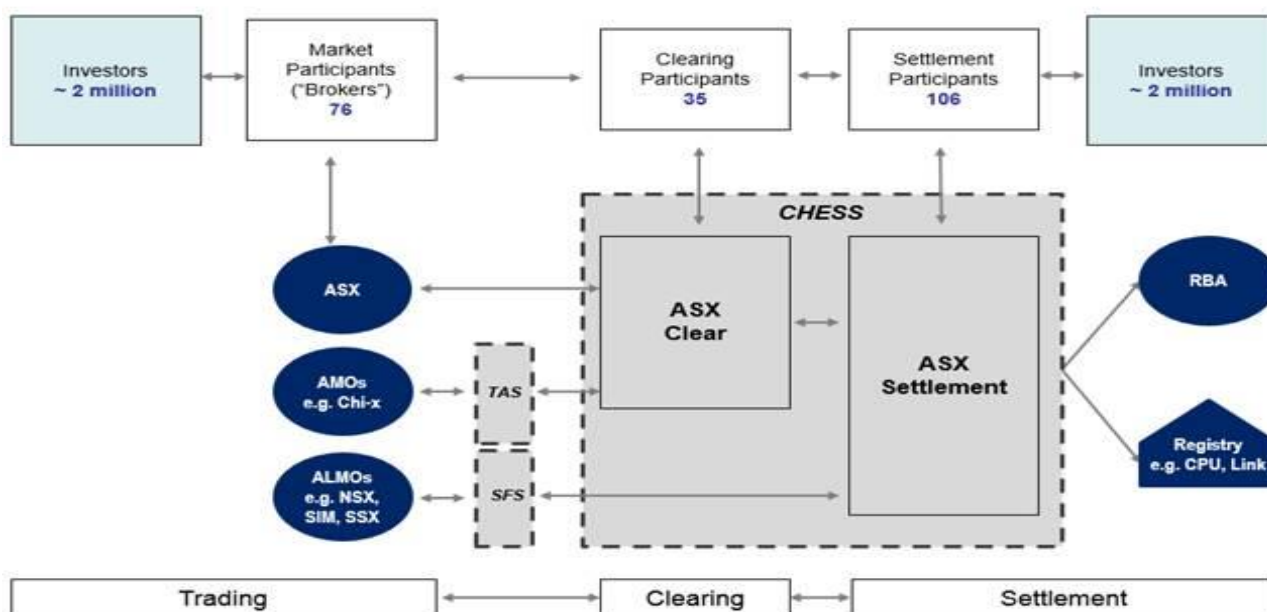| BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 1A | |
|---|---|
| Topic | Cash market clearing and settlement services - Operational performance |
| Date | 5 July 2018 |
| Purpose of this paper | To report on key performance metrics for ASX's clearing and settlement services. |

## 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 CHESS.  It is critical for market operations, that CHESS remains stable and available for processing.  A key metric for monitoring systems availability is the percentage of systems uptime as measured against target availability times.  The service availability target for CHESS is 99.80%.

For the June 2018 quarter[1], the average monthly system availability was 100.00% for CHESS.  The average monthly availability of CHESS has been 99.99% between November 2011 and May 2018.

## Trade Acceptance Service

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

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

For the June 2018 quarter[2], the average monthly system availability was 100.00% for the TAS.  The average monthly availability of the TAS has been 99.99% between November 2011 and May 2018 (which is the same as CHESS).

## Reporting on clearing and settlement service performance

The key metrics noted above on novation, netting efficiency and settlement efficiency for the December 2017 quarter are reported in Attachment A.  They are also supported by charts demonstrating a longer reporting period in Attachment B.
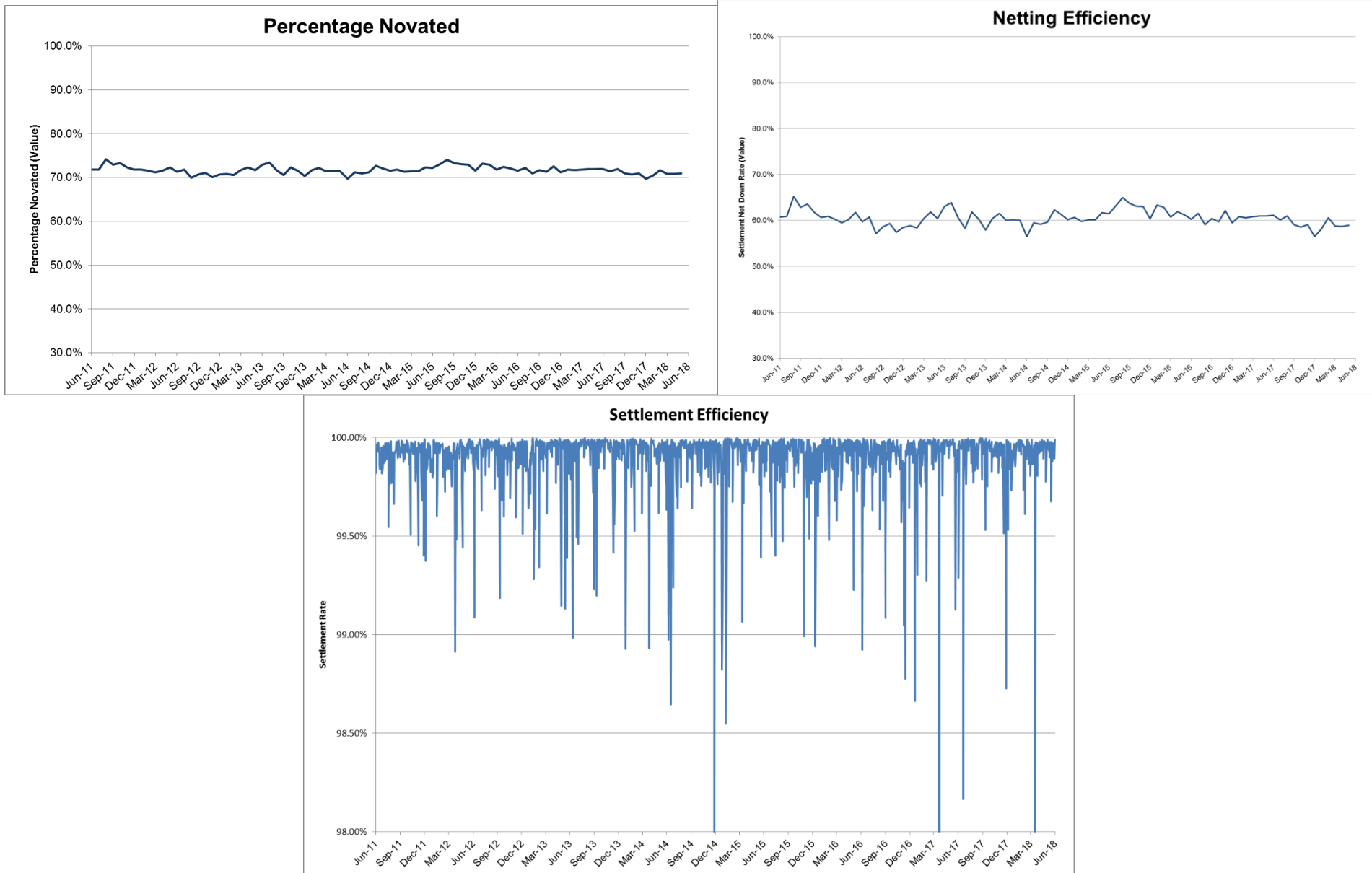
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[1] Up to 31 May 2018
[2] Up to 31 May 2018

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

| | June 2018 Quarter[3] | March 2018 Quarter | December 2017 Quarter |
|---|---|---|---|
| **System Availability (CHESS)** | 100% | 99.95% | 100% |
| **System Availability (TAS)** | 100% | 100% | 100% |
| **Total Trades Accepted (ASX)** | 49,069,130 | 75,725,702 | 73,927,275 |
| **Total Trades Rejected (ASX)** | 12 | 4 | 1,156 |
| **Total Trades Accepted (Chi-X)** | 18,276,119 | 29,460,806 | 29,275,952 |
| **Total Trades Rejected (Chi-X)** | 0 | 0 | 14 |
| **Total Settlements (SSX)** | 0 | 0 | 0 |
| **Total Value of Settlements (SSX)** | $0 | $0 | $0 |
| **Total Settlements (NSX)** | 346 | 299 | 401 |
| **Total Value of Settlements (NSX)** | $1,661,383 | $1,184,260 | $1,393,680 |
| **Daily Average Traded Value (On and Off Market)** | $6.34 billion | $6.49 billion | $6.35 billion |
| **Daily Average Cleared Value** | $4.49 billion | $4.61 billion | $4.47 billion |
| **Percentage Novated** | 70.8% | 71.0% | 70.5% |
| **Daily Average Cleared Value Post-Netting** | $1.85 billion | $1.88 billion | $1.88 billion |
| **Netting Efficiency** | 58.8% | 59.2% | 58.1% |
| **Daily Average Settled Value (Including Non-Novated)** | $9.6 billion | $9.8 billion | $9.6 billion |
| **Settlement Efficiency** | 99.94% | 99.88% | 99.88% |

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[3] Up to 31 May 2018

## ATTACHMENT B – PERFORMANCE OF ASX'S CLEARING AND SETTLEMENT SERVICES FROM JUNE 2011 TO May 2018



Percentage Novated



Netting Efficiency



Settlement Efficiency

| **BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 1B** | |
| --- | --- |
| **Topic** | **Market Events (verbal update)** |
| **Date** | 5 July 2018 |
| **Purpose of this paper** | **To provide Business Committee members with an update on two recent market events.**<br>• **Accidental Activation of Gas Fire Suppression System at ALC**<br>• **Unibail-Rodamco (URW) acquisition of Westfield Corporation (WFD)** |

### OVERVIEW

ASX will brief Business Committee Members on the background to, impacts of, and subsequent work conducted in response to two recent market events.

### Accidental Activation of Gas Fire Suppression System at ALC

On Monday 4 June 2018 there was an accidental discharge of the gas fire suppressant system at the Australian Liquidity Centre. This had an impact on the hardware of some customers.

ASX's equity market closed at its scheduled time and reopened as scheduled on Tuesday 5 June. The day session of the futures market closed at the scheduled time but the reopening of the evening session was delayed while ASX liaised with customers and investigated the issue further. The futures market night session opened at 10pm EST.

In addition to undertaking a number of remediation actions, ASX has been in contact with customers to understand the impact of the event.

Members will be updated on the preliminary findings and proposed work program going forward.

### Unibail-Rodamco (URW) acquisition of Westfield Corporation (WFD)

On 8 June Unibail-Rodamco completed its acquisition of Westfield Corporation (WFD). The stapled securities for the newly formed Unibail-Rodamco-Westfield (URW) were listed on Euronext Amsterdam and Paris and there was a secondary listing on ASX through CHESS Depository Interests (CDIs) which commenced trading on 31 May 2018.

Unibail advised the market on Monday 28 May that a French transaction tax would be payable on each purchase of the CDIs created out of the URW takeover. This had not previously been advised to the market or to Westfield security holders through the Australian scheme documentation. We understand from Unibail that ASX participants executing purchases of CDIs of URW are required to calculate and remit the tax to the French authorities.

The timing of disclosure of that information meant that some participants were not initially in a position to confirm that they could be in the market for the commencement of trading of the stapled securities. ASX consulted with participants to assess the impact this would have on the operation of an orderly market. This consultation elicited commitments from a number of participants that they would have processes in place in time for commencement of trading, and that they would be in the market. With the benefit of this consultation, ASX was able to determine that the risk of a disorderly market was acceptably low. ASX also liaised with ASIC during this period to understand whether ASIC intended to raise this issue at the second court hearing prior to the scheme being approved and trading commencing.

In the event, trading in the new stapled securities on 31 May 2018 was orderly.

| **BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 2A** | |
|---|---|
| **Topic** | **Regulatory Expectations - Audit** |
| **Date** | 5 July 2018 |
| **Purpose of this paper** | **To advise the Business Committee that the external audit of ASX's compliance against the Regulatory Expectations is expected to commence soon.** |

In the *Regulatory Expectations for Conduct in Operating Cash Equity Clearing and Settlement Services in Australia* there is a requirement for ASX to commit to submitting an annual external audit of its governance, pricing and access arrangements against the Regulatory Expectations.

The first audit was conducted last year. The second audit is due to commence shortly and Business Committee members should be contacted by PwC as part of their review. The second audit covers the 2017-18 financial year.

The Terms of Reference for the annual external audit set out the objectives, scope and approach for the external audit.  They were discussed at the March 2017 Business Committee meeting.

The Terms of Reference are provided in Attachment A.

## ATTACHMENTS

Attachment A – Terms of Reference

## Regulatory Expectations External Audit Terms of Reference

### Background

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

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

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

### Objective

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

### Scope

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

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

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

### Approach

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

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

The approach will include, but not be limited to:

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

## Timing and reporting

The external audit subject to these Terms of Reference will be performed in July 2018 covering the period from 1 July 2017 to 30 June 2017.

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

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

## Commitment from the ASX

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

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

## Audit Scope - Regulatory Expectations

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

party was higher).  Other than where pricing is anti-competitive or gives rise to financial stability or market functioning issues, the fees charged by ASX are a commercial matter for ASX and its customers. Nevertheless, to ensure that the fees charged by ASX for its cash equity CS services are fair, transparent and non-discriminatory:

| | |
|---|---|
| 2(a) | ASX should ensure that all prices of individually unbundled CS services, including rebates, revenue-sharing arrangements and discounts applicable to the use of these services:<br><br>(i)  are transparent to all users of the services<br><br>(ii)  do not discriminate in favour of ASX-affiliated entities, except to the extent that the efficient cost of providing the same service to another party was higher<br><br>(iii)  are made available to stakeholders in a form such that the impact of pricing changes can be readily understood. |
| 2(b) | ASX should maintain an appropriate method for determining the prices of its CS services so as to generate expected revenue that reflects the efficient costs of providing those services, including a return on investment commensurate with the commercial risks involved. |
| 2(c) | ASX should make an explicit public commitment that any changes in the prices of its CS services will not be implemented in a way that would materially shift revenue streams between aspects of its trading, clearing and settlement services. |
| 2(d) | ASX should publish any increases in its CS fee schedules along with an attestation justifying their reasonableness. For the most material such increases, this attestation would be expected to refer to relevant metrics and other evidence, such as the calculated return on equity, benchmarked price lists, or an independent review of how ASX's cash equity CS fees compare with those of CS facilities in other markets. |
| 2(e) | ASX should maintain an appropriate model for the internal allocation of costs, including the cost of allocated capital, as well as policies to govern the transfer of prices between the relevant ASX Group entities. Compliance with the model and policies would be expected to be subject to internal audit review. The model and policies should be based on reasonable cost allocation principles. For example:<br><br>where possible, costs should be directly allocated to the service(s) which give rise to those costs<br><br>shared costs should be allocated based on appropriate and transparent metrics. |
| 2(f) | ASX should negotiate commercially and in good faith with unaffiliated market operators and CS facilities regarding fees and other financial contributions charged for any extensions to its monopoly CS services, and in particular those provided under the existing Trade Acceptance Service and the Settlement Facilitation Service. |

**3.  Commercial, transparent and non-discriminatory access to CS services – service levels, information handling and confidentiality**

ASX should facilitate access to its cash equity CS services on commercial, transparent and non-discriminatory terms.  Non-discriminatory terms in this context are terms that do not discriminate in favour of ASX-affiliated entities (except to the extent that the cost of providing the same service to another party is higher).  As part of this:

| | |
|---|---|
| 3(a) | ASX should have objectives for its CS services that include an explicit public overarching commitment to supporting access to its CS services on commercial, transparent and non-discriminatory terms. ASX should maintain standard user terms and conditions that are consistent with these objectives, taking into account the legitimate business interests of ASX and any parties seeking access to its CS services. |

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

| BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 3A | |
|---|---|
| **Topic** | **CHESS Replacement – Program Update** |
| **Date** | 5 July 2018 |
| **Purpose of this paper** | **Members will be provided with a program update including stakeholder feedback to the 'CHESS Replacement: New Scope and Implementation Plan' consultation paper** |

## OVERVIEW

The CHESS Replacement consultation paper was released to the market on 27 April and submissions closed on 22 June after an 8 week response period. By the time of writing this paper ASX had received 35 written submissions.

At the meeting the Committee will be provided with a preliminary summary of feedback provided by respondents.

ASX will also provide members with a program update on CHESS Replacement which includes DA's release of the DAML – SDK (Digital Asset Modelling Language – Software Development Kit).

### Stakeholder Feedback to the Consultation Paper

ASX will provide the Committee with an initial analysis on stakeholders' feedback. This will highlight:

- Common themes which respondents broadly agreed on.
- Areas where there are differing perspectives and views.
- A roadmap for future stakeholder engagement.
- Next steps on ASX responding publically to stakeholder feedback and finalising the roadmap for implementation.

Stakeholder feedback has been extensive, sometimes providing input beyond the scope of the specific questions asked. ASX welcomes and is appreciative of the comprehensiveness of responses received. Given the sheer volume of material and the short time frame between the end of the consultation period and the Business Committee meeting, it will not be possible to include a complete record of everything raised in the written submissions.

ASX expects to be in a position to publish a summary of consultation feedback received and its response, including the final scope and implementation timeline around late July - mid August.

### Digital Asset Modelling Language – Software Development Kit (DAML SDK)

On 19 April, Digital Asset (DA) unveiled a developer program for its enterprise smart contract language, DAML (Digital Asset Modelling Language). The program provides developers with tools and training so they can use DAML to model sophisticated, multi-party applications that run on the Digital Asset Platform. DAML is the language that the CHESS Replacement platform is being developed in. Where a stakeholder takes a node, they can optionally and additionally use DAML to build workflow.

DA have made available the DAML Software Development Kit (SDK) which developers require if they wish to build software solutions. Anyone can register for the DAML SDK via a link from the ASX CHESS Replacement webpage. Pre-requisites to installing the SDK includes the signing of a Non-Disclosure Agreement and a Master Services Agreement with DA.

To date, there has been good interest in the DAML SDK from current CHESS vendors and participants.  DA will provide formal training in July and August to provide a hands-on training course that is primarily of a technical nature and that would enable software developers to commence using DAML to write software applications.

## Additional Stakeholder Engagement

In May, Management held a project update webinar, with close to 400 participants registered.  The webinar provided a walkthrough of the key points from the consultation paper and responses to questions submitted by the audience.

