the Chair will provide minutes from the Technical Committee to the Business Committee for endorsement. Members agreed that the Technical Committee should be scheduled monthly, with at least 2 weeks' notice provided by ASX. All Technical Committee information will be made available on ASX's CHES Replacement web page.
- A show of hands during the meeting confirmed a low level of familiarity with ISO 20022 and the short term need for committee member and broader CHES stakeholder training and education on ISO 20022. ASX and SWIFT proposed to provide more information on the training options at the next meeting. Hard copies of the booklet "ISO 20022 for Dummies" were provided to members present at the meeting, and an electronic copy has been published on the ASX CHES Replacement web page.

AGREED ACTIONS

1. ASX to amend the Charter to reflect that the Chair “will” (instead of “may”) forward copies of the minutes to the Business Committee for endorsement. ASX to publish and distribute final Charter.
2. ASX to provide members with information on how to access SWIFT MyStandards.
3. ASX to provide members with an overview of ISO 20022 training options.

Minutes from the meeting are attached.

TECHNICAL COMMITTEE MEETING 7 FEBRUARY 2017

The agenda for the meeting on 7 February 2017 included:

- An overview of the Technical Committee’s standing and forward agendas;
- Update from the Business Committee;
- Update on the ISO 20022 project;
- SWIFT overview of ISO 20022 – the basics;
- Discussion on market education and training on ISO 20022;
- Key principles and recommendations for adoption in relation to key fields present in the ISO 20022 format and standard references, for example:
 - identification of key parties including the issuer (e.g. ASX) of a proprietary code (e.g. UIC), identification of the depository, consistent identification of parties (such as participants, accounts), and identification of markets for trade related messages;
 - format and size of field valid values that are normally represented as codes; and
 - the use of ISO standard references where available, e.g. ISIN for financial instrument, currency codes, country codes.

Minutes from the 7 February 2017 meeting will be provided at the next Business Committee meeting.



MINUTES OF THE TECHNICAL COMMITTEE

CHES messaging & ISO 20022 Project

Tuesday 13 December 2016
ASX offices, 20 Bridge Street, Sydney

- 1. Welcome**
- 2. Update - December Business Committee meeting**
- 3. Objectives and Charter**
- 4. ISO 20022 consultation responses**
- 5. Global ISO 20022 adoption**
- 6. High level gap analysis overview**
- 7. Market infrastructure harmonisation for the adoption of ISO 20022**
- 8. ISO 20022 adoption and engagement roadmap**
- 9. Next steps**

ATTENDEES

| MEMBERS | | |
|-------------------------------|--------------------------------|--|
| Company | Name | Job Title |
| Bank of America Merrill Lynch | Andree Hindmarsh (by phone) | Head of GMOT Australia |
| Bell Potter Securities | Dean Surkitt | Managing Director Retail |
| BNP Paribas Securities | Narelle Rutter | Head of Local Custody & Clearing Operations |
| BNP Paribas Securities | Wayne Murphy | Project Manager |
| Broadridge (Australia) | John Greenhow | General Manager, Australia |
| Broadridge (Australia) | Manoj Mathew | Business Analyst |
| CBA Equities | Joel Cox | Technical Business Analyst |
| CBA Equities | Carolyn Webb | Test Manager |
| CBA Equities | Ben Lowe | Manager Settlements |
| Chi-X Australia | Mike Aikins | Chief Technology Officer |
| | | |
| Citicorp | Brett Dennis (by phone) | Head of Operations – Party Clearing |
| Citicorp | Vlad Medvedev (by phone) | |
| Citicorp | Lyall Herron | |
| Computershare | Paul Walton | Senior Manager, Corporate Actions & New Business Development – Investor Services |
| Computershare | Leanne Bailey | Senior Business Analyst Product & Innovation |
| Dion Global Solutions | Craig Gray (by phone) | Product Manager – Australia and New Zealand |
| HSBC Securities Services | Gregory Wilkin | Head of HSBC Operations |
| GBST | Andrew Murdoch (by phone) | Product Specialist, GBST Capital Markets |
| GBST | Sue Schafer (by phone) | Product Owner |
| Goldman Sachs | Darrel Schwarz | Technology Vice President |
| Goldman Sachs | Nichole Alexander | Operations Vice President |
| JP Morgan | Ed Lawson | Settlements Manager |
| JP Morgan | Danny Ng | Middle and Back office AD Manager |
| JP Morgan | Scott Oakland | Direct Custody Product Manager Australia |
| Link Market Services | Sue Julian | National Manager, Corporate Actions |
| Link Group | Ian Batterham | Business Applications Architect |
| Morgan Stanley | Oscar Dela Cruz (by phone) | |
| Morgan Stanley | Andrew Fielder (by phone) | |
| Morgan Stanley | Gordon Davies (by phone) | VP/Firmwide Ops |
| Morgan Stanley | Kristy Venters (by phone) | |
| Morgan Stanley | Heinz Aufner | |