Stakeholder engagement with Issuers has continued with ASX recently presenting, at the invitation of Governance Institute of Australia, to the Listed Public Companies Discussion Group on the key points from the consultation paper.

| BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 3B | |
|---|---|
| **Topic** | **Corporate Actions STP Phase 2 project** |
| **Date** | 5 July 2018 |
| **Purpose of this paper** | **To provide Business Committee members with an update on progress of the Corporate Actions STP Phase 2 project.** |

## OVERVIEW

Recent discussions with key stakeholders reinforced the conclusions from the CHESS Replacement corporate action working group - that the implementation of the STP solution across the full corporate action event set is worthwhile and is a high priority for market participants.

ASX is close to finalising the project planning for the Corporate Actions STP Phase 2 project. An outline of the project was provided in Appendix 1 of the 'CHESS Replacement: New Scope and Implementation Plan' consultation paper. The key points covered in the consultation paper are summarised below.

### Scope of Phase 2:

The scope of Phase 2 includes:

- Delivery of the straight through processing solution ('STP') for the remaining corporate action events currently supported by ASX.

- Delivery of STP for the announcement, capture of capital placement applications and applications for the quotation of securities by ASX issuers (that is, new online smart forms covering the matters currently included in Appendix 3B to the ASX Listing Rules), noting an overlap between notifications of capital raisings and some corporate action events such as entitlement offers.

- Extension of the STP service to cover the announcement of events by issuers of other product classes, such as, ETFs and mFund, and the capture of events by non-ASX affiliated AMOs on behalf of their issuers.

- A number of the corporate action business requirements detailed by the CHESS Replacement working groups that fit within the scope of this project; including

  – Electronic single access point for corporate action event information;

  – Standardised notification of corporate action events;

  – Transparency on life cycle of corporate actions, including the timely distribution of update event information;

  – Introduction of a consistent cut-off date for elections under dividend reinvestment plans (DRP) and bonus share plans (BSP);

  – Allocation of an ISIN for entitlements in non-renounceable issues;

  – Provide security code identifier and associated corporate action record for entitlement shares issued in foreign jurisdictions through a spin-off to differentiate them from the parent financial product; and

  – ASX will also review deferred settlement trading processes to assess whether there are any opportunities for simplification and more streamlined timetables.

- Delivery of specific enhancements to STP Phase 1 corporate action events.

## Proposed delivery timeframe:

It is expected that the project work will commence in Q3 2018 and will be delivered in two phases, the first in mid-2019, and the second and final phase in Q2 2020.  A high level timeline was included in the consultation paper (see below) alongside the indicative timeline of the key activities of the CHESS Replacement project. ASX is currently considering industry feedback to finalise the implementation timing of CHESS replacement.

| Indicative High-level Timeline | 2018 | | | | 2019 | | | | 2020 | | | | 2021 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 |
| ASX Analysis, Build & Test (iterative) | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | | |
| Corporate Actions STP Phase 2 | | | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | | | |
| Documentation Release (iterative) | | | | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | | |
| Customer Analysis, Build & Test | | | | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | | |
| Customer Development & Test Environments | | | | | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | ▓ | | |
| Industry Wide Testing | | | | | | | | | ▓ | ▓ | ▓ | | |
| Accreditation Testing | | | | | | | | | | ▓ | ▓ | | |
| Indicative Go-Live Window (Date TBC) | | | | | | | | | | | | ▓ | ▓ |

The timing of the STP Phase 2 project has been planned to minimise implementation risks and duplication of effort in conjunction with the CHESS replacement project.  For example, ASX does not anticipate any need for impacted STP stakeholders to re-work messages between delivery of the STP project and the system that replaces CHESS.

## Stakeholder engagement

The project will require significant consultation with relevant stakeholders. In Q3 2018 ASX will convene a working group similar to the CHESS Replacement corporate action working group that captured many of the business requirements to be carried forward by the Corporate Actions STP project.

ASX will provide members with further updates at future Business Committee meetings.

| BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 3C | |
|---|---|
| **Topic** | **ISO 20022 Technical Committee Report and Minutes** |
| **Date** | 5 July 2018 |
| **Purpose of this paper** | **To provide Business Committee members with a copy of the report and minutes from recent meetings of the ISO 20022 Technical Committee.** |

## OVERVIEW

The ISO 20022 Technical Committee met on 6 February 2018, 17 April, 22 May and 26 June.

A copy of the Technical Committee's final minutes for the 6 February meeting are provided in Attachment A (the Report to the ASX Boards was tabled at the last Business Committee meeting). In addition, a copy of the Technical Committee's report and minutes for the 17 April and 22 May meetings are attached.

A verbal update will be provided on the 26 June meeting.

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

## ATTACHMENTS

Attachment A – ISO 20022 Technical Committee Minutes 6 February 2018 meeting.

ISO 20022 Technical Committee Report and Minutes 17 April 2018 meeting.

ISO 20022 Technical Committee Report and Minutes 22 May 2018 meeting.

Attachment B -  ISO 20022 Technical Committee Forward Work Plan

# MINUTES OF THE ISO 20022 TECHNICAL COMMITTEE

Tuesday 6 February 2018

ASX Offices, 20 Bridge Street, Sydney; Webinar

1. **Welcome, Agenda**

2. **Minutes from last meeting, open actions**

3. **CHESS Replacement project update by ASX**

4. **ISO 20022 project update by ASX**

5. **Update from Business Committee**

6. **Matters for Consideration (Business and Technical Matters)**
   a) Review of Technical Committee member survey responses
   b) Update from SWIFT Standards team
   c) MyStandards Community – usage guideline feedback
   d) Securities and cash movements
   e) Simplify status messages
   f) Usage guidelines for review

7. **Next Meeting** - 17 April 2018

## Technical Committee Members

| Company | Name | Job Title | Apologies |
|---|---|---|---|
| Australian Payments Network Limited | Andy White | Chief Operating Officer | Apology |
| Australian Payments Network Limited | Paul Creswick | Security Standards Manager | |
| Bank of America Merrill Lynch | Andree Hindmarsh | Head of GMOT Australia | |
| Bank of America Merrill Lynch | Jimmie Alam | | |
| 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 | |
| Boardroom Limited | Tony Robinson | Senior Software Engineer | |
| Boardroom Limited | Michael Mullins | CIO | |
| Broadridge (Australia) | John Greenhow | General Manager, Australia | |
| Broadridge (Australia) | Manoj Mathew | Business Analyst | |
| Broadridge (Australia) | Mabel Chow | Development and Support Manager | |
| CBA Equities | Joel Cox | Technical Business Analyst | |
| CBA Equities | Carolyn Webb | Test Manager | |
| CBA Equities | Ben Lowe | Manager Settlements | |
| Chi-X Australia | Mike Aikins | Head of Solution Development | |
| Chi-X Australia | Suketu Adhvaryu | Senior Solution Architect | |
| Citicorp | Miles O'Connor | Director, Direct Custody & Clearing Securities Markets & Securities Services | |
| Citicorp | Brett Dennis | Head of Operations – Party Clearing | |
| Citicorp | Lyall Herron | | |
| Citicorp | Janice O'Brien | Markets & Securities Services Technology | |
| Citicorp | Matthew Warner | | |
| Citicorp | Ashok Kumar Balusa | | |

| Company | Name | Job Title | Apologies |
|---------|------|-----------|-----------|
| Citicorp | Glenn Pahilan | | |
| Citcorp | Andrew Gibson | Director – Head of Direct Custody and Clearing Australia & NZ | |
| Computershare | Paul Walton | Senior Manager, Corporate Actions & New Business Development – Investor Services | |
| Computershare | Leanne Bailey | Senior Business Analyst Product & Innovation | |
| Computershare | Laik Tan | | |
| Deutsche Securities | Kevin Novini | | |
| Dion Global Solutions | Craig Gray | Product Manager – Australia and New Zealand | |
| Dion Global Solutions | Nikki Gleisner | Account Manager | |
| GBST | Andrew Murdoch | Product Specialist, GBST Capital Markets | |
| GBST | Sue Schafer | Product Owner | |
| Goldman Sachs | Darrel Schwarz | Technology Vice President | |
| Goldman Sachs | Nichole Alexander | Operations Vice President | |
| HSBC Securities Services | Gregory Wilkin | Head of HSBC Operations | |
| HSBC Securities Services | Salih Kulic | Manager Custody | |
| HSBC Bank Australia Limited | Michael Macintosh | Senior Client Account Manager, Global Liquidity and Cash Management | |
| HSBC Bank Australia Limited | Anna Fratini | Senior Product Manager – High Value Payments, Clearing and Financial Institutions, | |
| 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 | Apology |
| JP Morgan | Ned Miglez | | |
| JP Morgan | Daniel Smith | VP, Network Management | |
| JP Morgan | Lesley Henderson | Technology Product team | |
| Link Group | Ian Batterham | Business Applications Architect | |

| Company | Name | Job Title | Apologies |
|---|---|---|---|
| Link Market Services | Sue Julian | National Manager, Corporate Actions | |
| Macquarie Group | Paul Bragg | Senior Manager Equities Clearing ANZ | |
| Macquarie Group | Merrilyn Auton | Manager Operations | |
| Morgans Financial | Matt Neaubauer | Team Leader, Service Management Team | |
| Morgans Financial | Ed Strike | IT Manager | |
| Morgan Stanley | Dorothy Wilson | Executive Director<br>Morgan Stanley Wealth Management, ISG Technology | |
| Morgan Stanley | Kirsty Venters | VP, Prime Brkrg Funding & Fin Tech | |
| Morgan Stanley | Oscar Dela Cruz | | |
| Morgan Stanley | Andrew Fielder | | |
| Morgan Stanley | Gordon Davies | VP/Firmwide Ops | |
| NAB Asset Management | Suresh Chinnappa | Head of Custody Service Operations | |
| National Australia Bank | Sachin Patel | Senior Analyst, Regulatory Affairs | |
| National Stock Exchange | Lina Lim | Head of Technology | |
| Nomura Research Institute | John Ryan | Senior Consultant | |
| Nomura Research Institute | Ashish Jha | | |
| Securitease | Anton Smith | Director | |
| Securitease | Chris Werry | Business Analyst | |
| Share Investing | Phil Barnes | Senior Manager, Platforms | |
| SWIFT Standards | Nicole Jolliffe | Senior APAC Standards consultant | |
| SWIFT Standards | Mieko Morioka | Senior APAC Standards consultant | |
| SWIFT Standards | Vincent Kuntz | Senior Business Analyst, EMEA, Standards | |
| SWIFT | Chermaine Lee | SWIFT Project Coordinator | Apology |
| Sydney Stock Exchange | Leo Zhang | Business Analyst | |
| Sydney Stock Exchange | Jason Shen | Market Operations Officer | |
| 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

## ASX Management

| Name | Job Title | Apologies |
| --- | --- | --- |
| Tim Hogben | Chief Operating Officer (Chair of the Technical Committee) | |
| Cliff Richards | Executive General Manager, Equity Post Trade | |
| Brendon Luscombe | General Manager, Product Owner, CHESS Replacement Project | |
| Karen Webb | Senior Manager, Equity Post Trade Services | |
| Russell Eyre | Enterprise Architect | |
| Anne-Marie Fisher-Taylor | Team Lead, Application Development | |
| Darcy Wright | Senior Business Analyst, Equity Post Trade | |
| Priscilla Ferri de Barros | Senior Business Analyst, Equity Post Trade | |
| Nicky Darwin | Senior Business Analyst, Equity Post Trade | |
| Gary Hobourn | Senior Economic Analyst, Regulatory and Public Policy | |

The meeting commenced at 3.00pm.

**Agenda item 1: Agenda overview**

The Chair welcomed Technical Committee members to the meeting including members attending by webinar. The Chair also welcomed two members of the SWIFT standards consultant team joining us in Sydney for the meeting – Vincent Kuntz and Mieko Morioka.

The Chair outlined the Agenda for the meeting, referring to the presentation slides prepared by ASX. The agenda included an overview of the proposed forward plan of meeting topics, as outlined on slide number 4 of the ASX presentation.

**Agenda item 2: Minutes from last meeting, open actions**

The Chair noted that the minutes from the last meeting held on 21 November 2017 had been finalised without change, distributed and published on the web page. ASX had not received any comments on the draft minutes from committee members.

The Chair noted the outstanding actions from the last meeting as outlined on slide number 5 and 6 from the ASX presentation.

**Action item 19** was considered as no longer required, with comparisons between 15022 and 20022 core messages being acceptable. **This item was closed.**

**Action item 20** was for ASX to provide a proposed plan for the remaining training webinars. The Chair noted that ASX was considering industry training closer to implementation. **This item remains on hold.**

**Action item 23** was for ASX to continue a review of reports and provide further candidates for descope at meetings. The Chair noted that at this point in time ASX did not have any further recommendations for descope and will consider any reporting changes or redundant items as the work on Day 1 scope business requirements continues. **This item was closed.**

**Action item 39** was for the Chair to contact members seeking feedback on the approach of the Technical Committee, any suggestions to improve the process. The Chair noted that ASX had sent a survey to Technical Committee members in December 2017 and thanked members for the feedback. A specific agenda item to review the feedback was included in this meeting. **This item was closed.**

**Action item 41** was for ASX to conduct bilateral discussions with share registries and mailing houses regarding structuring of registration details and associated static data. The Chair noted that ASX had sent invitations to share registries for a meeting later in February 2018 to discuss key requirements. **This item was closed.**

**Action item 42** was for ASX to conduct bilateral discussions with share registries regarding current holding balance changes associated with corporate actions and proposed withdrawal of EIS 421. The ASX Senior Business Analyst noted that a few options for the EIS 421 had been discussed at prior meetings. ASX with SWIFT have now developed a usage guideline to replicate the EIS 421 as a precursor to 'to-be' guidelines. Subject to the share registries review of this guideline, it was proposed to close the action item. **This item was closed.**

**Action item 43** was for ASX to provide a proposed governance method for Technical Committee input to and review of all matters tabled at the Standards Evaluation Group (SEG), including any matters raised by ASX on behalf of the community. The Chair noted that an overview would be provided during the ISO 20022 project update at this meeting. **This item was closed**.

**Action item 48** was for Technical Committee members to review the information provided in agenda item 6d) from the 21 November meeting regarding models for simple and complex reporting (refer presentation slide number 7) and indicate agreement or otherwise with ASX's recommendation. The Chair noted that in the absence of specific input, ASX would proceed with the recommendation to use model 1b for simple models and model 2a for complex models. The committee agreed with this action. **This item was closed**.

### Agenda item 3: CHESS Replacement project update by ASX

The Chair invited the Executive General Manager (EGM), Equity Post Trade to provide an update on the project. The EGM discussed the announcement in December 2017 in which ASX confirmed that DLT as provided by Digital Asset was the chosen technical solution for CHESS Replacement. The work completed to date with Digital Asset would form the basis of the functionality of CHESS Replacement, with enhancements. It would also include architectural and other refactoring on related clearing and settlement technology apart from CHESS. During 2017 ASX had conducted a large engagement process to capture and discuss business requirements as input to the Day 1 scope, that is, the first version of the replacement. The ASX team were in the midst of producing a consultation paper for a target release of end March 2018 including a description of what will and won't stay in functionality, including ASX generated requirements and industry requirements. It is likely that ASX would not deliver all requirements, keeping in mind the risk profile, and that complex requirements may have a time to market factor, and there may be conflicting requirements. There were also implications for the ASX rule books. ASX would describe those requirements targeted for Day 1 delivery or delivered later or by other means, or not at all, with the rationale.
The consultation paper would also include a plan with sufficient detail to allow stakeholders to make their own plans – how long it may take, what tasks and when. ASX appreciates that stakeholders need a minimum 12 months implementation for their own planning and resourcing. The project is still multi-year, and ASX hadn't determined the exact timeframe yet – likely between 2 and 4 years.

A member asked to what extent the existing work in ISO 20022 provides coverage for future requirements. The EGM responded that whether via traditional messaging or via a node, the format to invoke the service will be in ISO 20022.

### Agenda item 4: ISO 20022 project update by ASX

The ASX Senior Manager, Equity Post Trade Services (ASX SM) provided an overview of the ISO 20022 detailed mapping where the ASX and SWIFT teams were making good progress against the project plan to finalise the 'as-is' mapping. At 30 November 2017 ASX had achieved at least a first draft equivalent of all in scope CHESS EIS messages. To date 142 messages were considered finalised on an 'as-is' basis. From April 2018 the team would be using that 'as-is' base to start working on the 'to-be' mapping to match the Day 1 scope. The ASX and SWIFT standards teams were also planning to meet in upcoming workshops to discuss the remaining work and set up for the next phase of work.

Referring to ASX presentation slide number 10, the SM provided a re-cap on the scope of work in the 'as-is' detailed mapping, noting descoped items and the make-up of the final set of 451 EIS equivalent messages. This equated to 79 unique ISO 20022 base messages across 12 ISO business lines. The target state for the ISO 20022 messages may change with the 'to-be' mapping. The Chair noted ASX didn't have an intention to seek feedback on all the mapping, but may seek comments on a subset. A member commented that if the mapping for now was 1 for 1, there was no need to review. The review would add value to the market practice discussion if there was a different process.

The ASX Senior Business Analyst noted that while all guidelines had been mapped on a 1 for 1 basis, some were problematic, with further design decisions to be made in the 'to-be' mapping. A member noted that they would be interested in reviewing the messages, particularly for takeover. More discussion on this was noted for Agenda item 6f).

With reference to Action item 43 and ASX presentation slides 11 and 12, the ASX SM provided an overview of ASX's proposed governance model between the Technical Committee and other Australian and global standards groups included the ISO 20022 Securities Standards Evaluation Group (SEG). The ASX SM noted this was a considerable commitment by ASX with 3 team members attending regular late night calls for these meetings.

The ASX SM outlined three types of changes that ASX would either promote or provide input to – including change requests or new messages promoted by ASX on behalf of Australia for equity post trade, or the review of changes promoted by other groups. The ASX SM noted that ASX would consult the Technical Committee on the input and outcomes from the meetings. Members accepted this approach.

The indicative plan for Technical Committee activities for 2018 and beyond as presented on ASX presentation slide number 13 was noted.