| MEMBERS | | |
|---|----------------------------------|--|
| Company | Name | Job Title |
| | (by phone) | |
| NAB Asset Management | Suresh Chinnappa (by phone) | Head of Custody Service Operations |
| National Stock Exchange | Scott Evans (by phone) | General Manager & Company Secretary |
| National Stock Exchange | Lina Lim | Senior Manager, Information Technology |
| Securitease | Anton Smith | Director |
| Share Investing | Phil Barnes | Platform Manager |
| Stockbrokers & Financial Advisers Association Limited | Andrew Green | Chief Executive |
| Stockbrokers & Financial Advisers Association Limited | Danielle Henderson (by phone) | Chair of SAA CHES working group |
| SWIFT Standards | Mieko Morioka (by phone) | Senior APAC Standards consultant |
| SWIFT Standards | Nicole Jolliffe | Senior APAC Standards consultant |
| SWIFT | Chermaine Lee | SWIFT Project Coordinator |
| Sydney Stock Exchange | Jadeah Dogias | Supervisor – Market Control |
| Sydney Stock Exchange | Leo Zhang | Business Analyst |
| UBS | Phillip Drury | Phillip Drury, Executive Director, Equities IT |
| UBS | Duncan Earl | Executive Director, Head of Change, UBS Group Operations |
| Wealthhub Securities | James Channon | Manager, Capital Markets Trading |

| ASX Management | |
|--------------------------|--|
| Name | Job Title |
| Tim Hogben | Group Executive, Operations (Chair of the Technical Committee) |
| Amanda Harkness | Group General Counsel and Company Secretary |
| Nicholas Wiley | Deputy General Counsel Post Trade |
| Cliff Richards | General Manager, Equity Post Trade Services |
| Karen Webb | Manager, Equity Post Trade Services |
| Rodd Kingham | Senior Manager, Equity Post Trade Services |
| Russell Eyre | Enterprise Architect |
| Anne-Marie Fisher-Taylor | Architect CSD Development |
| Darcy Wright | Senior Business Analyst, Equity Post Trade |
| Gary Hobourn | Senior Economic Analyst, Regulatory and Public Policy |

**APOLOGIES**

| MEMBERS | | |
|---|----------------|--|
| Company | Name | Job Title |
| Australian Payments & Clearing Association (APCA) | Andy White | General Manager, Payments Community |
| Citicorp | Miles O'Connor | Director, Direct Custody & Clearing Securities Markets & Securities Services |
| Morgan Stanley | Dorothy Wilson | Executive Director Morgan Stanley Wealth Management, ISG Technology |
| Sydney Stock Exchange | David Lawrence | Company Secretary |



The meeting commenced at 3.30pm.

Agenda item 1: Welcome

The Chair welcomed Technical Committee members to the meeting including members attending by telephone.

The Chair noted that minutes from the previous meeting held on 24 September 2014 had been distributed and that there were no Action Items outstanding.

The Chair outlined the Agenda for this meeting, referring to the presentation slides prepared by ASX.

The Chair provided the Committee with an overview about the establishment of the Technical Committee. Following the Council of Financial Regulator's (COFR) decision in 2013 to defer any decision regarding the introduction of competition in cash equity clearing, ASX had established the Code of Practice for ASX's cash equity post trade services and the Business Committee as a forum for stakeholder engagement and input to ASX's forward work program related to cash equity post trade services. Key forward work items agreed by the Business Committee included the adoption of a global messaging standard, and the transition to T+2 Settlement which was achieved on schedule in March 2016. The Business Committee had agreed to the establishment of the Technical Committee in 2014 to focus on CHES Replacement and the adoption of ISO 20022 messaging.

Agenda item 2: Update – December Business Committee meeting

ASX's General Manager of Equity Post Trade Services updated members on the key points from the recent Business Committee meeting held on 1 December 2016 with regard to Equity Post Trade Renewal Program, including presentation of the roadmap for Post Trade Service Infrastructure. Refer to slide 3 of the ASX presentation. Key components of the project including stakeholder engagement, business requirements of the solution, messaging standards and the software system build were outlined.

He noted that the software build to be delivered towards the end of 2017 is not intended to replicate the full suite of existing CHES services or incorporate any new enhanced services but will instead be used to test the technology's capability, reliability and scalability to inform the decision on the technology and the vendor.

ASX's General Manager of Equity Post Trade Services outlined ASX's stakeholder engagement program, including the planned publication of an additional consultation questionnaire similar to a questionnaire recently distributed by Hong Kong Stock Exchange. ASX is yet to decide whether the response to the questionnaire will be included with ASX's response to feedback received to the initial consultation paper (September 2016). The General Manager of Equity Post Trade Services confirmed that the consultation process had only just begun and there would be plenty of opportunity for key industry stakeholders to provide input on functional and non-functional business requirements for the replacement of CHES.

A member asked if ASX had existing scope/business requirement documents for the build that could be shared with industry stakeholders. The General Manager of Equity Post Trade Services confirmed that documentation was not available for external distribution.

ASX's General Manager of Equity Post Trade Services confirmed that the Digital Asset white paper explaining generic components of the build was available on their website.



Agenda item 3: Objectives and Charter

The Chair referred to the Draft Charter that had been distributed to members for review and summarised key points from the Charter. Refer to slide 4 of the ASX presentation.

The Chair advised ASX had engaged SWIFT's Standards Consulting Services to support its use of ISO 20022 standards and subsequently had invited the SWIFT standards team to join the committee to provide best practice input for the adoption of this globally recognised messaging protocol.

The Chair outlined that the key priority focus for the committee must be to achieve industry wide benefit related to the adoption of ISO 20022 messaging.

The activities of the committee will include reviewing agenda and reading material. ASX will provide this material at least 2 weeks prior to meetings. The Chair asked that members be prepared for meetings with any prepared responses and questions. Meetings will be scheduled monthly.

The Chair noted that there is a broad range of expertise amongst member organisations so it is important to have the suitably qualified attendee for each meeting depending on the issues to be discussed. It was acknowledged that this may mean that the representative from an organisation may change from month to month.

The Chair noted that there are other existing standards market practice and SWIFT user groups operating in Australia and that it was important that key findings be reported back to those groups as and when required.

The Chair's role is very important to the work of the Committee and will take the lead as required, including reporting back to the Business Committee and ensuring the minutes from the Technical Committee are made available publicly.

A member requested that the Charter be amended to reflect that the Chair "will" (instead of "may") forward copies of the minutes to the Business Committee for endorsement. The meeting agreed to amend the Charter and otherwise adopt the Charter in its current form. **[Matter Arising 1]**

Agenda item 4: ISO 20022 consultation responses

ASX's Manager, Equity Post Trade Services provided a summary of the general themes from the 36 written responses to ASX's Consultation Paper – ASX's replacement of CHESS for Equity Post Trade Services: Business Requirements, with regard to the 8 specific questions on the adoption of ISO 20022 and associated implementation considerations. The key points are summarised on slide 5 of the ASX presentation. The members generally agreed with the themes presented. A member noted that it was critical that stakeholders understood any impact to operating model assumptions, and that the adoption should avoid proprietary formats and be as close to global standard formats and business processes as possible to achieve net benefits.

Agenda item 5: Global ISO 20022 adoption

The Chair invited a representative from SWIFT to provide an overview of the global adoption of ISO 20022 particularly by Securities Market Infrastructures, and key learnings from particular markets including SGX, JASDEC, T2S in Europe, presenting a global map identifying key projects on slide 6 of the ASX presentation. A member asked why some markets had focused on adoption for corporate actions initially? The SWIFT representative noted that corporate actions involve a smaller set of messages, and it was then relatively easy to leverage this into other business streams, as ASX has done with its Corporate Actions STP product.



The Chair noted that T2S is a recent example of post trade development using ISO 20022, and we can leverage the learnings from the T2S experience, and benefit from not being the first to adopt. The Chair noted that some 'ISO-like' messages may be used in Australia for strictly local requirements but that these may not obtain global certification.

Agenda item 6: High level gap analysis overview

ASX's Manager Equity Post Trade Services provided an overview of the outcomes from the High Level Gap Analysis between CHES and ISO 20022 messaging conducted with SWIFT standards consultants over the past few months. ASX identified 533 CHES messages across 13 business areas that needed to be mapped to ISO 20022 at the message level, as outlined on slide 7 of the presentation.

The analysis has indicated that of the 120 ISO 20022 message equivalents (slide 8 of the presentation):

- 60 messages map neatly or may require a change request to be fit for purpose,
- 32 messages have no direct mapping so may need new message definition, and
- 28 messages are currently being considered for certification as part of the T2S suite of messages.

ASX also noted that the quantum of work is actually larger than message mapping, based on business usage or scenarios where there is more than 1 message to 1 usage/scenario mapping. ASX's Manager Equity Post Trade Services stressed these numbers are indicative and subject to change as we move into detailed analysis. A member asked for clarification on the number of new messages and the proportion compared to the total set. ASX noted that working through the detail will provide more clarification.

The SWIFT standards consultant was invited to provide an overview of the ASX and high level gap analysis scope compared to three other market implementations as outlined on slide 10 of the presentation. The consultant noted that the CHES message suite was large and rich in functionality in comparison, outlining key themes from each implementation.

The SWIFT standards consultant provided a summary of the key recommendations from the high level gap analysis, outlined on slide 11. The consultant noted it was key that the project adopt standard messaging for common functions and rationalise the number of proprietary messages. Standardisation of data elements (to ISO) was also important. The consultant outlined the timelines associated with an adoption roadmap including the annual maintenance period, and lead times for change requests.

The Chair noted slides 12 and 13 for the information of members on market implementation strategies.