**Agenda item 5: Update from Business Committee**

The Chair noted key items from discussion at the Business Committee held on 30 November 2017. The Business Committee were provided with an overview of progress on the DLT build, functional and non-functional testing, the completion of the 2017 consultation process and requirements gathering and input from stakeholders on the business requirement priorities. The Committee was also provided with an overview of the third party security reviews on DLT, noting these wouldn't be disclosed publicly. The next meeting of the Business Committee would be held in March 2018.

**Agenda item 6: Matters for Consideration**

**a) Review of Technical Committee Survey responses**
Referring to ASX presentation slide numbers 16 to 18, the ASX SM provided a summary of the responses received from 26% of the Technical Committee members to the survey distributed in December 2017. The responses provided support for the current frequency, style of meetings and found the meeting agenda and associated presentations and documentation appropriate and valuable. Members also found the MyStandards tool and comments function useful. Some members also provided some valuable feedback on decision making and future considerations for committee discussion. The Chair thanked members again for their participation and reinforcement of the Technical Committee's value.

## b) Update from SWIFT Standards team

The Chair introduced Vincent Kuntz, Senior Business Analyst with SWIFT Standards who is based in Belgium with experience on the T2S and other key projects to provide insights into the T2S documentation and best practice considerations. ASX is reviewing documentation made available in other market initiatives related to the adoption of ISO 20022 as samples for CHESS Replacement documentation. The Chair noted that ASX was yet to decide what documents would be published, for example, as equivalents of the CHESS EIS. Referring to presentation slides numbered 21 to 25, Vincent noted that there was a lot of documentation, and that it was further complicated by the fact that T2S had defined one ISO 20022 usage guideline for a business area to cover all usage scenarios. The description of all the scenarios was therefore voluminous. Vincent cautioned against this approach, as it created a high number of rules to allow implementation.

Referring to presentation slide number 27, Vincent outlined learnings and best practices applied in the scope of the ISO 20022 project for ASX. Key points discussed included the importance of developing a strong ISO 20022 knowledge – within ASX and the community; appreciate the business flows and purpose of messages as part of mapping; use MyStandards as a single source of information, and the approach to versions for implementation and testing. Drawing on experience from other market implementations, Vincent noted that the T2S project did not start with the use of MyStandards, creating a more difficult process and inconsistencies between the development teams until they were brought together in a single format. T2S also went live with unregistered draft (newly developed) messages that are still subject to change. Vincent's recommendation was for new messages to be registered first, even if imperfect and seek changes after implementation. Any new message could be developed for specific domestic practices, though could also be usable in the global market. Vincent also recommended the creation of base components with notes visible in annotations to create consistencies in the message set. A member asked if ISO 15022 was used at all for T2S. Vincent confirmed that only ISO 20022 had been used, though it was only the CSDs and central banks that were contracted with T2S, so indirect linkages could be ISO 15022 with CSDs doing a conversion for T2S. The ISO 20022 messages did have backward compatibility to ISO 15022. The Chair noted that the adoption of ISO 20022 certainly introduces standardised processes around release cycles.

Vincent's final topic for presentation was on the use of supplementary data and best practice usage, referring to presentation slides numbers 29 and 30. Vincent outlined that the use of supplementary data should not be used to change the scope of the base message, and it is valid to include for local market practice elements. Change requests could be sought to include that data in the base message, where it may be applicable more globally. Vincent provided three examples of ASX's current mapping. If change requests were raised, the change is applied to ISO 20022, and the Standards Evaluation Group also reviewed if the changes should also be made in ISO 15022. A member asked how the review of CHESS EIS to ISO 20022 fits in the 'to-be' scope; how pure will the mapping be? The Chair confirmed the question would be asked during 'to-be' message development – whether global practice could be applied or to accept local market practice. It was noted that many of these questions had already been put to the Technical Committee as part of ASX's recommendations for consideration.

## c) MyStandards Community – usage guideline feedback

Referring to ASX presentation slide number 32, the ASX Senior Business Analyst noted that comments had been received on 9 of the 12 usage guidelines published post the 21 November 2017 meeting, and on 8 previously reviewed guidelines, by 2 Technical Committee members. It was noted that some comments were received on potential 'to-be' considerations, so wouldn't be addressed in the 'as-is' set. The ASX

Senior Business Analyst noted that some redundant fields were still present in the 'as-is' guidelines, for example stamp duty, and would be removed in the 'to-be' set. The analyst also noted some other corrections and omissions.

The Analyst reminded committee members that ASX provided responses to each comment and published these on the CHESS Replacement web page.

### d) Securities and Cash Movements

Referring to ASX presentation slide number 33, the ASX Senior Business Analyst provided an overview of securities and cash movements, and conventions in ISO 20022. The 'as-is' mapping currently follows the EIS conventions, noting that if the protocol is changed, then this would add complexity in backward compatibility for current systems. However the inherited approach may not be intuitive for new entrants to the market. No comments or questions were received from members.

### e) Simplify status messages

Referring to ASX presentation slide number 34, an ASX Senior Business Analyst provided an overview of examples of EIS prescribed separate message definitions that actually represent similar data flows, such as status messages (equivalent to EIS 016, 405, 407, 076). These examples could allow for the development of a common guideline, for example, for status messages. If this approach was adopted, then ASX would need to identify each usage and the business rules for optional elements.

Referring to presentation slide number 35 the analyst provided a specific example of the potential 'to-be' ISO references, including in the BAH, to support ASX's recommendation to standardise status messages with a common guideline supported by usage rules.

The Chair asked if there were any member views on this approach. A member confirmed that it made sense, noting the T2S discussion that it should not be too complicated with reference to business rules, and that the content was applicable. Members agreed with ASX's recommendation.

### f) Usage guidelines for review

An ASX Senior Business Analyst provided a review of the usage guidelines shared to date with the Technical Committee. During 2017, ASX had shared usage guidelines that covered core 'as-is' processes including Trade Registration, Clearing, Settlement and Holding Management.

In 2018, ASX could publish 'as-is' guidelines for other core processes including Funds Settlement, Holder Management, Collateral (including takeover), mFund, and Reporting with likely availability in the second quarter of 2018.

As the message set is 'as-is' and cannot be relied upon for actual go live specifications and build, ASX asked which of these messages, if any, members would like published for review. The analyst confirmed that the mapping was largely 1 for 1 between EIS and ISO 20022. The analyst also confirmed that if the messages were published, ASX would not update this 'as-is' set in response to any comments received – updates would be included in 'to-be' usage guidelines only. The Chair asked members to provide input to this publication question. **(Matters Arising 1 – Action item 49)**

**Agenda item 7: Next meeting**

The Chair noted one additional action item from the meeting and noted that draft minutes from the meeting would be circulated to members for review.

The Chair confirmed that the next meeting would be held on 17 April 2018, most likely in Melbourne, with the proposed agenda to include an overview of the consultation paper, a review of the 'as-is' mapping change profile, standardisation of transaction id mapping, and the business service model.

The Chair thanked members for their input, and for participating in the meeting. The meeting closed at 5.00pm.

Signed as a correct record of the meeting.

10 APRIL 2018

Technical Committee Chair                    Date

ASX

## ACTION ITEMS

| No. | Meeting Date | Open Action Items | Owner | Due Date |
|-----|--------------|-------------------|-------|----------|
| 20 | 2 May 2017 | Provide details of a proposed plan including potential topics for the remaining training webinars for feedback, standard training provided by SWIFT, and including identification of business vs. technical topics. | ASX | On hold |
| 49 | 6 February 2018 | ASX to confirm additional 'as-is' usage guidelines that could be published in Q2 and members to provide expression of interest in reviewing this set. | ASX | 17 April 2018 |

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|-----|--------------|---------------------|-------|-------------|
| 1 | 13 December 2016 | 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 |
| 2 | 13 December 2016 | Provide members with information on how to access SWIFT MyStandards. | ASX | 14 March 2017 |
| 3 | 13 December 2016 | Provide members with an overview of ISO 20022 training options. | ASX/SWIFT | 7 February 2017 |
| 4 | 7 February 2017 | Provide members with list of current scope of messages for detailed mapping during first half 2017. | ASX | 14 March 2017 |
| 5 | 7 February 2017 | Schedule training webinar for the attendance by members and seek and review feedback after the initial webinar. | ASX / SWIFT | 14 March 2017 |
| 6 | 7 February 2017 | Add link to relevant ISO 20022 information websites to the CHESS Replacement web page. | ASX | 14 March 2017 |
| 7 | 7 February 2017 | Provide more details on access to online education available at swift.com. | SWIFT | 14 March 2017 |
| 8 | 7 February 2017 | Provide members with the current list of Market Identification Codes (MICs) | ASX | 14 March 2017 |

ASX

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|-----|--------------|---------------------|-------|-------------|
| 9 | 7 February 2017 | Provide members with more information on the use of BIC vs. UIC as the party identification code. | ASX / SWIFT | 14 March 2017 |
| 10 | 7 February 2017 | Market Operators to advise the preferred MIC to be presented in trade related messages as the "Place of Trade". | ASX, Chi-X, NSX, SSX | 6 June 2017 |
| 11 | 7 February 2017 | ASX to conduct analysis on whether the identification of a financial instrument is a fixed value or true value of the proprietary code issuer. | ASX | 14 March 2017 |
| 12 | 7 February 2017 | Provide list of proposed code (i.e. condition or BOM) in ISO 20022 format (4 character) mapped against CHESS codes. | ASX | 14 March 2017 |
| 13 | 7 February 2017 | Add a general CHESS Replacement update to the standing agenda for meetings. | ASX | 14 March 2017 |
| 14 | 7 February 2017 | Check the next Technical Committee meeting date planned for March and advise members of any change. | ASX | 14 March 2017 |
| 15 | 14 March 2017 | Schedule future agenda item to discuss transition arrangements, including any changed values (e.g. party identifiers). | ASX | 2 May 2017 |
| 16 | 14 March 2017 | Create register of matters that may impact upstream, downstream systems or processes, including codes, identifiers and ISO 15022. | ASX | 2 May 2017 |
| 18 | 14 March 2017 | ASX to draft procedures for change requests to usage guidelines and code lists. | ASX | 2 May 2017 |
| 21 | 2 May 2017 | Provide a list of standard training topics to share.<br>Noted this action item is combined with action item 20. | SWIFT | 6 June 2017 |
| 22 | 2 May 2017 | Provide members with a copy of the presentation material from the trial training webinar held on 27 April 2017. | ASX | 6 June 2017 |
| 24 | 2 May 2017 | Resolve issue with Comments function on MyStandards and advise members when fixed. | ASX/SWIFT | 6 June 2017 |

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|---|---|---|---|---|
| 25 | 2 May 2017 | Provide samples of the proposed consolidation and rationalisation scenarios for EIS 138 and EIS 134. | ASX | 6 June 2017 |
| 26 | 2 May 2017 | Provide proposal to broaden the engagement and method to seek feedback on key concepts such as consolidation/rationalisation. | ASX | 6 June 2017 |
| 27 | 6 June 2017 | Publish list of comments received on MyStandards with ASX responses regularly, around the time of each meeting. | ASX | 18 July 2017 |
| 28 | 6 June 2017 | Re-publish ISO 20022 equivalent of EIS 138 with corrected default value INFO for issuer of financial instrument code. | ASX | 18 July 2017 |
| 29 | 6 June 2017 | Review EIS 102 mapped equivalent message with Scott Oakland, JPM – optional inclusion of HIN. | ASX | 18 July 2017 |
| 33 | 6 June 2017 | Provide a presentation of CHESS EIS mapping to ISO 20022, and typical ISO 20022 flows to assist committee discussion of key topics (e.g. rationalisation, consolidation, descope of certain processes like allegement modify). ASX would also seek input from key members about the best process going forward. | ASX | 18 July 2017 |
| 34 | 6 June 2017 | Add the overview of transaction ids to the July meeting agenda. | ASX | 18 July 2017 |
| 31 | 6 June 2017 | Sample consolidated (EIS 138) and rationalised (EIS 138 and 134) messages published in the MyStandards community – in a separate collection "Sample Message Review". Members to review and provide further comments via MyStandards, email. | Members | 22 August 2017 |
| 32 | 6 June 2017 | For Cancel/Correct & Modify, ASX recommendation revised to only do cancel/correct for bilateral modifications (and not allow modify – removal of EIS 121). ASX to contact users of EIS 121, and action remains open until all members confirmed their agreement with the recommendation. | ASX, Members | 22 August 2017 |
| 30 | 6 June 2017 | Obtain international usage comparisons on the use of UTC time format. Members to provide input from international offices where possible. | ASX, members | 22 August 2017 |

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|---|---|---|---|---|
| 35 | 18 July 2017 | ASX to publish all final draft usage guidelines in MyStandards and highlight to members those usage guidelines that need their review. SWIFT to advise if a flag is available in MyStandards to indicate particular review items. | ASX, SWIFT | 22 August 2017 |
| 36 | 18 July 2017 | Provide members with details of feature in MyStandards to affirm a comment. | ASX, SWIFT | 22 August 2017 |
| 17 | 14 March 2017 | Provide further information on party identification for issuers – UIC or BIC and proposed process. | ASX | 10 October 2017 |
| 37 | 18 July 2017 | Provide comparisons to other market implementations of transaction ids. | ASX, SWIFT | 22 August 2017 |
| 38 | 22 Aug 2017 | Review consistency of the application of UTC date, date and time, zulu format, and add item to upstream/downstream considerations log re the use of UTC for Trade Date confirmations from AMOs (with flow on impact to EIS 164 equivalent). | ASX | 10 October 2017 |
| 40 | 22 Aug 2017 | Provide list of CHESS EIS messages in scope for detailed mapping during 2$^{nd}$ half of 2017, including identification of descoped messages. | ASX | 10 October 2017 |
| 44 | 10 Oct 2017 | ASX project team to consider effective housekeeping of rights that expire worthless – and whether this could be improved. | ASX | 21 November 2017 |
| 45 | 10 Oct 2017 | Review recommendations put to committee in Agenda item 6c) – approach to ISO best practice exceptions and provide feedback to ASX. | Members | 21 November 2017 |
| 46 | 10 Oct 2017 | Review recommendation put to committee in Agenda item 6d) – inclusion of unique event id in Market Infrastructure Tx id (MITI) field. | Members | 21 November 2017 |
| 47 | 10 Oct 2017 | Allow for future use of Party2+ identification in messages, and ensure discussion on same point at working group meetings re business requirement. | ASX | 21 November 2017 |
| 19 | 2 May 2017 | Provide sample of demonstration of comparison between ISO 20022 and ISO 15022 messages. | Scott Oakland, JPM | On hold |

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|---|---|---|---|---|
| 23 | 2 May 2017 | Further review of the ASX CHESS demand reporting summary and responses to questions contained in that summary. ASX to continue review of reports and provide further candidates for descope at meetings. | Members / ASX | 21 November 2017 |
| 39 | 22 Aug 2017 | Chair to contact members seeking feedback on the approach of the Technical Committee, any suggestions to improve the process. | ASX | 21 November 2017 |
| 41 | 22 Aug 2017 | Conduct bilateral discussions with share registries and mailing houses regarding structuring of registration details and associated static data. | ASX | 21 November 2017 |
| 42 | 22 Aug 2017 | Conduct bilateral discussions with share registries regarding current holding balance changes associated with corporate actions and proposed withdrawal of EIS 421. | ASX | 21 November 2017 |
| 43 | 10 Oct 2017 | Provide a proposed governance method for Technical Committee input to and review of all matters tabled at the Standards Evaluation Group (SEG), including any matters raised by ASX on behalf of community. | ASX | 21 November 2017 |
| 48 | 21 Nov 2017 | Members to review information provided in agenda item 6d) and respond to the question – was there appetite for using xml in model 1b or 2a as presented or keep the mapping 1 to 1. | Members | 6 February 2018 |

# ISO 20022 Technical Committee Report to the Business Committee

### ISO 20022 TECHNICAL COMMITTEE MEETING 17 APRIL 2018

The Technical Committee met on 17 April 2018 in Melbourne.

### MEETING AGENDA (NON STANDARD ITEMS)

Business and Technical Matters For Consideration:
- Review 'as-is' mapping change profile
- Publication of 'as-is' collections
- Overview of key changes for the 'to-be' collection
- Case Study: consolidated netting messages
- 'To-be' collections and message naming convention
- 'To-be' Business Application Header (BAH)

### KEY ISSUES DISCUSSED

- The Chair noted that of two open action items, one had been actioned and closed. One action item remained on hold.

- The committee members were provided with an update on the CHESS Replacement project, including an overview of the soon to be released consultation paper. Some members did query the six week consultation response period and whether this was reasonable given the expected size of the paper.

- As part of the ISO 20022 project update, ASX confirmed to the committee that all 'as-is' mapping had been finalised, completing the current scope of work with the SWIFT standards team. This was a significant effort and milestone for both teams and had been achieved on schedule. As part of the presentation, ASX also provided an overview of the 'as-is' mapping change profile – from well mapped messages to those where there was proposed usage of supplementary data, or draft new message sets developed by other markets (for example T2S). For those messages where supplementary data was currently used, ASX provided an indication of the percentage that could be suitable base message change request candidates. Regardless, ASX confirmed that the usage of supplementary data to accommodate local practices was considered to be acceptable.

- ASX confirmed that it had published a collection of over 300 'as-is' ISO 20022 equivalent usage guidelines for the information of the committee members on MyStandards. These guidelines covered 7 logical business area collections.

- The ASX team outlined the commencement of work on the 'to-be' changes in alignment with the proposed 'Day 1' scope for the replacement of CHESS as would be outlined in the consultation paper. ASX would continue to present draft 'to-be' ISO 20022 usage guidelines to the committee for discussion of key changes and ASX recommendations. During this meeting and going forward ASX confirmed it would present on any key changes proposed by ASX to the 'to-be' message collection. ASX provided an overview of a number of these changes in the meeting including:

  - the consolidation of netting messages;

  - proposed interchangeable use of either BIC or UIC as a party identifier;

  - the naming conventions to be used for messages and message collections; and

  - the proposed conventions for particular elements in the Business Application Header message.

- ASX also noted that it would be providing a tool to allow users to perform early testing of message formats. This tool was part of the MyStandards portal and would be available later in 2018.

- The Chair noted that the next meeting of the committee was scheduled for 22 May in Sydney.


**AGREED ACTIONS**

No additional action items were raised at the meeting, with one outstanding action item noted.  The action items are detailed in full in the Minutes from the meeting.  Minutes from the meeting are attached.

# MINUTES OF THE ISO 20022 TECHNICAL COMMITTEE

Tuesday 17 April 2018

NAB offices, Melbourne; Webinar

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1. **Welcome, Agenda**

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2. **Minutes from last meeting, open actions**

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3. **CHESS Replacement project update by ASX**

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4. **ISO 20022 project update by ASX**

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5. **Update from Business Committee**

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6. **Matters for Consideration (Business and Technical Matters)**

    a)  Review 'as-is' mapping change profile

    b)  Publication of 'as-is' collections

    c)  Overview of key changes for the 'to-be' collection

    d)  Case Study: consolidated netting messages

    e)  'To-be' collections and message naming convention

    f)  'To-be' Business Application Header (BAH)

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7. **Next Meeting** - 22 May 2018 – Sydney, webinar

## Technical Committee Members

| Company | Name | Job Title | Apologies |
|---|---|---|---|
| Australian Payments Network Limited | Andy White | Chief Operating Officer | Apology |
| Australian Payments Network Limited | Paul Creswick | Security Standards Manager | Apology |
| Bank of America Merrill Lynch | Andree Hindmarsh | Head of GMOT Australia | |
| Bank of America Merrill Lynch | Jimmie Alam | | |
| 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 | |
| Boardroom Limited | Tony Robinson | Senior Software Engineer | |
| Boardroom Limited | Michael Mullins | CIO | |
| Broadridge (Australia) | John Greenhow | General Manager, Australia | |
| Broadridge (Australia) | Manoj Mathew | Business Analyst | |
| Broadridge (Australia) | Mabel Chow | Development and Support Manager | |
| CBA Equities | Joel Cox | Technical Business Analyst | |
| CBA Equities | Carolyn Webb | Test Manager | |
| CBA Equities | Ben Lowe | Manager Settlements | |
| Chi-X Australia | Mike Aikins | Head of Solution Development | |
| Chi-X Australia | Suketu Adhvaryu | Senior Solution Architect | |
| Citicorp | Miles O'Connor | Director, Direct Custody & Clearing Securities Markets & Securities Services | |
| Citicorp | Brett Dennis | Head of Operations – Party Clearing | |
| Citicorp | Lyall Herron | | |
| Citicorp | Janice O'Brien | Markets & Securities Services Technology | |
| Citicorp | Matthew Warner | | |
| Citicorp | Ashok Kumar Balusa | | |
| Citicorp | Glenn Pahilan | | |
| Citcorp | Stephen Rylands | Product Manager | |
| CMC Markets Stockbroking | Nikola Vanstan | Change Manager | |
| Computershare | Paul Walton | Senior Manager, Corporate Actions & New Business Development – Investor Services | |

ASX

| Company | Name | Job Title | Apologies |
|---|---|---|---|
| Computershare | Leanne Bailey | Senior Business Analyst Product & Innovation | |
| Computershare | Laik Tan | | |
| Deutsche Securities | Kevin Novini | | |
| Dion Global Solutions | Craig Gray | Product Manager – Australia and NZ | |
| Dion Global Solutions | Nikki Gleisner | Account Manager | |
| GBST | Andrew Murdoch | Product Specialist, GBST Capital Markets | |
| GBST | Sue Schafer | Product Owner | |
| Goldman Sachs | Darrel Schwarz | Technology Vice President | |
| HSBC Securities Services | Gregory Wilkin | Head of HSBC Operations | |
| HSBC Securities Services | Salih Kulic | Manager Custody | |
| HSBC Bank Australia Limited | Michael Macintosh | Senior Client Account Manager, Global Liquidity and Cash Management | |
| HSBC Bank Australia Limited | Anna Fratini | Senior Product Manager – High Value Payments, Clearing and Financial Institutions, | |
| HSBC Bank Australia Limited | Phyllis Yeung | Senior Analyst | |
| 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 | |
| JP Morgan | Ned Miglez | | |
| JP Morgan | Daniel Smith | VP, Network Management | |
| JP Morgan | Lesley Henderson | Technology Product team | Apology |
| Link Group | Ian Batterham | Business Applications Architect | |
| Link Market Services | Sue Julian | National Manager, Corporate Actions | |
| Macquarie Group | Paul Bragg | Senior Manager Equities Clearing ANZ | |
| Macquarie Group | Merrilyn Auton | Manager Operations | |
| Morgans Financial | Matt Neaubauer | Team Leader, Service Management Team | |
| Morgans Financial | Ed Strike | IT Manager | |
| Morgan Stanley | Dorothy Wilson | Executive Director, Morgan Stanley Wealth Management, ISG Technology | Apology |
| Morgan Stanley | Kirsty Venters | VP, Prime Brkrg Funding & Fin Tech | Apology |
| Morgan Stanley | Oscar Dela Cruz | | |
| Morgan Stanley | Andrew Fielder | | |

| Company | Name | Job Title | Apologies |
|---|---|---|---|
| Morgan Stanley | Gordon Davies | VP/Firmwide Ops | |
| Morgan Stanley | Andrew Sime | | |
| NAB Asset Management | Suresh Chinnappa | Head of Custody Service Operations | |
| National Stock Exchange | Lina Lim | Head of Technology | |
| Nomura Research Institute | John Ryan | Senior Consultant | Apology |
| Nomura Research Institute | Ashish Jha | | |
| Northern Trust | Yen Pan Chung | Senior BA, Market Advocacy and Innovation Research | |
| Securitease | Anton Smith | Director | Apology |
| Securitease | Chris Werry | Business Analyst | |
| Share Investing | Phil Barnes | Senior Manager, Platforms | |
| SWIFT Standards | Nicole Jolliffe | Senior APAC Standards consultant | |
| Sydney Stock Exchange | Leo Zhang | Business Analyst | |
| Sydney Stock Exchange | Jason Shen | Market Operations Officer | |
| UBS | Phillip Drury | Phillip Drury, Executive Director, Equities IT | |
| UBS | Duncan Earl | Executive Director, Head of Change, UBS Group Operations | |
| UBS | Neil Martin | IT – Project Management | |
| Wealthhub Securities | James Channon | Manager, Capital Markets Trading | |

ASX

## ASX Management

| Name | Job Title | Apologies |
| --- | --- | --- |
| Tim Hogben | Chief Operating Officer (Chair of the Technical Committee) | |
| Cliff Richards | Executive General Manager, Equity Post Trade | Apology |
| Brendon Luscombe | General Manager, Product Owner, CHESS Replacement Project | Apology |
| Karen Webb | Senior Manager, Equity Post Trade Services | |
| Keith Purdie | Senior Manager, Equity Post Trade Services | |
| Russell Eyre | Enterprise Architect | |
| Anne-Marie Fisher-Taylor | Team Lead, Application Development | |
| Darcy Wright | Senior Business Analyst, Equity Post Trade | |
| Priscilla Ferri de Barros | Senior Business Analyst, Equity Post Trade | |
| Nicky Darwin | Senior Business Analyst, Equity Post Trade | |
| Gary Hobourn | Senior Economic Analyst, Regulatory and Public Policy | Apology |

The meeting commenced at 3.00pm.

**Agenda item 1: Agenda overview**

The Chair welcomed Technical Committee members to the meeting including members attending by webinar. The Chair commented that he had been looking at research into Fintech's adoption of standards to achieve interoperability and noted this was important from an integration perspective, especially for new entrants.

The Chair outlined the Agenda for the meeting, referring to the presentation slides prepared by ASX. The agenda included an overview of the proposed forward plan of meeting topics, as outlined on slide number 4 of the ASX presentation.

**Agenda item 2: Minutes from last meeting, open actions**

The Chair noted that the minutes from the last meeting held on 6 February 2018 had been finalised with a minor correction regarding a member's attendance at the meeting. There were no other comments received on the draft minutes from members. The minutes had been distributed and published on the web page.

The Chair noted the outstanding actions from the last meeting as outlined on slide number 5 from the ASX presentation.

**Action item 20** was for ASX to provide a proposed plan for the remaining training webinars. The Chair noted that ASX was considering industry training closer to implementation. **This item remains on hold.**

**Action item 49** was raised at the last meeting and was for ASX to confirm additional 'as-is' usage guidelines that could be published in Q2 and members to provide expression of interest in reviewing this set. The Chair noted that this item would be dealt with in agenda item 6b of the meeting and proposed the action be closed. **This item was closed.**

**Agenda item 3: CHESS Replacement project update by ASX**

The Chair invited the Senior Manager, Equity Post Trade Services to provide an update on the project and in particular an overview of the upcoming consultation paper. The Senior Manager referred to ASX presentation slide #6 and provided an overview of what members could expect to find in the consultation paper from a structural perspective. The Senior Manager noted the details remained confidential as the paper was in the final stages of review. ASX was aiming to keep the paper to a digestible size, but the document would likely be around 80 pages in length to adequately cover responses to the working group and industry feedback provided over the past year, and more on the technology solution. The paper was structured in 10 key parts including an Executive Summary, Introduction, Business Requirements, Adoption of ISO20022 messaging, Non-functional and technical requirements, Technical Solution, Digital Asset Platform and Node Access, Testing & Release Management, Migration and Implementation and Stakeholder Engagement.

The Manager noted that the Business Requirements section was the largest, talking to the 40 functional and 5 non-functional business requirements that came out of the industry working groups, covering a description of the requirement, the rationale, any stakeholder input, and any rules or regulatory

considerations. The requirements were grouped into five categories - new features to be implemented on Day 1, new features to be implemented through service releases post Day 1, industry requirements not being progressed, CHESS functionality being decommissioned and new features to be implemented separately to CHESS Replacement.

The paper walks through the connectivity options and a technical vs non- technical detail on the options to connect via a node, where a node is a piece of software. The architecture, features, and methods for direct integration via a node to the Digital Asset platform are explained in a separate section.

A section of the paper outlines the approach to testing, test environments, when technical documentation would be available and approach to release management. A subsequent section describes the overall system migration and implementation approach, with specific commentary on data migration and cleansing activities.

Referring to ASX presentation slide #7, the Senior Manager noted that the final chapter of the consultation paper sets out the stakeholder engagement forward work plan in terms of key forums, and that the plan on slide #7 was still indicative until finalisation of the paper. The paper acknowledges the ongoing role of the Business Committee and the ISO20022 Technical Committee, with discussion on additional streams of engagement.

The Chair noted that the project was complex in nature, and that ASX was particularly interested in feedback around the proposed connectivity options.

A member noted that past connectivity was only available via messaging, were there any other methods proposed via DAML? The Chair confirmed that DAML was Digital Asset's particular underlying language for their DLT solution. A number of connectivity methods would be available.

**Agenda item 4: ISO 20022 project update by ASX**

The ASX Senior Manager, Equity Post Trade Services provided an overview of the ISO 20022 work to date. It was noted that all 'as-is' mapping had been completed, ending the current scope of work with the SWIFT standards team. This was a significant effort for both teams and achieved on schedule.

The ASX ISO team had commenced work on the 'to-be' mapping to agree with the proposed 'Day1' scope for the project. This work would be undertaken on an iterative basis depending on the ASX work schedule. ASX would continue to share draft 'to-be' guidelines with Technical Committee members for discussion, and highlight any key changes, recommendations by ASX. The consultation paper would provide more information on how documentation and specifications would be shared with the broader community, and it was expected this would also be done on an iterative basis. ASX would continue to engage with the SWIFT consultants where necessary particular where their experience and best practice input was considered valuable, and assistance with new message creation and registration, and preparation of change requests to ISO, including to the T2S suite of messages. ASX was continuing to attend the international standards meetings to support this work.

The Senior Manager also noted that ASX was planning to provide a tool for early format testing of the ISO 20022 messages. This would assist with verifying messages against schemas and to front run this effort outside of the test environments.

A member asked if the format testing tool would provide feedback on errors. The Senior Manager responded that the tool was provided by SWIFT and sat alongside the MyStandards portal. This would allow ease of use and familiarity for ASX and customer users, where ASX could easily manage the ISO 20022 schemas available for testing. The tool would also provide users with immediate feedback on validation errors and a link to the relevant definition in the usage guidelines. It would also provide ASX with visibility on what customers were testing.

The Chair reiterated the importance of the availability of the early testing of message format to the project and to ASX's customers.

### Agenda item 5: Update from Business Committee

The Chair noted the key discussion points at the Business Committee meeting held on 28 March 2018. More information was provided to the committee on the consultation paper on a confidential basis. An update was also provided on the Corporate Actions STP Phase 2 project that would be delivered separate to CHESS Replacement but delivered prior to the go live for CHESS Replacement. The project was currently in estimation and planning. The next meeting of the Business Committee would be held in July 2018.

### Agenda item 6: Matters for Consideration

#### a) Review 'as-is' mapping change profile

Referring to ASX presentation slide numbers 12 and 13 the ASX Senior Business Analyst provided an overview of the completed 'as-is' mapping change profile. Of the final 453 equivalents to CHESS messages, 240 (53%) didn't use supplementary data, 24 (5%) were proposed to use T2S messages, 123 (27%) used supplementary data and may need a change request of some kind, 20 (5%) were descoped, and 46 (10%) were new message candidates. The actual impact on the basis of unique ISO 20022 messages was reduced, for example, the number of unique messages where supplementary data was used, and therefore may be candidates for change requests was 33 (37%). For the T2S messages, it was noted that as ASX was involved in the evaluation team for registration of the messages we had promoted our requests to include current supplementary data in the base message. Taking into consideration that most of the usage guidelines with supplementary data only had 1-2 supplementary data elements and therefore may be acceptable as is, then 90% of the defined messages would not require ISO 20022 base message change. With some adjustments this could be moved to 100%. The Senior Business Analyst reiterated that the use of supplementary data was considered acceptable if it represented local market practice.

#### b) Publication of 'as-is' collections

The ASX Senior Business Analyst noted that ASX had published a collection of 300+ 'as-is' messages across 7 logical business area collections for the information of members. This logical grouping would be used by ASX going forward. Inactive or in development messages were not included (e.g. RTGS, mFund CHESS 10 release). ASX was not seeking any feedback on the 'as-is' collection and wouldn't check any comments in MyStandards.

A member asked about the scenario if errors were found in the mapping and whether these should be raised with ASX. The Senior Business Analyst suggested that significant error information could be emailed to the team.

A member asked if there would be anymore clean up to the message set before moving to 'to-be". ASX confirmed that a number of messages had already been descoped in certain business areas following discussion with the Technical Committee. ASX would continue to be transparent on the message set per documentation to be released through the project delivery.

### c) Overview of key changes for the 'to-be' collection

Referring to ASX presentation slides numbered 15 to 17, the ASX Senior Business Analyst provided a summary of the key changes that would be adopted by ASX in the 'to-be' collection. These changes had already been discussed with the Technical Committee. With reference to the use of BIC or UIC in party identification a member asked if CHESS Replacement would translate the UIC to BIC and vice versa per user preferences. The analyst advised that each Party will nominate their own Party Identifier (of UIC, BIC8 or BIC11 format) for messaging to and from CHESS replacement. For bilateral events, there will be no translation of the Counterparty's Identifier (which will be published in a directory similar to SWIFT's BIC Directory) and any of the Party Identifier formats may be received in the allegement.

Referring to ASX presentation slide number 17, the ASX Senior Business Analyst outlined a key change to align settlement amounts to industry practice where explicit credit and debit indicators would be used so the direction of funds was independent of the direction of units. This would be more explicit in future flows, compared to the current complex 'negative override' arrangements for CHESS messages, and therefore would be more easily consumed. A member asked whether the analyst was referring to the example where cash doesn't move in the opposite direction, as expected. The analyst confirmed the change applied where a negative Settlement Amount resulted in CHESS because units and funds moved in the same direction – most commonly as a result of netting.

The Chair noted that the credit, debit changes seemed logical and would be a positive move.

### d) Case Study: Consolidated netting messages

The ASX Senior Business Analyst walked through a specific case study of consolidated netting messages to demonstrate the key changes, comparing 'as-is' to 'to-be', referring to ASX presentation slides numbered 18 to 20.

A member asked if the preference to use BIC or UIC for party identifier would be universal or message specific. The analyst confirmed this would be universal, that is for all the messaging for that Party and noting that this was an internal identifier in the message and not necessarily used for routing. It was suggested this be discussed in the committee in more detail if more granularity was required, or if a common party identifier was to apply for multiple parties.

A member asked if the issuer UIC would still be valid going forward, or could an issuer use a BIC if preferred. The analyst confirmed the default would be UIC but any Actor could nominate any of the Party Identifier formats.

### e) 'To-be' collections and message naming convention

The ASX Senior Business Analyst provided an overview of the convention that ASX would be using going forward for the naming of the message collection and message identifiers, as shown on ASX presentation slide number 21. The messages will be grouped by business process in a collection, and each message within that collection would have a message number. The analyst provided some samples of the new

convention compared to the CHESS EIS messages and noted that business collections could be added in the future.

Referring to ASX presentation slide number 22, the analyst demonstrated the make-up of a message name, and the convention to be adopted by ASX going forward.

The Chair reinforced the point that members, and the broader community would need to refer to the new message names going forward.

## f) 'To-be' Business Application Header (BAH)

The ASX Senior Business Analyst provided an overview of the elements in the Business Application Header and the conventions that ASX would be employing for each of those elements going forward. The analyst provided an overview of the current Transaction id format used in CHESS, and how this will change in the future. The ASX recommended that the Transaction id be changed in size from 16 characters to a minimum 1, maximum 35 character size in order to accommodate the use of either BIC or UIC in the transaction id, and to use delimiters in the format of the id between certain parts of the id information. The format of the id and allowable characters would be prescribed by ASX. It was noted that users would need to cater for the larger sizes and variations above 16 characters.

A member asked if the allowable characters would be limited to capitalised (upper case) alpha. The analyst noted that ASX would provide a presentation on the allowable characters at the next meeting. ASX was currently performing a gap analysis on the current characters in use. The member noted that the availability of upper and lower case would allow for greater flexibility and range of available characters.

A member asked how initiators of messages would know the UIC of another party. An ASX analyst noted that it would be similar to the bilateral method used today – where only one identifier was used at any one time. ASX would provide a directory of BICs, as it does for UICs (PIDs). The member asked if a user could change their preference for identifier from time to time. The analyst noted that this would have to follow procedures and have effective dates for the change.

A member asked what would happen if a user included a BIC in a transaction id – would CHESS translate that to a UIC for a user that has a UIC preference? ASX confirmed that the transaction id was unique from the original message and ASX would not alter its content, as it was passed through a sequence of messages.