Agenda item 7: MI Harmonisation for adoption of ISO 20022

ASX's Manager, Equity Post Trade Services noted that ASX had endorsed the Market Infrastructure Harmonisation Charter for the adoption of ISO 20022, including 3 key principles, as outlined on slide 14 of the presentation. Key to this was ASX's publication of ISO 20022 usage guidelines on the SWIFT MyStandards portal, as has been done for the Corporate Actions messages, and in 15022 for Austraclear. A member asked if ASX would share information on how to register for access to SWIFT MyStandards. ASX will provide the necessary information to members. **[Matter Arising 2]**



Agenda item 8: ISO 20022 adoption and engagement roadmap

The Chair outlined the approach to Business Requirements and message definition as presented on slide 15.

The Chair noted that with regard to scope, the existing CHES business areas of Electronic Trade Confirmation and Securities Lending Service would not be carried forward as they were not currently used and weren't consistent with current market practice.

Trade reporting from AMOs will be in FIX format. ASX will consult with AMOs to discuss the FIX format.

Agenda item 9: Next steps

The Chair confirmed that ASX will publish the summary and response to consultation responses in first quarter of 2017. As noted on slide 17 of the ASX presentation, the Chair noted the next Technical Committee meeting would be held in February 2017. The Chair sought feedback from members with regard to market education and training on ISO 20022, and to consider how training can be provided. ASX will work with SWIFT to provide some training/education options at the next meeting. **[Matter Arising 3]** In the meantime, members can request additional copies of the booklet "ISO 20022 for Dummies" to assist education in their organisations.

The Chair directed members to the CHES Replacement web page where material for the Technical Committee will be published by ASX, and available to the broader industry to allow for transparency of the Committee's agenda and actions.

The Chair thanked members for their input, and for participating in the meeting. The meeting closed at 4.50pm.

Signed as a correct record of the meeting.

A handwritten signature in black ink, appearing to be 'A. G.', written over a horizontal line.

Technical Committee Chair

A handwritten date in black ink, '18 JANUARY 2017', written over a horizontal line.

Date



ACTION ITEMS

| # | Open Action Items | Owner | Due Date |
|---|--|-----------|-----------------|
| 2 | Provide members with information on how to access SWIFT MyStandards. | ASX | 7 February 2017 |
| 3 | Provide members with an overview of ISO 20022 training options. | ASX/SWIFT | 7 February 2017 |

| # | Closed Action Items | Owner | Due Date |
|---|---|-------|------------------|
| 1 | Amend the Charter to reflect that the Chair "will" (instead of "may") forward copies of the minutes to the Business Committee for endorsement. ASX to publish and distribute final Charter. | ASX | 13 December 2016 |

BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 6A

| | |
|------------------------------|---|
| Topic | Minutes from 1 December 2016 meeting |
| Date of the Meeting | 2 March 2017 |
| Purpose of this paper | To provide Business Committee members with a copy of the minutes and Business Committee report to the ASX Clear and ASX Settlement Boards from the 1 December 2016 meeting. |
| Action required | To approve the minutes and report to the Forum from the 1 December 2016 meeting. |

Draft minutes and the draft report to the Forum from the 1 December 2016 Business Committee meeting were emailed to all members of the Business Committee on 21 December 2016 for comments by 25 January 2017. There were some changes made in response to comments from a Business Committee member. These are marked up in the attached document.

The Report and Business Committee 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 the ASX Clear and ASX Settlement from the 1 December 2016 Meeting.



BUSINESS COMMITTEE REPORT TO THE BOARDS OF ASX CLEAR AND ASX SETTLEMENT

BUSINESS COMMITTEE MEETING

At its 1 December 2016 meeting, the Business Committee was updated on:

- market activity and settlement performance in the past quarter and actions being pursued following the September 2016 ASX Trade outage to enhance processes and communication with the market in the event of similar events in the future;
- the CHES replacement project including upcoming stakeholder engagement e.g industry workshops and a reconvening of the Technical Committee to develop global messaging standards (ISO 20022) to replace CHES messages; and
- ASX consultation on proposed changes to minimum core capital requirements; methodology changes for collateral haircuts; and ETO margin enhancements.

KEY RECOMMENDATIONS

There were no recommendations arising from the meeting.

KEY ISSUES DISCUSSED

- CHES replacement project – it was noted that the consultation process has only just begun and there would be plenty of opportunities for key industry stakeholders to provide input on functional and non-functional business requirements for the CHES replacement project over the next 12 months.

Members of the Business Committee expressed strong views that the Committee should be the key forum for delivering industry input to the process and that this would require frequent and active engagement (including the allocation of sufficient time at future meetings) to debate and provide recommendations the relevant ASX Boards on the scope and priorities of the project.

They also stressed that participants wanted clear 'Day 1' enhancements to existing functionality to deliver upfront efficiency and cost reductions as part of CHES replacement in areas such as corporate actions and transfers and conversions.