Referring to ASX presentation slide number 27, the ASX Senior Business Analyst provided an overview of the future Business Service element structure, noting that this would be useful to identify linkages and flows in messages, alongside other elements inside the message payload. An example of transaction flows was provided on ASX presentation slide number 28, calling out the key linkages. It was noted that the Related Transaction id available in the BAH may be the same for an 'approve' or 'reject' message, so users would need to look at elements inside the message payload to help identify the particular flow.

A member asked how a user would be able to link back to the original request message if it received a confirmation message. The analyst confirmed the messages would include both the Related Transaction id and the original Target Transaction id.

**ASX**

**Agenda item 7: Next meeting**

The Chair provided a recap on the key points from the meeting:
- that the consultation paper was likely to be released late April
- ASX had published the 'as-is' message but wouldn't provide umls or transaction id flow
- ASX will start talking 'to-be' messaging with the Technical Committee
- ASX would provide a tool for future testing of message formats
- There may be limited change requests to ISO, depending on the 'to-be' changes
- ASX wouldn't decommission any current CHESS EIS messages prior to changeover
- UIC and BIC would be interchangeable, noting that to change an identifier requires a process
- Considerations had been shared with members regarding the Business Application Header.

A member asked if the consultation response period was still 6 weeks, given the size of the paper at over 80 pages. The Chair confirmed this would be the case, but where challenges were being experienced extensions may be accommodated.

A member asked if the implementation of CHESS Replacement would be phased or big bang. The Chair confirmed the implementation approach would be outlined in the consultation paper.

The Chair confirmed that no additional action items had been raised during the meeting, and as in the past draft minutes from the meeting would be circulated to members for review.

The Chair confirmed that the next meeting would be held on 22 May 2018, in Sydney. The agenda was still to be determined by ASX.

The Chair thanked members for their input, and for participating in the meeting. The meeting closed at 4.40pm.

Signed as a correct record of the meeting.

_____          15 MAY 2018
Technical Committee Chair                 Date

ASX

## ACTION ITEMS

| No. | Meeting Date | Open Action Items | Owner | Due Date |
|---|---|---|---|---|
| 20 | 2 May 2017 | Provide details of a proposed plan including potential topics for the remaining training webinars for feedback, standard training provided by SWIFT, and including identification of business vs. technical topics. | ASX | On hold |

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|---|---|---|---|---|
| 1 | 13 December 2016 | 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 |
| 2 | 13 December 2016 | Provide members with information on how to access SWIFT MyStandards. | ASX | 14 March 2017 |
| 3 | 13 December 2016 | Provide members with an overview of ISO 20022 training options. | ASX/SWIFT | 7 February 2017 |
| 4 | 7 February 2017 | Provide members with list of current scope of messages for detailed mapping during first half 2017. | ASX | 14 March 2017 |
| 5 | 7 February 2017 | Schedule training webinar for the attendance by members and seek and review feedback after the initial webinar. | ASX / SWIFT | 14 March 2017 |
| 6 | 7 February 2017 | Add link to relevant ISO 20022 information websites to the CHESS Replacement web page. | ASX | 14 March 2017 |
| 7 | 7 February 2017 | Provide more details on access to online education available at swift.com. | SWIFT | 14 March 2017 |
| 8 | 7 February 2017 | Provide members with the current list of Market Identification Codes (MICs) | ASX | 14 March 2017 |
| 9 | 7 February 2017 | Provide members with more information on the use of BIC vs. UIC as the party identification code. | ASX / SWIFT | 14 March 2017 |

ASX

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|---|---|---|---|---|
| 10 | 7 February 2017 | Market Operators to advise the preferred MIC to be presented in trade related messages as the "Place of Trade". | ASX, Chi-X, NSX, SSX | 6 June 2017 |
| 11 | 7 February 2017 | ASX to conduct analysis on whether the identification of a financial instrument is a fixed value or true value of the proprietary code issuer. | ASX | 14 March 2017 |
| 12 | 7 February 2017 | Provide list of proposed code (i.e. condition or BOM) in ISO 20022 format (4 character) mapped against CHESS codes. | ASX | 14 March 2017 |
| 13 | 7 February 2017 | Add a general CHESS Replacement update to the standing agenda for meetings. | ASX | 14 March 2017 |
| 14 | 7 February 2017 | Check the next Technical Committee meeting date planned for March and advise members of any change. | ASX | 14 March 2017 |
| 15 | 14 March 2017 | Schedule future agenda item to discuss transition arrangements, including any changed values (e.g. party identifiers). | ASX | 2 May 2017 |
| 16 | 14 March 2017 | Create register of matters that may impact upstream, downstream systems or processes, including codes, identifiers and ISO 15022. | ASX | 2 May 2017 |
| 18 | 14 March 2017 | ASX to draft procedures for change requests to usage guidelines and code lists. | ASX | 2 May 2017 |
| 21 | 2 May 2017 | Provide a list of standard training topics to share. Noted this action item is combined with action item 20. | SWIFT | 6 June 2017 |
| 22 | 2 May 2017 | Provide members with a copy of the presentation material from the trial training webinar held on 27 April 2017. | ASX | 6 June 2017 |
| 24 | 2 May 2017 | Resolve issue with Comments function on MyStandards and advise members when fixed. | ASX/SWIFT | 6 June 2017 |
| 25 | 2 May 2017 | Provide samples of the proposed consolidation and rationalisation scenarios for EIS 138 and EIS 134. | ASX | 6 June 2017 |

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|---|---|---|---|---|
| 26 | 2 May 2017 | Provide proposal to broaden the engagement and method to seek feedback on key concepts such as consolidation/rationalisation. | ASX | 6 June 2017 |
| 27 | 6 June 2017 | Publish list of comments received on MyStandards with ASX responses regularly, around the time of each meeting. | ASX | 18 July 2017 |
| 28 | 6 June 2017 | Re-publish ISO 20022 equivalent of EIS 138 with corrected default value INFO for issuer of financial instrument code. | ASX | 18 July 2017 |
| 29 | 6 June 2017 | Review EIS 102 mapped equivalent message with Scott Oakland, JPM – optional inclusion of HIN. | ASX | 18 July 2017 |
| 33 | 6 June 2017 | Provide a presentation of CHESS EIS mapping to ISO 20022, and typical ISO 20022 flows to assist committee discussion of key topics (e.g. rationalisation, consolidation, descope of certain processes like allegement modify).  ASX would also seek input from key members about the best process going forward. | ASX | 18 July 2017 |
| 34 | 6 June 2017 | Add the overview of transaction ids to the July meeting agenda. | ASX | 18 July 2017 |
| 31 | 6 June 2017 | Sample consolidated (EIS 138) and rationalised (EIS 138 and 134) messages published in the MyStandards community – in a separate collection "Sample Message Review". Members to review and provide further comments via MyStandards, email. | Members | 22 August 2017 |
| 32 | 6 June 2017 | For Cancel/Correct & Modify, ASX recommendation revised to only do cancel/correct for bilateral modifications (and not allow modify – removal of EIS 121).  ASX to contact users of EIS 121, and action remains open until all members confirmed their agreement with the recommendation. | ASX, Members | 22 August 2017 |
| 30 | 6 June 2017 | Obtain international usage comparisons on the use of UTC time format. Members to provide input from international offices where possible. | ASX, members | 22 August 2017 |
| 35 | 18 July 2017 | ASX to publish all final draft usage guidelines in MyStandards and highlight to members those usage guidelines that need their review. SWIFT to advise if a flag is available in MyStandards to indicate particular review items. | ASX, SWIFT | 22 August 2017 |

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|---|---|---|---|---|
| 36 | 18 July 2017 | Provide members with details of feature in MyStandards to affirm a comment. | ASX, SWIFT | 22 August 2017 |
| 17 | 14 March 2017 | Provide further information on party identification for issuers – UIC or BIC and proposed process. | ASX | 10 October 2017 |
| 37 | 18 July 2017 | Provide comparisons to other market implementations of transaction ids. | ASX, SWIFT | 22 August 2017 |
| 38 | 22 Aug 2017 | Review consistency of the application of UTC date, date and time, zulu format, and add item to upstream/downstream considerations log re the use of UTC for Trade Date confirmations from AMOs (with flow on impact to EIS 164 equivalent). | ASX | 10 October 2017 |
| 40 | 22 Aug 2017 | Provide list of CHESS EIS messages in scope for detailed mapping during 2$^{nd}$ half of 2017, including identification of descoped messages. | ASX | 10 October 2017 |
| 44 | 10 Oct 2017 | ASX project team to consider effective housekeeping of rights that expire worthless – and whether this could be improved. | ASX | 21 November 2017 |
| 45 | 10 Oct 2017 | Review recommendations put to committee in Agenda item 6c) – approach to ISO best practice exceptions and provide feedback to ASX. | Members | 21 November 2017 |
| 46 | 10 Oct 2017 | Review recommendation put to committee in Agenda item 6d) – inclusion of unique event id in Market Infrastructure Tx id (MITI) field. | Members | 21 November 2017 |
| 47 | 10 Oct 2017 | Allow for future use of Party2+ identification in messages, and ensure discussion on same point at working group meetings re business requirement. | ASX | 21 November 2017 |
| 19 | 2 May 2017 | Provide sample of demonstration of comparison between ISO 20022 and ISO 15022 messages. | Scott Oakland, JPM | On hold |
| 23 | 2 May 2017 | Further review of the ASX CHESS demand reporting summary and responses to questions contained in that summary. ASX to continue review of reports and provide further candidates for descope at meetings. | Members / ASX | 21 November 2017 |

ASX

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|-----|-------------|---------------------|-------|-------------|
| 39 | 22 Aug 2017 | Chair to contact members seeking feedback on the approach of the Technical Committee, any suggestions to improve the process. | ASX | 21 November 2017 |
| 41 | 22 Aug 2017 | Conduct bilateral discussions with share registries and mailing houses regarding structuring of registration details and associated static data. | ASX | 21 November 2017 |
| 42 | 22 Aug 2017 | Conduct bilateral discussions with share registries regarding current holding balance changes associated with corporate actions and proposed withdrawal of EIS 421. | ASX | 21 November 2017 |
| 43 | 10 Oct 2017 | Provide a proposed governance method for Technical Committee input to and review of all matters tabled at the Standards Evaluation Group (SEG), including any matters raised by ASX on behalf of community. | ASX | 21 November 2017 |
| 48 | 21 Nov 2017 | Members to review information provided in agenda item 6d) and respond to the question – was there appetite for using xml in model 1b or 2a as presented or keep the mapping 1 to 1. | Members | 6 February 2018 |
| 49 | 6 February 2018 | ASX to confirm additional 'as-is' usage guidelines that could be published in Q2 and members to provide expression of interest in reviewing this set. | ASX | 17 April 2018 |

# ISO 20022 Technical Committee Report to the Business Committee

## ISO 20022 TECHNICAL COMMITTEE MEETING 22 MAY 2018

The Technical Committee met on 22 May 2018 in Sydney.

## MEETING AGENDA (NON STANDARD ITEMS)

Business and Technical Matters For Consideration:

- ISO 20022 integration options
- Review of Notified Broker to Broker Trade 'to-be' messaging
- Registration details – 'to-be' format
- Transaction id – allowable character set
- Business Application Header (BAH) – 'to-be' format
- Data Source Scheme with ASX External code lists
- Use of BIC as party identifier – adoption considerations
- Review of Netting 'to-be' messaging

## KEY ISSUES DISCUSSED

- The Chair welcomed two new representatives to the group - Fraser Moodie recently joining ASX as Manager, Integration and Connectivity, CHESS Replacement, and Fil Mackay from the Digital Asset team.

- The Chair noted that one open action remained on hold.

- The committee members were provided with an update on the CHESS Replacement project, focused on the consultation paper released on 27 April, with an 8 week consultation response period, and other project engagement activities.

- ASX noted that Digital Asset had also released details of the DAML software development kit (SDK) training program, with some discussion during the meeting regarding the legal agreements associated with the DAML SDK.  Digital Asset were actioned to review the Non Disclosure Agreement.

- As part of the ISO 20022 project update, ASX confirmed to the committee that work on the 'to-be' message changes was progressing. The team were also working on other interface or file interactions with the replacement system, including FIX messages for market operator reporting of trades. This work is fundamental ground work to build the platform capability. From an external messaging perspective the team was progressing work on the topics of trade registration, netting and account management. The details of the draft messages would be shared with the committee once they were in a good state.

- The ASX's Enterprise Architect provided a presentation that expanded on the ISO 20022 integration options outlined in the consultation paper. The architect outlined the three broad options available - integration via a node (messaging or direct), via traditional messaging or via a browser. The Architect noted that all options were ISO 20022, with multiple options permitted. ASX had also determined that the ISO 20022 schema validation would be light (as xml validation couldn't be relied upon in all options) vs. validations made by the application.

Under this approach schema restrictions such as code lists would be avoided, with validations occurring only at the application layer.  There was some discussion on the differences and benefits between each option. ASX noted that the new working groups to be established in the second half of 2018 would provide more information to help users make informed decisions.

- The ASX analysts presented a number of ASX recommendations to the committee with regard to the matters for consideration. Members endorsed most of the recommendations with new actions raised with regard to outstanding questions. ASX also requested member input on the potential models that would need to be accommodated where the use of BIC or UIC is proposed to be used on an interchangeable basis for the identification of parties.

- ASX noted that it would publish draft 'to-be' ISO 20022 equivalents to the current CHESS EIS 134, 138 and 542 messages related to netting for member review prior to the next meeting. ASX also noted that because of consolidation and other changes, the draft ISO 20022 equivalent messages were not backward compatible to the CHESS EIS, with associated considerations needed regarding migration and implementation.

- The Chair noted that the next meeting of the committee was scheduled for 26 June in Sydney.

## AGREED ACTIONS

Four additional action items were raised at the meeting, with one outstanding action item noted.  The action items are detailed in full in the Minutes from the meeting.  Minutes from the meeting are attached.

## ISO 20022 TECHNICAL COMMITTEE MEETING 26 JUNE 2018 - Sydney

The agenda for the 26 June 2018 meeting includes the following matters for consideration.  A report and minutes from the 26 June meeting will be provided at the next Business Committee meeting.

## MEETING AGENDA (NON STANDARD ITEMS)

Business and Technical Matters For Consideration:

- Review of member feedback on the draft usage guidelines published on SWIFT MyStandards - netting;
- Further review of Notified Broker to Broker Trade 'to-be' messaging
- Registration details – further discussion
- Creation of account (HIN)
- More information on sample xml considerations
- Review of 'to-be' messaging to be shared with members for comment

# MINUTES OF THE ISO 20022 TECHNICAL COMMITTEE

Tuesday 22 May 2018

ASX offices, Sydney; Webinar

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1. **Welcome, Agenda**

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2. **Minutes from last meeting, open actions**

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3. **CHESS Replacement project update by ASX**

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4. **ISO 20022 project update by ASX**

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5. **Update from Business Committee**

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6. **Matters for Consideration (Business and Technical Matters)**
   a) ISO 20022 integration options
   b) Review of Notified Broker to Broker Trade 'to-be' messaging
   c) Registration details – 'to-be' format
   d) Transaction id – allowable character set
   e) Business Application Header (BAH) – 'to-be' format
   f) Data Source Scheme with ASX External code lists
   g) Use of BIC as party identifier – adoption considerations
   h) Review of Netting 'to-be' messaging

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7. **Next Meeting** - 26 June 2018 – Sydney, webinar

## Technical Committee Members

| Company | Name | Job Title | Apologies |
|---|---|---|---|
| Australian Payments Network Limited | Andy White | Chief Operating Officer | Apology |
| Australian Payments Network Limited | Paul Creswick | Security Standards Manager | |
| Bank of America Merrill Lynch | Andree Hindmarsh | Head of GMOT Australia | |
| Bank of America Merrill Lynch | Jimmie Alam | | |
| Bell Potter Securities | Dean Surkitt | Managing Director Retail | |
| BNP Paribas Securities | Narelle Rutter | Head of Local Custody & Clearing Operations | Apology |
| BNP Paribas Securities | Wayne Murphy | Project Manager | |
| Boardroom Limited | Tony Robinson | Senior Software Engineer | |
| Boardroom Limited | Michael Mullins | CIO | |
| Broadridge (Australia) | Manoj Mathew | Business Analyst | |
| Broadridge (Australia) | Mabel Chow | Development and Support Manager | |
| CBA Equities | Joel Cox | Technical Business Analyst | |
| CBA Equities | Carolyn Webb | Test Manager | |
| CBA Equities | Ben Lowe | Manager Settlements | |
| Chi-X Australia | Mike Aikins | Head of Solution Development | |
| Chi-X Australia | Suketu Adhvaryu | Senior Solution Architect | |
| Citicorp | Miles O'Connor | Director, Direct Custody & Clearing Securities Markets & Securities Services | |
| Citicorp | Andrew Gibson | Director – Head of Direct Custody and Clearing Australia & NZ | Apology |
| Citicorp | Brett Dennis | Head of Operations – Party Clearing | |
| Citicorp | Lyall Herron | | |
| Citicorp | Janice O'Brien | Markets & Securities Services Technology | |
| Citicorp | Matthew Warner | | |
| Citicorp | Ashok Kumar Balusa | | |

ASX

| Company | Name | Job Title | Apologies |
|---|---|---|---|
| Citicorp | Glenn Pahilan | | |
| Citicorp | Stephen Rylands | Product Manager | |
| CMC Markets Stockbroking | Nikola Vanstan | Change Manager | |
| Computershare | Paul Walton | Senior Manager, Corporate Actions & New Business Development – Investor Services | |
| Computershare | Leanne Bailey | Senior Business Analyst Product & Innovation | |
| Computershare | Laik Tan | | |
| Deutsche Securities | Kevin Novini | | |
| Digital Asset | Fil Mackay | Senior Product Analyst | |
| Dion Global Solutions | Craig Gray | Product Manager – Australia and NZ | |
| Dion Global Solutions | Nikki Gleisner | Account Manager | |
| GBST | Andrew Murdoch | Product Specialist, GBST Capital Markets | |
| GBST | Sue Schafer | Product Owner | |
| Goldman Sachs | Darrel Schwarz | Technology Vice President | |
| Goldman Sachs | Josh Rice | | |
| Goldman Sachs | Nidhi Luthra | | |
| HSBC Securities Services | Gregory Wilkin | Head of HSBC Operations | |
| HSBC Securities Services | Salih Kulic | Manager Custody | |
| HSBC Bank Australia Limited | Michael Macintosh | Senior Client Account Manager, Global Liquidity and Cash Management | |
| HSBC Bank Australia Limited | Anna Fratini | Senior Product Manager – High Value Payments, Clearing and Financial Institutions, | |
| HSBC  Bank Australia Limited | Phyllis Yeung | Senior Analyst | |
| 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 | |
| JP Morgan | Ned Miglez | | |