- Two members questioned whether the wording of the updated Code of Practice, particularly the concept of "users" of the facilities was consistent with the wording in the Council of Financial Regulator's Regulatory Expectations. If it was not, it should be made consistent.

The view was expressed that the interests of the users represented by the Business Committee should be given the highest priority by ASX.



AGREED ACTIONS

1. Material matters raised at CHES replacement project industry workshops and the Minutes of the Technical Committee are reported to the Business Committee.
2. A more detailed 2017 forward work program would be presented to the next Business Committee meeting and, as part of that, the scope to hold additional (or extended) Business Committee meetings at points that are aligned with key CHES replacement project milestones would be identified. This would include the flexibility, if appropriate, to focus the agendas of particular meetings entirely to CHES replacement.
3. The next Business Committee meeting to be extended to allow for an open exchange of views on the overarching vision for the replacement of CHES and to also consider a revised Business Committee Charter.
4. ASX would also examine the feasibility of bringing forward the next Business Committee meeting.
5. ASX to look at Hong Kong and other markets for examples of other engagement mechanisms for eliciting user input to the CHES replacement project. This would include, considering the use of the Hong Kong template to seek additional feedback from Business Committee members.
6. ASX to review the wording of the updated Code of Practice to reaffirm that it is aligned with in the context of the CFR's Regulatory Expectations and to set out who are the other relevant stakeholders referenced in that document.

Minutes from the meeting are attached.



MINUTES

BUSINESS COMMITTEE MEETING

| Date | Time | Location |
|----------------------------|-----------------|---|
| Thursday , 1 December 2016 | 4.00pm – 5.35pm | ASX offices – Level 1, 20 Bridge Street, Sydney |

| Agenda Item |
|--|
| 1. Introduction |
| 2. Service Performance Operating Performance Report |
| 3. Business Matters a) Roadmap for post-trade service infrastructure |
| 4. Regulatory Updates a) Minimum Core Capital requirement, Collateral Haircuts and ETO Initial Margins b) Updated Code of Practice |
| 5. Administration a) Forward work program updated b) Minutes from the 31 August 2016 meeting c) Proposed 2017 Business Committee Meeting Dates d) Other matters |
| 6. Next Meeting The next meeting of the Business Committee is scheduled for Thursday 2 March 2017. |

NEXT MEETING: Thursday 2 March 2017



| Members | | |
|---------------------------------------|---|---|
| Company | Name | Job Title |
| ANZ | Mr Andrew Kourdin (as delegate for Peter Mullin) | Head of Execution Assurance and Middle Office |
| ASX | Mr Peter Hiom | Business Committee Chair Deputy CEO, ASX |
| Bank of America Merrill Lynch | Mr Rhys Cahill | Global Markets COO |
| BNP Paribas | Mr Luc Renard | Head of Clearing & Custody |
| Chi-X Australia | Mr Mike Aikins | Chief Operating Officer |
| Citi | Mr Miles O'Connor | Director, Direct Custody & Clearing Securities & Funds Services |
| Commonwealth Bank of Australia | Mr Sheridan Thompson | Head of Strategic Development, CommSec |
| Goldman Sachs | Mr Jeremy Follett | Executive Director Operations |
| HSBC | Mr Peter Snodgrass | Head of Direct Custody and Clearing |
| J.P. Morgan | Mr Suneet Jain | Sales Business Manager, Markets & Investor Services |
| Macquarie Group | Mr James Indge | Cash Equities Business Manager |
| Morgans | Mr Peter Chisholm | Chief Operating Officer |
| Morgan Stanley | Mr Craig McGuire | Head of Operations |
| National Australia Bank | Mr Greg Bowrey (by telephone) (as delegate for Nathan Walsh) | General Manager, Self-Directed Wealth Products & Markets |
| NSX | John Williams (delegate for Ann Bowering) | Managing Director |
| Stockbrokers Association of Australia | Mr Andrew Green | Chief Executive Officer |
| UBS | Mr Conor Foley | Chief Operating Officer |



Apologies

| Company | Name | Job Title |
|-------------------------------|--|---|
| ABN AMRO Clearing | Mr Sean Lawrence | Managing Director |
| Bell Potter Securities | Mr Dean Surkitt | Managing Director Retail |
| Credit Suisse | Mr Matthew Gallagher (as delegate for Andrew Farran) | Head of Operations |
| Deutsche Bank AG | Mr Geoffrey Plaisted | Chief Operating Officer, Equities |
| Pershing Securities | Mr Rob Forbes | Chief Executive Officer |
| Sydney Stock Exchange Limited | Mr David Lawrence | Chief Operating Officer & Company Secretary |

ASX Management

| Name | Job Title |
|---------------------|---|
| Ms Amanda Harkness | Group General Counsel & Company Secretary |
| Mr Tim Hogben | Group Executive, Operations |
| Mr Alan Bardwell | Chief Risk Officer |
| Ms Eloise Wett | Executive General Manager, Customer Experience |
| Mr Cliff Richards | General Manager, Equity Post Trade Services |
| Ms Diane Lewis | Senior Manager, Regulatory and Public Policy |
| Mr Gary Hobourn | Senior Economic Analyst, Regulatory and Public Policy |
| Mr Rodd Kingham | Senior Manager, Equity Post Trade Services |
| Mr Michael Bradwell | Senior Legal Counsel |



AGENDA ITEM 1: INTRODUCTION

The Chair formally opened the meeting at 4pm. Some of the Agenda items were considered out of order. For convenience, they are recorded in the order set out in the Agenda.

The Chair welcomed Members and delegates and noted the apologies. The Chair noted changes of representatives of two Members.

AGENDA ITEM 2: SERVICE PERFORMANCE

a. Operating Performance Report

The ASX Group Executive, Operations spoke to the agenda paper noting that the statistics in the paper for the December 2016 quarter are for the period to 31 October 2016 only. The Group Executive, Operations noted the following metrics including:

- Availability for CHES and TAS was 100%
- Trading on ASX and NSX was slightly down on the previous quarter, trading on Chi-X was in line with the previous quarter and trading on SSX was slightly up
- Netting efficiency was high on volume 99% and value 60%
- Fail rates in November slightly heightened but still very low given the size of the settlement batch, this was partially attributable to two days trading settling on one day (due to Melbourne Cup) and some corporate actions

The Group Executive, Operations reported that technical issues at participants had resulted in the batch settlement time being extended on 4 separate occasions (twice for 15 minutes and twice for 30 minutes). It was specifically noted in relation to the two 30 minute extensions that it is a serious matter to extend settlement however the participants involved contributed significant volume and value into the settlement batch and their failure to participate would have significant impact on overall settlement performance.

The Group Executive, Operations also reported to the Committee the market activity and settlement performance that arose from the announcement of the results of the US election. It was reported that there was higher than usual volatility in both the equity and derivative markets but the system continued to operate normally and without disruption. Of specific note was the record equity trade volume, no trade cancellations, no delays in receiving the additional margin called and that fail rates remained low. Fail rate was 0.4%. The Group Executive, Operations thanked the Committee for their efforts in achieving the high levels of settlement performance throughout the period.

The Chair invited the ASX Executive General Manager, Customer Experience to speak to the Committee in relation to the ASX Trade outage that occurred on 19 September 2016. The Executive General Manager, Customer Experience reported in relation to the actions being taken since the outage and the learnings from the outage including in relation to technology, communications and market management. It was reported that in relation to technology ASX has reviewed the cause of the outage in conjunction with its vendors and has introduced tools allowing early identification of issues and faster resolution together with diagnostics to decide when the market is ready to reopen. ASX is reviewing the feedback received in relation to communications from ASX during the outage, including in relation to the breadth of distribution within recipients and having a single source of information from ASX. It was also reported that ASX is



reviewing feedback in relation to the reopening of the market in groups as is current market practice and will be consulting if changes are proposed to this or other market practices. A Member noted their objection to the cancellation of trades 24 hours after the outage and that the cancellation put them in breach of regulatory obligations.

AGENDA ITEM 3: BUSINESS MATTERS

a. Roadmap for post-trade service infrastructure

The Chair thanked Members for their responses to the recent Consultation Paper: "ASX's Replacement of CHES for Equity Post-Trade Services: Business Requirements". The Chair noted that this consultation is only the beginning of the consultation process and that there will be further opportunities for key industry stakeholders to provide input on functional and non-functional requirements for the CHES replacement project over the next 12 months and beyond.

The ASX General Manager, Equity Post Trade Services spoke to the paper and noted key components of the project including stakeholder engagement, business requirements of the solution, messaging standards and the software system build. Stakeholder engagement will include a response to consultation in February 2017, bilateral discussions and industry workshops and similar communication channels to those used during the T+2 project to educate stakeholders on key topics and keep them informed of the progress in consideration of key issues during the life of the project. One member commented that his organisation had found the information session on Distributed Ledger Technology particularly useful.

It was noted that invitations would shortly be sent to those that had made written submissions, to participate in workshops ahead of the holidays to further elaborate on, and confirm, ASX's understanding of consultation feedback and stakeholder priorities.

A particular theme that came out in submissions was a strong desire from Participants for greater functional enhancement from 'Day 1' with the replacement of CHES, for example, with corporate action and transfer and conversion processes being enhanced to deliver significant upfront process efficiencies.

The Group Executive, Operations noted the Committee's earlier endorsement of the use of global messaging standards and reported in relation to the work streams that had been progressed to investigate the use of such standard. This would ensure that the standards would be consistent with those being pursued in other international jurisdictions and within Australia under the New Payments Platform. The preliminary gap analysis between current CHES messages and equivalent ISO20022 messages indicated that approximately 120 ISO20022 messages could replace around 500 CHES messages while retaining, and expanding, service functionality given the ability to include enhanced logic within the new message format.