ASX

| Company | Name | Job Title | Apologies |
|---|---|---|---|
| JP Morgan | Daniel Smith | VP, Network Management | |
| JP Morgan | Lesley Henderson | Technology Product team | |
| Link Group | Ian Batterham | Business Applications Architect | |
| Link Market Services | Sue Julian | National Manager, Corporate Actions | |
| Macquarie Group | Paul Bragg | Senior Manager Equities Clearing ANZ | Apology |
| Macquarie Group | Merrilyn Auton | Manager Operations | Apology |
| Morgans Financial | Matt Neaubauer | Team Leader, Service Management Team | |
| Morgans Financial | Ed Strike | IT Manager | |
| Morgan Stanley | Dorothy Wilson | Executive Director, Morgan Stanley Wealth Management, ISG Technology | |
| Morgan Stanley | Kirsty Venters | VP, Prime Brkrg Funding & Fin Tech | |
| Morgan Stanley | Oscar Dela Cruz | | |
| Morgan Stanley | Andrew Fielder | | |
| Morgan Stanley | Gordon Davies | VP/Firmwide Ops | |
| Morgan Stanley | Andrew Sime | | |
| NAB Asset Management | Suresh Chinnappa | Head of Custody Service Operations | |
| National Stock Exchange | Lina Lim | Head of Technology | |
| Nomura Research Institute | John Ryan | Senior Consultant | |
| Nomura Research Institute | Ashish Jha | | |
| Northern Trust | Yen Pan Chung | Senior BA, Market Advocacy and Innovation Research | |
| Securitease | Anton Smith | Director | Apology |
| Securitease | Chris Werry | Business Analyst | |
| Securitease | Angela Losurdo | Business Systems Analyst | |
| Share Investing | Phil Barnes | Senior Manager, Platforms | |
| SWIFT Standards | Nicole Jolliffe | Senior APAC Standards consultant | |
| Sydney Stock Exchange | Leo Zhang | Business Analyst | |
| Sydney Stock Exchange | Jason Shen | Market Operations Officer | |
| UBS | Phillip Drury | Phillip Drury, Executive Director, Equities IT | |
| UBS | Duncan Earl | Executive Director, Head of Change, UBS Group Operations | |
| UBS | Neil Martin | IT – Project Management | |
| Wealthhub Securities | James Channon | Manager, Capital Markets Trading | |

**ASX**

**ASX Management**

| Name | Job Title | Apologies |
|------|-----------|-----------|
| Tim Hogben | Chief Operating Officer (Chair of the Technical Committee) | |
| Cliff Richards | Executive General Manager, Equity Post Trade Services | Apology |
| Brendon Luscombe | General Manager, Product Owner, CHESS Replacement Project | Apology |
| Karen Webb | Senior Manager, Equity Post Trade Services | |
| Keith Purdie | Senior Manager, Equity Post Trade Services | |
| Russell Eyre | Enterprise Architect | |
| Anne-Marie Fisher-Taylor | Team Lead, Application Development | |
| Darcy Wright | Senior Business Analyst, Equity Post Trade | |
| Priscilla Ferri de Barros | Senior Business Analyst, Equity Post Trade | |
| Nicky Darwin | Senior Business Analyst, Equity Post Trade | |
| Gary Hobourn | Senior Economic Analyst, Regulatory and Public Policy | Apology |
| Fraser Moodie | Manager, Integration and Connectivity, CHESS Replacement | |

**ASX**

The meeting commenced at 3.05pm.

**Agenda item 1: Agenda overview**

The Chair welcomed Technical Committee members to the meeting including members attending by webinar. The Chair noted that it was an important time in the project, with the recent release of the consultation paper generating significant interest. The Stockbrokers (SAFAA) Conference was also being held in the next couple of days where standards and ISO 20022 would likely be discussed.

The Chair welcomed two new representatives to the group - Fraser Moodie recently joining ASX as Manager, Integration and Connectivity, CHESS Replacement, and Fil Mackay from the Digital Asset team.

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

**Agenda item 2: Minutes from last meeting, open actions**

The Chair noted that the minutes from the last meeting held on 17 April 2018 had been finalised with a minor correction to agenda item 6(f) replacing an incorrect reference to UIC with BIC. There were no other comments received on the draft minutes from members. The minutes had been distributed and published on the web page.

The Chair noted the outstanding action from the last meeting as outlined on slide number 5 from the ASX presentation.

**Action item 20** was for ASX to provide a proposed plan for the remaining training webinars. The Chair noted that ASX was considering when the delivery of industry training would be appropriate during ASX's progression of the 'to-be' state, and that may be later this year. **This item remains on hold**.

**Agenda item 3: CHESS Replacement project update by ASX**

The Chair invited the Senior Manager, Equity Post Trade Services to provide an update on the project. The Senior Manager noted that since the last meeting ASX had released the consultation paper on 27 April, with an 8 week consultation period, closing 22 June. ASX had also held a project update webinar a week ago with approximately 400 registrations. The webinar provided a walkthrough of the key points from the consultation paper and responses to questions submitted by the audience. A recording of the webinar is now available on the CHESS Replacement web page. ASX had already received a number of good questions about the consultation paper. The stakeholder engagement stream were progressing with planning for the new working groups that will focus on connectivity and integration, and implementation and migration, as well as preparation of the first tranche of external project documents planned for release in the 4th quarter of this year. Representatives from ASX and the CHESS Replacement team were also attending the SAFAA conference in Melbourne this week, so members were encouraged to visit the ASX exhibition stand if they wanted to discuss the project and consultation in more detail.

Since the last meeting, Digital Asset had also released details of the DAML software development kit (SDK) training program.

A member questioned how achievable the project dates were – they seemed very aggressive, and the consultation response period was tight. The Chair noted the comments and that ASX would be responding in more detail on the timeline in July following receipt of responses. Members should provide input to the CHESS Replacement team if they felt they couldn't meet the consultation response deadline.

A member referred to the legal agreement required for the DAML SDK and that this would require significant legal review which may take time. A question was raised about the type of Non-Disclosure Agreement (NDA) with Digital Asset – where the preference was for an NDA covering the party (one way), rather than two way, and that this would speed up any legal review. Noted action for Digital Asset to review the NDA and respond. **[Matters arising 1 – Action item 50]**

### Agenda item 4: ISO 20022 project update by ASX

The ASX Senior Manager, Equity Post Trade Services provided an overview of the ISO 20022 work to date. The Senior Manager noted that following the last meeting ASX had published over 300 'as-is' messages in the new collection format in MyStandards and asked if any members had reviewed the messages, though ASX was not expecting particular comments. One member confirmed they had reviewed some of the messages.

The Senior Manager noted that the ISO team were progressing 'to-be' work, and some of this work wasn't just ISO 20022 messaging related, but also working on any other interface or file interaction with the new platform including FIX messages for trade registration and consumption of data regarding issuers, securities, calendars, and so on. A lot of this was fundamental ground work to build the platform capability. From an external messaging perspective the team was progressing work on trade registration (to be discussed today), netting (discussion today), and account management – to be discussed at the next meeting.

From a global engagement perspective the ASX representatives continue to participate in the ISO 20022 Securities Standards Evaluation Group and the sub-group evaluating T2S draft messages. ASX and others had provided feedback to the T2S group on changes to administration and reference data messages and the group was currently on hold, pending the 4CBs re-work on those messages. The group was expected to reconvene when revised specifications were available perhaps next month.

The Chair noted that the global adoption of ISO 20022 was progressing, naming a number of countries including China, the USA and European community.

### Agenda item 5: Update from Business Committee

The Chair noted that the next Business Committee meeting was scheduled for 5 July, with a focus on CHESS Replacement and the responses received to the consultation paper.

### Agenda item 6: Matters for Consideration

#### a) ISO 20022 integration options

Referring to ASX presentation slide numbers 10 to 13, ASX's Enterprise Architect provided an overview of the ISO 20022 integration options, where there were three broad options available. These included integration via a node (messaging or direct), via traditional messaging or via a browser. The Architect noted that all options were ISO 20022, with multiple options permitted. Because of the optionality, ASX

had determined that the ISO 20022 schema validation would be light (as xml validation couldn't be relied upon in all options) vs. validations made by the application. Therefore schema restrictions such as code lists would be avoided, with validations occurring only at the application layer.

For node integration the first option available is to use xml messaging where ASX would present an interface similar to traditional methods. The second node option was direct DAML integration where users can use the DA SDK to create applications that integrate directly with the DA platform. This would require training for users.

A member suggested that it was not clear what benefits may be realised by a full DAML integration. A member representative from Digital Asset confirmed this option provided direct access to the database and further functionality could be built upon that access. The integration would allow tighter data coupling without intermediate xml, and allowing for broader workflows beyond CHESS.

A member asked whether there was a standard ISO 20022 format. The Architect responded that xml was the most common format but ISO 20022 did not define the representation and could also be equally represented as a DAML contract. When using xml to interface to the node there is a translation from done from xml to DAML and vice versa.

A member asked that if inbound and outbound messages were still ISO, what information could be extracted via the node that wasn't available via messaging. The Architect confirmed that messaging typically followed a request and confirmation process (e.g. participant request set up of HIN, and CHESS confirms set up), but the node provided access to the state of system where the user could query the state of the ledger, such as all current HINs for that participant. The member sought clarification that the node therefore provided another form of enquiry. The Architect confirmed that was the case – in the form of how and when a user wanted it.

A member suggested that a data query would be available via the Data API described in the consultation paper. The Architect confirmed that was correct, but the intention of the Data API is to provide an out of band access method for current CHESS demand style reporting. The use of a node would provide more flexible access as it will provide both ad-hoc query capability and real-time data access. The member asked if this this would mean users would need a node to query the database. The Architect confirmed that a user could have a node just to query the data if they chose, and could use other integration methods to perform transactions.

A member asked whether the node with messaging options would be adequate for most use cases; or whether there were any inadequacies in using that option. The Architect noted that it may not be adequate if for example there was high transaction volume in an account and the user wanted to trigger behaviour when a particular balance was met. The Digital Asset representative noted that the SDK (full integration) option allowed for capabilities to tightly integrate with external workflows, and avoids developing message-based data flows from scratch.

A member asked about the balances in the ledger. The Architect explained that hashes evidencing transactions (or contracts) were stored in the GSL (global synchronisation log); and that the PCS (private contract store) contains the transaction data, and for example balances information. The DA representative noted that it was important to emphasise the distinction between public and private implementations of DLT. In a private ledger only a user's information (that it has permission to see) is available.

**ASX**

The Architect provided an overview of the second option where traditional messaging was still available and the leading candidates for the transport were SWIFTNet and/or open standards messaging (e.g. AMQP), as demand would dictate. It was important to ASX not to provide a proliferation of connectivity options, and only to use options that were globally accepted standards with off the shelf software support.

The final integration option was the availability of a browser, largely to replace the existing ASX solution CHESS PC. The browser would support manual entry of all possible messages, and the capability to upload download files in an ad-hoc way but wasn't intended to be used as a pseudo message gateway.

The Architect noted that the use of the browser would be subject to a user on-boarding process. The Chair noting that ASX already had strict rules around CHESS PC usage, particularly with regard to volume, value and these were likely to be carried forward. It was expected that most clearing and settlement participants would not use the browser, but it may be a BCP consideration.

The Chair commented that the questions raised were obviously topical for both technology and business to understand what the options mean. It was expected that the new working groups would provide more information to help users make informed decisions.

### b) Review of Notified Broker to Broker Trade 'to-be' messaging

The ASX Senior Business Analyst provided an overview of ASX's progress in considering the mapping and implementation considerations for CHESS EIS 164 message. ASX was proposing to use the ISO 20022 secl.001 base message 'Trade Leg Notification', in place of the message selected in 'to-be' mapping (setr.044 – Securities Trade Confirmation Status Advice). The Analyst noted that ASX would review each message in the 'to-be' mapping to determine whether the 'as-is' mapping was still appropriate or it should be changed for a better outcome and to suit the 'to-be' requirements.

Referring to presentation slides numbered 15 and 16, the Analyst provided a re-cap on the convention that ASX would be using for the unique transaction id present in the Business Application Header (BAH). The current transaction id for the CHESS EIS 164 message includes the Trade Serial Number and Julian Date for that specified Trade Date. To maintain consistency, ASX recommended that for the unique transaction id used in the BAH for the secl.001 (equivalent to CHESS EIS 164), the 'Julian (Trade) Date' be removed from the transaction id and the information items 'Trade Execution Identification' (i.e. the Trade Serial Number) included in the ISO 20022 document. Trade Date remains present in the message document. This convention would be applied across the message set, where a standardised transaction id would be present in the BAH, and any informational data previously present in a transaction id (as specified in the CHESS EIS) would be carried forward in the ISO 20022 document. No information would be lost, just re-located.

The Analyst referred to presentation slide numbered 17 to present an example of how this would impact further messages in the same chain of events, such as the messages for netted and un netted obligation reports. These messages would include the Trade Leg Identifier relating back to the original sec.001 base message (ASX catalogue message reference sett_101).

A member asked for confirmation that no information would be lost. The Analyst confirmed that was the case – ASX was suggesting a more ISO compliant implementation where the data was contained in the document rather than the transaction id. The Chair asked members if they were comfortable with this approach. The members endorsed the recommendation.

ASX

### c) Registration details – 'to-be' format

Referring to ASX presentation slides numbered 18 to 21, the ASX Senior Business Analyst provided an overview of the Registration Details 'to-be' format. The Analyst provided a comparison of the current CHESS format, and the proposed 'to-be' format where name and address fields would be separated. The Analyst had performed a gap analysis of the current registration detail standards in the CHESS EIS and how they could be carried forward in ISO 20022 messaging. The only existing CHESS standards that couldn't be carried forward were the use of elements to separate content such as name, address, post code, as the ISO message provided for separate elements in the message. The Analyst also noted that ASX would adopt the global standard for country reference, which is 2 alpha characters instead of the currently defined 3 alpha characters in CHESS. As shown on presentation slide number 20 the Analyst noted that a number of other ISO 20022 adoption initiatives from around the world had used a similar standard for name and address details as that proposed by ASX.

A member noted that they were finding it difficult to understand the cost benefit to adopt the standard, particularly the increased field sizes, noting it would have significant impacts. Another member questioned how larger size fields would be wrapped. The Analyst confirmed that most rules current in CHESS would continue to apply and that ASX would present the proposed limitations on the fields at the next Technical Committee meeting. ASX was not advocating for example the use of the full field size available for name (350 characters), but the discussion today was around the standardised format of the elements in ISO.

A member commented that it would be helpful to have the recommended format and restrictions known as soon as possible to help form a response to the consultation paper regarding the expected impact.

The Chair noted that ASX appreciates the impacts that would be present from the replacement of CHESS and the need to work as an industry to agree the limitations on usage. The consultation paper was on specific topics around business requirements, and the discussions in this meeting were more technical considerations.

The member suggested that all the current registration information could still fit within the name field. There needed to be a good explanation on the need and justification for further standardisation.

Referring to presentation slide number 21 the Analyst presented ASX's recommendation to adopt a standard character set (UTF-8) for schema validation of the name and address fields. For Application validation ASX will have alpha-numeric characters (A-Z, 0-9) and special characters in ASCII 32-126, not including lower case. Must not contain " and 'or accented characters. ASX considered whether to accept lower case and convert to upper case, but this would be difficult for technical implementation. ASX will only accept upper case for Registration Details. The Analyst noted again that the Registration Details 'to-be' standards for how to fill the fields would be presented at the next meeting.

A member noted that the adoption of the standards, additional structure and related transition activities would be a huge job for everyone, so agreed the 'to-be' standards were needed as soon as possible.

The Chair noted that ASX would consider how impacted stakeholders could be engaged prior to the next meeting before members were asked to confirm acceptance of ASX's recommendation. **[Matters arising 2 – Action item 51]**

### d) Transaction id – allowable character set

The ASX Senior Business Analyst presented ASX's recommendation to adopt the UTF-8 character set for Transaction ids for schema validation only. For Application validation the field must only contain alpha-numeric characters (A-Z, a-z, 0-9) and special characters in ASCII 32-126, noting lower case is confirmed. The field must not contain | (vertical line) because it will be used as delimiter.

A member asked if ASX was going to be consistent in its application of character sets across all fields such as Registration Details and Transaction Id.  The Analyst confirmed that was the intention, but there may be cases where it wasn't possible.

Members endorsed the recommendation.

### e) Business Application Header (BAH) – 'to-be' format

The ASX Senior Business Analyst provided an overview of a change that ASX was proposing to the Business Message identifier present in the BAH from the 'as-is' to the 'to-be' mapping. In 'as-is', the identifier had also included the Business Date. For 'to-be' ASX was recommending the removal of the Business Date from the identifier and its inclusion in the ISO 20022 document.  The Analyst noted again, that the proposal did not result in any loss or information, it was relocated.  Members endorsed the recommendation.

### f) Data Source Scheme with ASX External code lists

The ASX Senior Business Analyst provided an overview of ASX's proposal to adopt a data source scheme with ASX external code lists. In the 'as-is' mapped messages, all codes had been identified within the usage guidelines.  The advantage of removing the codes from the usage guidelines and including in external code lists would be the ability to update the codes without having to develop a new version of the guidelines.

A member noted that including the codes in the schema would force formality around the creation and use of the codes. The member noted that when ASX had made changes to valid values, codes in the past they had been caught short as they were unaware of the change.  The Chair noted that if this approach was adopted, ASX would give consideration to how it would advise users of any change to the code lists in the future. [**Matters arising 3 – Action item 52**]

### g) Use of BIC as party identifier – adoption considerations

The ASX Senior Business Analyst referenced previous committee discussions where ASX had determined that a UIC or BIC could be used to identify parties in the business message being Business Application Header and ISO document.  ASX was proposing a model where either UIC or BIC uniquely identified an actor (and therefore their role).  ASX presented 4 questions to the members who were considering using a BIC as their party identification – whether they would use a new or existing BIC, whether the BIC was connected or non-connected, whether it was a BIC8 or BIC11, and if that BIC would apply to all activity for that organisation or actor, or for multiple activities. These were important questions to assist ASX to determine the correct modelling.