It was noted that the first of a planned monthly schedule of meetings of the Technical Committee is to be held on 13 December. Members can decide which representatives from their organisation are most appropriate to attend Technical Committee meetings and those best placed to participate would need to have a deep understanding of CHES messaging and the associated business processes, and may also have some knowledge of the ISO message standards. The Group Executive, Operations responded to questions from the Committee and confirmed that a report from the Technical Committee, including minutes of the meeting, would be provided to the Business Committee.

The General Manager, Equity Post Trade Services reported that the software build to be delivered towards the end of 2017 is not intended to replicate the full suite of existing CHES services or incorporate any new



enhanced services but will instead be used to test the technology's capability, reliability and scalability to inform the decision on the technology and the vendor. An important feature of any new clearing and settlement system will be to facilitate future service changes in a timely and cost-effective manner.

The high level timeline in the agenda paper outlined that the exploration of the full business requirements for the CHES replacement project will continue alongside and beyond the timeline set out for the decision of the technology to be employed. The work on those business requirements will still be relevant and usable even if a decision not to proceed with distributed ledger technology was taken in 2017.

The meeting discussed the role of the industry workshops (including those to be held prior to the holidays) and it was noted that while they will discuss substantive matters they are not generally intended to be decision making bodies or to make recommendations but rather to confirm with those providing responses their feedback in the written consultation process. It was agreed that any material matters raised at workshops would be minuted and reported to ~~and discussed with~~ the Business Committee. **[Matter Arising 1]**

The Committee discussed the frequency of Business Committee meetings following a request for more (possibly monthly) meetings and it was agreed that ASX would prepare a more detailed 2017 forward work program for the next meeting and, as part of that, would look to hold additional, and/or extended, meetings at points in the process that are aligned with key project milestones. This would be reviewed as work progressed. There would also be the flexibility, if appropriate, to focus the agendas of particular meetings entirely to CHES replacement. **[Matter Arising 2]**

Some Members expressed concerns that ASX's focus to-date appeared to be on the technology solution rather than the exploration of the opportunities to use this once in a generation project to enhance existing arrangements to deliver significantly superior functionally that would offer substantial process efficiencies for users. Some Members felt that they had not been provided adequate opportunities to date to provide meaningful input to the process.

A member asked about the timeline and process for making a decision on CHES replacement. The Chair noted that a decision on whether to proceed with Distributed Ledger Technology is due in November 2017 but he reiterated ~~that this was not the intention and~~ that the door is just opening on the opportunity for users to have effective input to the business requirements that will underpin the replacement of CHES.

He confirmed the Business Committee was the key forum for market participants and other market operators to provide input in to ASX's governance and decision making process regarding the replacement of CHES. The Boards of ASX Clear and ASX Settlement must respond in writing to any recommendations from the Business Committee, this written response must include an explanation if any recommendations had not been followed. The Chair noted that regulators will also be regularly monitoring the processes and outcomes of the project.

In response to a Member's question on the nature of engagement with other stakeholder groups (such as share registries and technology vendors), including whether it may be appropriate to broaden the membership of the Business Committee, the Chair indicated that ASX is currently considering the most appropriate mechanisms to engage with those stakeholder groups.

There was some discussion on why the interests of other stakeholders needed to be considered. Under Agenda Item 4(b) there was a further discussion of what priority ASX should give to the views and interests of different user groups in developing the business requirements for the replacement of CHES.



For future meetings of the Business Committee, it was agreed that sufficient time would be allocated at each meeting to allow for an informed and involved discussion on CHES replacement following a request from Members. It was agreed that the length of the next meeting be extended to focus on a discussion of the industry's vision and priorities for CHES replacement. A member indicated that the industry does not want a 'like-for-like' CHES replacement. ASX also confirmed that the Charter for the Business Committee will be revised to reflect the updated Code of Practice and that the revised Charter will be provided to the next meeting. [Matter Arising 3]

Some Members asked if it was possible to bring forward the date of the next meeting to February and ASX agreed to examine the feasibility of convening an earlier meeting. [Matter Arising 4]

A Member noted favourably a recent consultation document issued by the Hong Kong Exchanges Group in respect of a planned comprehensive upgrade of its post trade infrastructure and requested that ASX consider that consultation document as a possible template to facilitate further industry input. It was agreed ASX would examine the Hong Kong document along with looking at other markets for examples of other engagement mechanisms for eliciting user input to the project. [Matter Arising 5]

AGENDA ITEM 4: REGULATORY UPDATES

a. Minimum Core Capital requirement, Collateral Haircuts and ETO Initial Margins

The ASX Chief Risk Officer spoke to the agenda paper and reported in relation to ASX's consultation on the proposed changes to the minimum core capital requirements (MCCR) noting the responses received were neutral to broadly supportive while responses from some smaller brokers were less favourable. The Chief Risk Officer reported in relation to some of the key messages from that feedback and reported that the revised MCCR Rules and associated documents reflecting feedback received would be released for market consultation in early 2017.