A member asked that if a user was to use SWIFTNet would they need a BIC. This was an important consideration for registries, as they don't see the need to use BIC for issuers and would likely use UICs.

The Analyst confirmed that if a BIC is used for party identification in the Business Message, this could also be used in the SWIFTNet network header. However if a UIC is used in the business message, a connected BIC not the UIC must be used in the SWIFTNet network header.

The Chair requested that members consider these questions and provide responses back to ASX, and that examples would be helpful. **[Matters arising 4 – Action item 53]**

**h) Review of Netting 'to-be' message**

The ASX Senior Business Analyst provided an overview of the Netting 'to-be' messaging, starting with a description of the consolidation of messages and introduction of three new items of information.

Firstly, currently clearing and settlement participants are typically the same entity resulting in the delivery of a single netted obligation report message. In the future if the clearing and the settlement participants were different entities a copy of the netted obligation report will be sent to both the clearing participant and settlement participant.

Secondly, existing Target Transaction id (BP49 in CHESS EIS messages) will be replaced by Trade Leg Identifier of the Trade Leg Notification message (secl.001 - equivalent to EIS 164).

Thirdly, ASX will be restoring the use of Party 2 in this message, in addition to Party 1, allowing for the identification of both the Settlement Participant (standardised as Party 1) and the Clearing Participant (standardised as Party 2) on the securities movement side. For example in a RECE, the settlement and clearing participant will be identified in the Receiving Settlement Parties block with the Delivering Settlement Parties block (DELI) having details of ASX as the CCP for Party 1.

The Analyst noted the 'to-be' messages were not backwardly compatible, with associated considerations needed regarding migration and implementation.

The Analyst referred to presentation slide number 27 that provided an xml view of part of the message to highlight the key changes. It was noted that today CHESS provides an 'End of Netting' event notification, and this would also be provided. The Business Date had also been relocated from the BAH to the ISO 20022 document.

Referring to presentation slide number 28 the Analyst discussed the usage guidelines including the BAH, ISO 20022 equivalents of EIS 134, 138 and 542 that would be published for members review within the next week. ASX would also attach to the community pages in MyStandards supporting 'trial' documents to the usage guidelines including the message model, samples and code list. ASX requested members' review of the published messages prior to the next meeting, and no later than Friday 15 June.

**Agenda item 7: Next meeting**

The Chair noted that four additional action items had been raised during the meeting, and as in the past draft minutes from the meeting would be circulated to members for review.

The Chair confirmed that the next meeting would be held on Tuesday 26 June 2018, in Sydney. ASX had already proposed the agenda items for the next meeting, some of which carried on topics of conversation from today's meeting including – reviewing member feedback on the netting messages, a further review of the Notified Broker to Broker Trade message and possible publication of that message in June,

reviewing the standards for Registration Details, creation of accounts, and more on sample xmls. The Chair noted that ASX was also considering agendas for subsequent meetings, and at the July meeting ASX could provide an overview of the types of documentation that would be published later in the year, building on the trial documents mentioned in agenda item 6h).

The Chair reminded members that responses to the consultation paper were due on 22 June, and to continue to send any queries to the project team via the project email address, or find updated information including a recording of the recent project update webinar on the CHESS Replacement web page.

The Chair thanked members for their input, and for participating in the meeting. The meeting closed at 4.52 pm.


Signed as a correct record of the meeting.



15 June 2018

_____          _____
Technical Committee Chair                  Date

## ACTION ITEMS

| No. | Meeting Date | Open Action Items | Owner | Due Date |
|---|---|---|---|---|
| 20 | 2 May 2017 | Provide details of a proposed plan including potential topics for the remaining training webinars for feedback, standard training provided by SWIFT, and including identification of business vs. technical topics. | ASX | On hold |
| 50 | 22 May 2018 | Digital Asset to review the NDA regarding the DAML SDK and respond to questions around one way vs. two way. | DA | 26 June 2018 |
| 51 | 22 May 2018 | ASX to consider how impacted stakeholders could be engaged on the standards for registration details prior to the next meeting. | ASX | 26 June 2018 |
| 52 | 22 May 2018 | ASX to give consideration to how it would advise users of any change to the external code lists and report back to members. | ASX | 26 June 2018 |
| 53 | 22 May 2018 | Members to answer 4 questions if they are considering using a BIC as their party identification: whether they would use a new or existing BIC, whether the BIC was connected or non-connected, whether it was a BIC8 or BIC11, and if that BIC would apply to all activity for that organisation or actor, or for multiple activities. Examples would be helpful. | Members | 26 June 2018 |

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|---|---|---|---|---|
| 1 | 13 December 2016 | 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 |
| 2 | 13 December 2016 | Provide members with information on how to access SWIFT MyStandards. | ASX | 14 March 2017 |
| 3 | 13 December 2016 | Provide members with an overview of ISO 20022 training options. | ASX/SWIFT | 7 February 2017 |
| 4 | 7 February 2017 | Provide members with list of current scope of messages for detailed mapping during first half 2017. | ASX | 14 March 2017 |

ASX

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|-----|-------------|---------------------|-------|-------------|
| 5 | 7 February 2017 | Schedule training webinar for the attendance by members and seek and review feedback after the initial webinar. | ASX / SWIFT | 14 March 2017 |
| 6 | 7 February 2017 | Add link to relevant ISO 20022 information websites to the CHESS Replacement web page. | ASX | 14 March 2017 |
| 7 | 7 February 2017 | Provide more details on access to online education available at swift.com. | SWIFT | 14 March 2017 |
| 8 | 7 February 2017 | Provide members with the current list of Market Identification Codes (MICs) | ASX | 14 March 2017 |
| 9 | 7 February 2017 | Provide members with more information on the use of BIC vs. UIC as the party identification code. | ASX / SWIFT | 14 March 2017 |
| 10 | 7 February 2017 | Market Operators to advise the preferred MIC to be presented in trade related messages as the "Place of Trade". | ASX, Chi-X, NSX, SSX | 6 June 2017 |
| 11 | 7 February 2017 | ASX to conduct analysis on whether the identification of a financial instrument is a fixed value or true value of the proprietary code issuer. | ASX | 14 March 2017 |
| 12 | 7 February 2017 | Provide list of proposed code (i.e. condition or BOM) in ISO 20022 format (4 character) mapped against CHESS codes. | ASX | 14 March 2017 |
| 13 | 7 February 2017 | Add a general CHESS Replacement update to the standing agenda for meetings. | ASX | 14 March 2017 |
| 14 | 7 February 2017 | Check the next Technical Committee meeting date planned for March and advise members of any change. | ASX | 14 March 2017 |
| 15 | 14 March 2017 | Schedule future agenda item to discuss transition arrangements, including any changed values (e.g. party identifiers). | ASX | 2 May 2017 |
| 16 | 14 March 2017 | Create register of matters that may impact upstream, downstream systems or processes, including codes, identifiers and ISO 15022. | ASX | 2 May 2017 |
| 18 | 14 March 2017 | ASX to draft procedures for change requests to usage guidelines and code lists. | ASX | 2 May 2017 |
| 21 | 2 May 2017 | Provide a list of standard training topics to share. | SWIFT | 6 June 2017 |

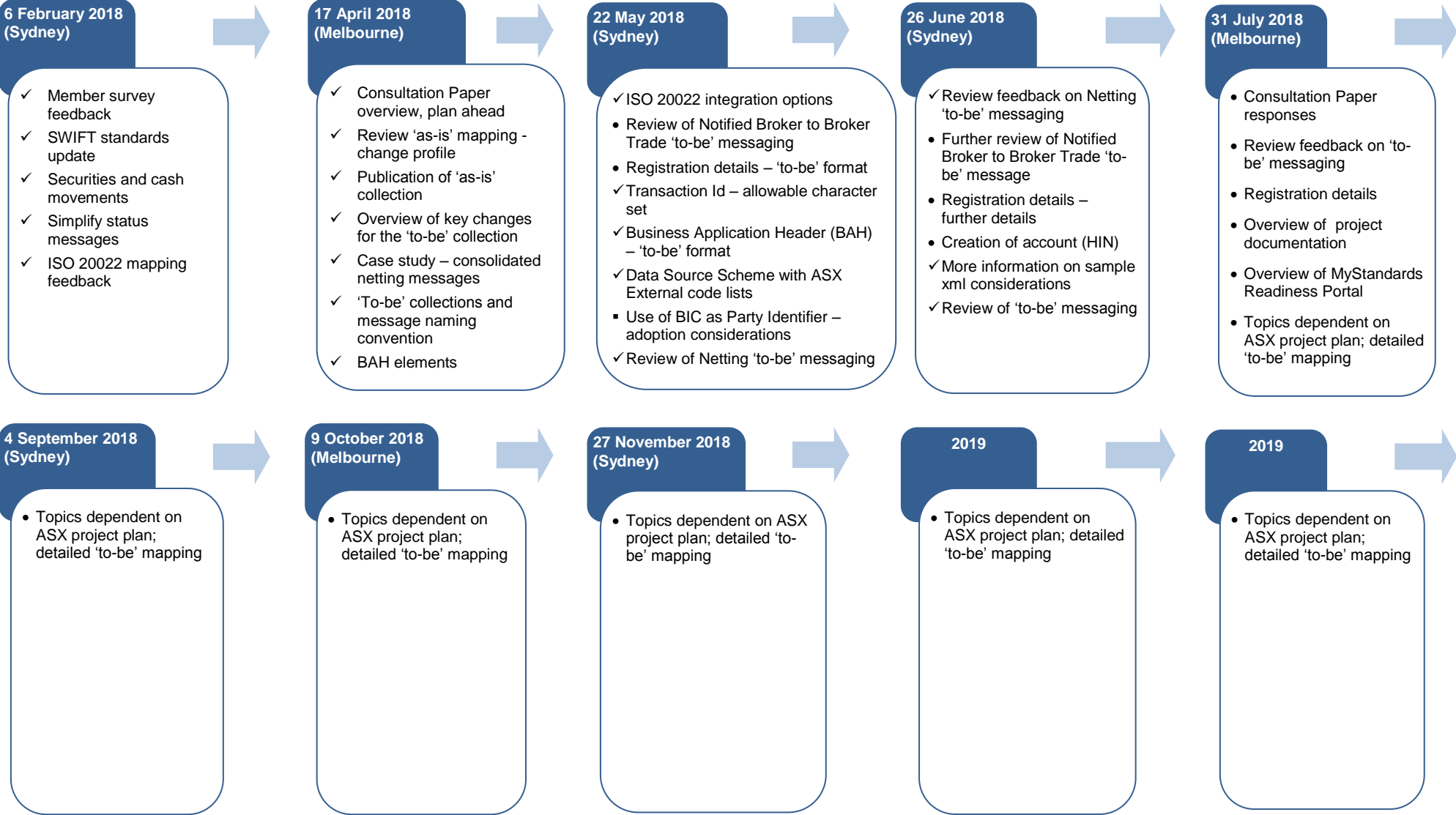| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|-----|-------------|---------------------|-------|-------------|
| | | Noted this action item is combined with action item 20. | | |
| 22 | 2 May 2017 | Provide members with a copy of the presentation material from the trial training webinar held on 27 April 2017. | ASX | 6 June 2017 |
| 24 | 2 May 2017 | Resolve issue with Comments function on MyStandards and advise members when fixed. | ASX/SWIFT | 6 June 2017 |
| 25 | 2 May 2017 | Provide samples of the proposed consolidation and rationalisation scenarios for EIS 138 and EIS 134. | ASX | 6 June 2017 |
| 26 | 2 May 2017 | Provide proposal to broaden the engagement and method to seek feedback on key concepts such as consolidation/rationalisation. | ASX | 6 June 2017 |
| 27 | 6 June 2017 | Publish list of comments received on MyStandards with ASX responses regularly, around the time of each meeting. | ASX | 18 July 2017 |
| 28 | 6 June 2017 | Re-publish ISO 20022 equivalent of EIS 138 with corrected default value INFO for issuer of financial instrument code. | ASX | 18 July 2017 |
| 29 | 6 June 2017 | Review EIS 102 mapped equivalent message with Scott Oakland, JPM – optional inclusion of HIN. | ASX | 18 July 2017 |
| 33 | 6 June 2017 | Provide a presentation of CHESS EIS mapping to ISO 20022, and typical ISO 20022 flows to assist committee discussion of key topics (e.g. rationalisation, consolidation, descope of certain processes like allegement modify).  ASX would also seek input from key members about the best process going forward. | ASX | 18 July 2017 |
| 34 | 6 June 2017 | Add the overview of transaction ids to the July meeting agenda. | ASX | 18 July 2017 |
| 31 | 6 June 2017 | Sample consolidated (EIS 138) and rationalised (EIS 138 and 134) messages published in the MyStandards community – in a separate collection "Sample Message Review". Members to review and provide further comments via MyStandards, email. | Members | 22 August 2017 |
| 32 | 6 June 2017 | For Cancel/Correct & Modify, ASX recommendation revised to only do cancel/correct for bilateral modifications (and not allow modify – removal of EIS 121).  ASX to | ASX, Members | 22 August 2017 |

ASX

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|---|---|---|---|---|
| | | contact users of EIS 121, and action remains open until all members confirmed their agreement with the recommendation. | | |
| 30 | 6 June 2017 | Obtain international usage comparisons on the use of UTC time format. Members to provide input from international offices where possible. | ASX, members | 22 August 2017 |
| 35 | 18 July 2017 | ASX to publish all final draft usage guidelines in MyStandards and highlight to members those usage guidelines that need their review. SWIFT to advise if a flag is available in MyStandards to indicate particular review items. | ASX, SWIFT | 22 August 2017 |
| 36 | 18 July 2017 | Provide members with details of feature in MyStandards to affirm a comment. | ASX, SWIFT | 22 August 2017 |
| 17 | 14 March 2017 | Provide further information on party identification for issuers – UIC or BIC and proposed process. | ASX | 10 October 2017 |
| 37 | 18 July 2017 | Provide comparisons to other market implementations of transaction ids. | ASX, SWIFT | 22 August 2017 |
| 38 | 22 Aug 2017 | Review consistency of the application of UTC date, date and time, zulu format, and add item to upstream/downstream considerations log re the use of UTC for Trade Date confirmations from AMOs (with flow on impact to EIS 164 equivalent). | ASX | 10 October 2017 |
| 40 | 22 Aug 2017 | Provide list of CHESS EIS messages in scope for detailed mapping during 2$^{nd}$ half of 2017, including identification of descoped messages. | ASX | 10 October 2017 |
| 44 | 10 Oct 2017 | ASX project team to consider effective housekeeping of rights that expire worthless – and whether this could be improved. | ASX | 21 November 2017 |
| 45 | 10 Oct 2017 | Review recommendations put to committee in Agenda item 6c) – approach to ISO best practice exceptions and provide feedback to ASX. | Members | 21 November 2017 |
| 46 | 10 Oct 2017 | Review recommendation put to committee in Agenda item 6d) – inclusion of unique event id in Market Infrastructure Tx id (MITI) field. | Members | 21 November 2017 |

| No. | Meeting Date | Closed Action Items | Owner | Closed Date |
|---|---|---|---|---|
| 47 | 10 Oct 2017 | Allow for future use of Party2+ identification in messages, and ensure discussion on same point at working group meetings re business requirement. | ASX | 21 November 2017 |
| 19 | 2 May 2017 | Provide sample of demonstration of comparison between ISO 20022 and ISO 15022 messages. | Scott Oakland, JPM | On hold |
| 23 | 2 May 2017 | Further review of the ASX CHESS demand reporting summary and responses to questions contained in that summary. ASX to continue review of reports and provide further candidates for descope at meetings. | Members / ASX | 21 November 2017 |
| 39 | 22 Aug 2017 | Chair to contact members seeking feedback on the approach of the Technical Committee, any suggestions to improve the process. | ASX | 21 November 2017 |
| 41 | 22 Aug 2017 | Conduct bilateral discussions with share registries and mailing houses regarding structuring of registration details and associated static data. | ASX | 21 November 2017 |
| 42 | 22 Aug 2017 | Conduct bilateral discussions with share registries regarding current holding balance changes associated with corporate actions and proposed withdrawal of EIS 421. | ASX | 21 November 2017 |
| 43 | 10 Oct 2017 | Provide a proposed governance method for Technical Committee input to and review of all matters tabled at the Standards Evaluation Group (SEG), including any matters raised by ASX on behalf of community. | ASX | 21 November 2017 |
| 48 | 21 Nov 2017 | Members to review information provided in agenda item 6d) and respond to the question – was there appetite for using xml in model 1b or 2a as presented or keep the mapping 1 to 1. | Members | 6 February 2018 |
| 49 | 6 February 2018 | ASX to confirm additional 'as-is' usage guidelines that could be published in Q2 and members to provide expression of interest in reviewing this set. | ASX | 17 April 2018 |

**Attachment B: Technical Committee on ISO 20022 Forward Work Plan (matters for consideration @ June 2018)**

**6 February 2018 (Sydney)**

- ✓ Member survey feedback
- ✓ SWIFT standards update
- ✓ Securities and cash movements
- ✓ Simplify status messages
- ✓ ISO 20022 mapping feedback

**17 April 2018 (Melbourne)**

- ✓ Consultation Paper overview, plan ahead
- ✓ Review 'as-is' mapping - change profile
- ✓ Publication of 'as-is' collection
- ✓ Overview of key changes for the 'to-be' collection
- ✓ Case study – consolidated netting messages
- ✓ 'To-be' collections and message naming convention
- ✓ BAH elements

**22 May 2018 (Sydney)**

- ✓ ISO 20022 integration options
- Review of Notified Broker to Broker Trade 'to-be' messaging
- Registration details – 'to-be' format
- ✓ Transaction Id – allowable character set
- ✓ Business Application Header (BAH) – 'to-be' format
- ✓ Data Source Scheme with ASX External code lists
- ▪ Use of BIC as Party Identifier – adoption considerations
- ✓ Review of Netting 'to-be' messaging

**26 June 2018 (Sydney)**

- ✓ Review feedback on Netting 'to-be' messaging
- Further review of Notified Broker to Broker Trade 'to-be' message
- Registration details – further details
- Creation of account (HIN)
- ✓ More information on sample xml considerations
- ✓ Review of 'to-be' messaging

**31 July 2018 (Melbourne)**

- Consultation Paper responses
- Review feedback on 'to-be' messaging
- Registration details
- Overview of project documentation
- Overview of MyStandards Readiness Portal
- Topics dependent on ASX project plan; detailed 'to-be' mapping

**4 September 2018 (Sydney)**

- Topics dependent on ASX project plan; detailed 'to-be' mapping

**9 October 2018 (Melbourne)**

- Topics dependent on ASX project plan; detailed 'to-be' mapping

**27 November 2018 (Sydney)**

- Topics dependent on ASX project plan; detailed 'to-be' mapping

**2019**

- Topics dependent on ASX project plan; detailed 'to-be' mapping

**2019**

- Topics dependent on ASX project plan; detailed 'to-be' mapping

**Note:** Items with a 'tick' have been discussed and all actions have been completed.  Items from previous meetings that do not have a 'tick' have been discussed, but there are outstanding actions.