The Chief Risk Officer reported that the methodology changes for collateral haircuts had been implemented which resulted in the margin requirement falling and as a consequence the value of excess collateral held increasing by \$350m.

The Chief Risk Officer also reported that the spread changes had just been implemented and that the final implementation of liquidity and concentration multipliers is expected to be in Q3 2017.

b. Updated Code of Practice

-In the course of discussing the agenda item on CHES replacement (see above), the meeting discussed the updated Code of Practice and some Members expressed concerns about the wording of the updated Code of Practice, including around ensuring that the concept of "users" of ASX's cash equities clearing and settlement services is aligned with the definition of users in the Council of Financial Regulator's Regulatory Expectations.

Two members requested that the ASX Code be redrafted to reflect the exact words used by CFR to avoid ambiguity. This included terminology related to 'users'; 'governance processes that enable users provide input on the setting of the investment strategy', and the 'comply or explain' obligation on the relevant ASX Boards.

Some Members expressed the view that 'users' should primarily refer to clearing and settlement participants and that broader references in the Code of Practice for the need for post trade infrastructure



to continue to meet the needs of the market was of concern. One member expressed the view that the interests of the users represented by the Business Committee should be given the highest priority by ASX. Another member questioned why the interests of stakeholders other than clearing and settlement participants should be considered.

The Senior Manager, Regulatory and Public Policy noted that ASX will be assessed against CFR's regulatory expectations and the terminology used in the Code of Practice does not affect those obligations. She also noted that under the Regulatory Expectations users are broadly defined to include 'participants of the ASX CS facilities; end users; unaffiliated market operators, central counterparties and settlement facilities, technology service providers; and other relevant stakeholders'.

ASX undertook to review the wording of the updated Code of Practice in the context to reaffirm that it is aligned with ~~of~~ the Regulatory Expectations and set out who are the other relevant stakeholders in response to the comments made during the discussion. **[Matter Arising 6]**

AGENDA ITEM 5: ADMINISTRATION

a. Forward work program updated

The meeting noted the forward work program. The Chair noted that the forward work program would be updated to incorporate CHES replacement activities.

b. Minutes from the 31 August 2016 meeting

The Chair noted the minutes from the 31 August 2016 meeting and invited comments. As there were no comments, the Chair noted that the minutes were approved.

c. Proposed 2017 Business Committee meeting dates

It was agreed that the proposed 2017 meeting dates would be reviewed with regard to the possibility of bringing forward the March meeting and including additional meetings.

d. Other matters

The Chair noted that there would be an informal presentation by Adrian Lovney, the CEO of the National Payments Platform, immediately following the meeting.

The Chair thanked Members for their participation and contributions to the Committee during the year, and wished everyone a happy holiday over the festive season.

NEXT MEETING

The next meeting is scheduled to be held on Thursday, 2 March 2017 (which may be subject to change if an earlier date was found to be feasible).

As there was no further business discussed, the meeting closed at 5.35pm.

Signed as a correct record of the meeting.



Chairman

Date

BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 6B

| | |
|------------------------------|---|
| Topic | 2017 Proposed Business Committee Dates |
| Date of the Meeting | 2 March 2017 |
| Purpose of this paper | To provide Business Committee members with the proposed 2017 meeting dates. |
| Action required | To note proposed dates. |

The proposed 2017 Business Committee meeting dates are set out below.

| Business Committee Meeting Dates | ISO20022 Technical Committee Meeting Dates |
|---|---|
| | Tuesday, 7 February 2017 (3.00pm) |
| Thursday, 2 March 2017 (2.00pm) | Tuesday, 14 March 2017 (3.00pm) |
| Thursday, 4 May 2017 (12.00pm) | Tuesday, 2 May 2017 (3.00pm) |
| Thursday, 15 June 2017 (12.00pm) | Tuesday, 6 June 2017 (3.00pm) |
| | Tuesday, 18 July 2017 (3.00pm) |
| Thursday, 3 August 2017 (12.00pm) | Tuesday, 22 August 2017 (3.00pm) |
| Wednesday, 4 October 2017 (12.00pm) | Tuesday, 10 October 2017 (3.00pm) |
| Thursday, 30 November 2017 (4.00pm) | Tuesday, 21 November 2017 (3.00pm) |

It is proposed to increase the number of Business Committee meeting in 2017 from four to six, consistent with the forward work program.

Business Committee meetings are generally scheduled for 12:00pm - 2:00pm and include a sandwich lunch. The length of a meeting will be extended, if required, to allow for more detailed discussion of a particular issue.

Additional meetings may also be added to the schedule if required.

Members are asked to contact the Business Committee Chair by email at bc.chair@asx.com.au if there are any issues with the proposed dates.

Formal Outlook invitations for the meetings will be sent closer to the dates.