The Forward Work Program is an evolving document and is presented above as at June 2018.

| BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 4A | |
|---|---|
| **Topic** | **Minutes from 28 March 2018 Business Committee Meeting** |
| **Date** | 5 July 2018 |
| **Purpose of this paper** | **To provide Business Committee members with the minutes and Business Committee report to the ASX Boards from the 28 March 2018 meeting.** |

## OVERVIEW

Draft minutes and the draft report to the Boards of ASX Clear and ASX Settlement from the 28 March 2018 Business Committee meeting were emailed to all members of the Business Committee on 1 May 2018 for comment. There were some changes made in response to comments received from a Business Committee member. These are marked up in the attached document.

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

## ATTACHMENTS

Attachment A – Business Committee Report and Minutes from the 28 March 2018 Meeting.

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

## Business Committee Meeting

At its 28 March 2018 meeting, the Business Committee was updated on the:

- operating performance of CHESS for the March Quarter 2018 to date;
- progress with the CHESS replacement project;
- Corporate Action STP Phase 2 project; and
- Technical Committee's progress in mapping CHESS messages to the ISO20022 standards.

### KEY ISSUES DISCUSSED

The Committee was provided with an advance briefing on the upcoming consultation paper which will set out the planned scope of the enhancements and additions to the functionality of the CHESS replacement system as well as those features being decommissioned.

The briefing included a high-level overview of the technical solution being developed based on digital ledger technology (DLT) and the user interfaces available to connect the new system (traditional message based methods or by taking a DLT node).

The proposed migration program and implementation timetable was also outlined for members. It was stressed that a key part of the upcoming consultation was getting industry feedback on the practicability of the proposed timetable and the testing and release management strategy.

It was noted that the Business Committee and the Technical Committee on ISO20022 would meet regularly during the next twelve months and two new working groups would be established to assist with implementation over the life of the project covering:

- Connectivity and Integration; and
- Implementation and Transition.

### Agreed Actions

None

Minutes from the meeting are attached.

# Minutes

## Business Committee Meeting

| Date | 28 March 2018 | Time | 12:00pm – 2:00pm |
|---|---|---|---|
| Location | ASX Offices – Level 1, 20 Bridge Street, Sydney | | |

**1. Service Performance**

   a) Cash Market Clearing and Settlement - Operating Performance

**2. CHESS Replacement Project**

   a) DLT update

   An update on the work following ASX's announcement that it would be proceeding with a DLT-based system.

   b) Business Requirements Update

   An update on the consultation process surrounding business requirements and the structure of future work to implement CHESS replacement.

   c) Corporate Action STP Phase 2 Update

   An update on the proposed work program to progress Phase 2 of corporate action STP enhancements.

   d) ISO 20022 Technical Committee Report and Minutes

   Members will receive reports from the 21 November 2017 and 6 February 2018 meetings.

**3. Administration**

   a) Minutes from the 30 November 2017 Business Committee Meeting

   b) Forward work program and BC Meeting dates for 2018

   c) Other matters

**4. Next Meeting** - 5 July 2018

## Business Committee Members

| Company | Name | Job Title | Apologies |
|---|---|---|---|
| ABN AMRO Clearing | Barry Parker | Chief Executive Officer | |
| ACSA | Rob Brown | Chief Executive Officer | |
| AFMA | David Lynch | Chief Executive Officer | |
| ANZ | Andrew Koudrin (delegate) | Head of Execution Assurance and Middle Office | Peter Mullin |
| ASX | Peter Hiom | Business Committee Chair, Deputy CEO | |
| Bank of America Merrill Lynch | Rhys Cahill | Global Markets COO | |
| Bell Potter Securities | Dean Surkitt | Managing Director Retail | By Phone |
| BNP Paribas | David Braga | Head of Securities Services | |
| Chi-X Australia | Mike Aikins | Chief Operating Officer | By Phone |
| Citi | Miles O'Connor | Director, Direct Custody & Clearing Securities & Funds Services | |
| CBA | Sheridan Thompson | Head of Strategic Development, CommSec | |
| Credit Suisse | Winston Loke | Australia Equities COO | By Phone |
| Deutsche Bank AG | Geoffrey Plaisted | Chief Operating Officer, Equities | |
| Goldman Sachs | Yen Le (delegate) | Executive Director | Jeremy Follet By Phone |
| HSBC | Peter Snodgrass | Head of Direct Custody and Clearing | |
| J.P. Morgan | Jonathan Evans | Head of Custody and Markets Operations | |
| Macquarie Group | James Indge | Cash Equities Business Manager | |
| Morgans | Daniel Spokes (delegate) | Manager, Transactional Services & Settlement Systems | Peter Chisholm |
| Morgan Stanley | Craig McGuire | Head of Operations | |
| NAB | Greg Bowrey | General Manager, Self-Directed Wealth Products & Markets | |
| NSX | Ann Bowering | Managing Director | |
| Pershing Securities | Leigh Conder | Chief Operating Officer | |
| SAFAA | Andrew Green | Chief Executive Officer | |
| Sydney Stock Exchange | Tony Sacre | Chief Executive Officer | Tony Sacre |
| UBS | Conor Foley | Chief Operating Officer | |

## ASX Management

| Name | Job Title |
| --- | --- |
| Tim Hogben | Chief Operating Officer |
| Daniel Moran | General Counsel |
| Hamish Treleaven | Chief Risk Officer |
| Eloise Wett | Executive General Manager, Operations |
| Cliff Richards | Executive General Manager, Equity Post Trade Services |
| Sally Palmer | Deputy General Counsel |
| Con Korkofigas | Senior Legal Counsel and Senior Manager |
| Frederik Van den Weghe | Manager Business Analysis Clearing |
| Karen Webb | Senior Manager, Equity Post Trade Services |
| Keith Purdie | Senior Manager, Equity Post Trade Services |
| Gary Hobourn | Senior Economic Analyst, Regulatory and Public Policy |

## INTRODUCTION

The Chair welcomed members and delegates to the first meeting of the year. He noted that Tony Sacre (Sydney Stock Exchange) was unable to attend and a few members had nominated delegates to attend on their behalf: Andrew Koudrin (ANZ); Yen Le (Goldman Sachs) and Daniel Spokes (Morgans).

Four members dialled in to the meeting: Dean Surkitt (Bell Potter Securities), Yen Le (Goldman Sachs), Mike Aikins (Chi-X) and Winston Loke (Credit Suisse).

## AGENDA ITEM 1: SERVICE PERFORMANCE

### a)    Operating Performance Report

The ASX Executive General Manager, Operations spoke to the March quarter performance report (data up to end February 2018) noting that:

- Availability of CHESS was 99.93% reflecting a single incident which affected the system prior to the market opening on 7 February. During the period participants were able to submit messages but were not receiving acknowledgements. The system was restored by 9:30am and there was no impact on settlement that day. TAS availability was 100% for the period.

- Overall activity levels (volumes traded and value settled) during the March quarter to date have been broadly in line with the previous quarter.

- There were a small number of trade rejections on ASX (due to a participant inputting an incorrect clearing ID) and Chi-X (duplicate transactions). ASX is examining if a process can be put in place to prevent incorrect clearing IDs to avoid the need for rebooking transactions.

- Fail rates remained very low (0.3%).

- The mFund service continues to grow in terms of number of funds (194) and funds under management ($584m).

The efficiency of CHESS and the value it provides in terms of netting and the netting process were highlighted during a record trading day (6 February) where there were around 2.7 million trades processed with a gross value of nearly $13 billion. This reduced down to 25,000 settlement instructions and $3.2 billion in value through the netting process. There were also no performance issues with CHESS during the day.

A member asked about the underlying cause of the 7 February incident and whether it had happened before? In response it was noted that while the specific circumstances hadn't happened before (a particular non-critical task had failed), the problem of a nature that ASX was able to apply a familiar solution.

## AGENDA ITEM 2: CHESS REPLACEMENT PROJECT

The Chair thanked members and their organisations for their participation during the consultation process to date. He noted that the process had been extremely intensive and appreciated the resources firms have allocated to this process.

The Executive General Manager Equity Post-Trade Services updated members on the CHESS replacement process. He provided a preview of the decisions in relation to the scope of enhancements and additions to the new system and an outline of the proposed implementation timetable.  He noted these issues will be included in the upcoming consultation paper.

He stressed that the advance briefing was being provided to the Committee on a confidential basis as the plans were still subject to internal review and discussion with regulators so there may be some further amendments before they are finalised.

He outlined the structure of the paper including that it will cover the:

- additional or enhanced features of the new system as well as the decommissioning of some redundant CHESS functionality;
- adoption of ISO 20022 messaging;
- technical solution which includes both DLT-based (node) connectivity as well as traditional message-based connectivity options;
- testing and release management plan;
- migration and implementation approach; and
- ongoing stakeholder engagement activities between now and the go-live day.

## a)   DLT update

The Executive General Manager Equity Post-Trade Services noted that, as an operator of critical financial infrastructure, ASX's clearing and settlement system exceeds a range of minimum standards around system resilience, recoverability, performance, scalability, and connectivity.  The new system will be able to handle large daily transaction volumes and accommodate a significant number of participants choosing to adopt node-based connections with no material adverse impact on system performance.

He reminded members that as the end of last year ASX chose the Digital Asset technology to underpin the replacement of CHESS. The upcoming paper will provide an overview of the platform and the connection options for users, including the ability of a participant to choose take a node or to continue to connect through more traditional messaging channels. There will also be a separate Application Programming Interface (API) to enable permissioned users to request and access data reports on their information. There will also be a web browser-based integration option that will replace the current CHESS PC application that some low volume users currently utilise.

The network connectivity and the transmission of messages will be through ASX Net and other options are being examined, including SWIFTNet.

In relation to the adoption of ISO 20022 messaging it was noted the initial high-level gap analysis and message mapping has been completed. The next step is consolidating the messages down to around 100 ISO20022 messages. As the system development proceeds some workflows may change and those workflows need to be specified and delivered before the messages can be consolidated down to its final set.  This will be an iterative approach, that is, messages will be released in tranches and communicated through the Technical Committee.

He noted that, based on feedback from users and technology vendors as well as an assessment of the risks involved ASX has decided to implement a migration to the new system over a single weekend. The existing CHESS and replacement system will not operate in production at the same time given the significant cost and complexity involved for users and ASX. The risks associated with this approach will be managed through the earliest possible roll-out of development and test environments to allow participants and vendors to become familiar with the new system well before the cut-over time to the new technology.

ASX is currently targeting Q4 2018 for an initial documentation release that will include the technology and connectivity specifications for the new system and outline any implications this may have for new or altered functions and processes.

A customer development environment would follow in Q2 2019, allowing software vendors and participants' early access to an incomplete version of the new system (e.g. core functions such as, participant set up, account set up, clearing and settlement functions) so they can begin developing to the new system. Subsequent functionality will be added incrementally to the development environment.

The customer build and test environments will be supplemented with an industry-wide test environment in Q1 2020 to provide an end-to-end testing capability.

This environment will be the basis for accrediting, testing and certifying participants, as well as connectivity and integration to the new system. There will be a pre-live production environment which will be configured as a production environment and this will be used for regular industry migration rehearsals.

He noted that ASX is currently targeting a go-live window for the new system of between Q4 2020 and Q1 2021 although the feedback from the consultation and ongoing stakeholder engagement will inform this target as the project moves forward.

Members were asked if they had any initial views on the indicative timetable, in particular whether it was overly aggressive or not aggressive enough, noting that feedback on timing was one of the most critical areas of the upcoming consultation paper.

One member responded that any tighter timing would feel aggressive and that the proposed go-live window may be challenging given other resource intensive projects banks are currently working on, such as preparations for Brexit.

Another member asked if the indicative timetable took into account all of the necessary work streams, regulatory engagements and the capacity of the market to accommodate the proposed development and testing arrangements.

In response, the Executive General Manager Equity Post-Trade Services indicated that the timeline has factored in everything ASX is aware of, including the new business requirements, the Technical Committee's work around the ISO 20022 messaging, and earlier feedback from the Business Committee around the lead times that participants had requested for their budgeting cycles.

There was another question around how the Corporate Action STP project fits into the timeline. In response it was noted that the project would run in parallel, and is expected to be completed prior, to CHESS replacement.

There were questions around how the development and testing process would work in practice. The Executive General Manager Equity Post-Trade Services responded that ASX will apply an agile iterative process to enable it to continually refine the system as new information emerges including feedback from users. ASX will try to minimise the changes facing customers once the project moves into those iterative cycles and any adjustments will be at the margin, not major functional changes.

ASX will be providing support to participants to assist them through the migration and implementation process. The significant testing and accreditation program should also identify if any participants are not ready for the migration. The Executive General Manager, Operations added that ASX will establish technical account management support and day-to-day technical support for participants similar to that which occurred around the introduction of for the new ASX24 trading platform.

A few members indicated that the proposed six week consultation paper may be insufficient given the need to coordinate a response across their organisations. It was noted that the six week period was designed so that ASX could publish a synthesis of the feedback received in the middle of the year and be in a position to report back to the next Business Committee meeting in early July. That said, ASX would consider the appropriate consultation period.

On future stakeholder engagement it was noted that the Business Committee, ISO 20022 Technical Committee and AMO working group will continue their existing roles. Two new industry working groups with a broad range of stakeholders will be established:

- Connectivity and Integration – to assist users to manage their connectivity to test and production systems as well as assessing the different integration options.
- Implementation and transition – to inform stakeholder's implementation and transition plans.

The Executive General Manager Equity Post-Trade Services asked members to nominate a primary and a secondary contact person to assist in coordinating any CHESS replacement activities and also nominate people for the two new working groups. He also suggested it would be useful to have a single monitored group email address for any communication with their organisations over the life of the project.

### b) Business Requirements Update

The Executive General Manager Equity Post-Trade Services noted that a large part of the consultation paper would be setting out the business requirements coming out of last year's working groups and the rationale used to determine the targeted scope of the Day 1 release of the system that will replace CHESS.

He provided a preview of which features that are targeted to be included in the Day 1 scope and which would be implemented at a later date. He noted that the implementation timing of some business requirements which are targeted for Day 1 implementation are subject to a higher degree of uncertainty because of the associated regulatory considerations.

The paper would also set out the handful of business requirements not being progressed and some existing CHESS functionality being decommissioned.

Members asked questions about the nature of a few of the planned features including the common investor number, optional accelerated settlement, and bilateral settlement outside of the batch.

There was also discussion on the removal of the need for signed documentation to conduct custodian off-market transfers. While this is currently being progressed it is not clear if it will be possible to meet the original expectation of this being in place by mid-2018 as there was still a regulatory process to go through which may require public consultation. A member noted that his firm, and most custodians, are ready to offer any further input necessary to progress the matter and assuage any residual investor protection concerns the regulator may have.

A member asked about the timing for those business requirements that have been categorised as being implemented Post Day 1. In response it was noted that the timing of the handful of features in this category would be considered on a case-by-case basis considering factors such as the time necessary to develop the associated rule framework and the regulations and the level of user demand. Members were encouraged to indicate in their responses to the consultation paper whether any business requirement not included in Day 1 should be a high priority for subsequent implementation.

The business requirements that had been identified but will not be progressed were identified and it was noted that the consultation paper would provide the reasons for those decisions. A member reinforced the need for ASX to explain any decisions not to proceed with particular business requirements that came out of the working groups, not only so stakeholders can understand the process but also to assist them in responding to the consultation paper.

### c) Corporate Action STP Phase 2 Update

The Senior Manager, Equity Post-Trade Services confirmed that the Corporate Action STP project will be run in parallel with CHESS replacement process. The project plan is currently being developed now that corporate action items coming out of the working group process have been identified.

It is expected that the project will run for about 18 to 24 months and the outputs should be delivered prior to CHESS replacement. The project will focus on four key areas:

- Delivering straight-through processing functionality for the corporate actions that weren't addressed in Phase 1. This includes modifying how an issuer announces the corporate action, the automatic capture of data by ASX systems and the delivery of corporate action information to users. The ISO20022 message format provides greater scope to collect richer information and release it more quickly to the market by removing manual processes.
- Addressing capital raising announcement events including entitlement offers, share purchase plans, and priority offers. This information is currently captured manually through Appendix 3B forms. It is planned to introduce a more automated process for these capital raising announcements.
- Progressing the corporate action business requirements coming from the CHESS replacement working groups. An example would be the requirement around electronic support for DRP elections. The CHESS project will cover the electronic election process, but the corporate actions project will examine the structural or listing rule requirements that would, for example, be necessary to facilitate standardised election periods.

- Introducing enhancements to the Phase 1 corporate actions. This could include collecting more tax information associated with dividends; applying the STP process across more products such as ETFs; and providing an interface for non-ASX affiliated AMOs to provide corporate action information electronically to facilitate CHESS support for their listed entity's corporate action events.

A member asked how the two projects would work in parallel. In response it was noted that CHESS is a consumer of ReferencePoint corporate action data and the specific corporate action enhancements wouldn't impact directly on existing CHESS or the design of the new system unless they require some structural changes to a CHESS supported event.

### d)   ISO 20022 Technical Committee Report and Minutes

The ASX Chief Operating Officer noted that since the first meeting of the Technical Committee about 16 months ago around 450 messages have been transposed into about 80 unique ISO messages, although the final number will be dependent on the additional business requirements.  Technical Committee members are considering how the new message structures can assist their business flows.

ASX surveyed Technical Committee members to determine if they felt they were being provided with the right information and whether the meetings were effective. The results generally validated the process, while identifying ways that information might be better provided in advance of meetings.

The next meeting will be held in Melbourne in April. By the end of this year the Committee is aiming to have a 'technical specification' available for the market on new suite of messages that will allow participants and vendors to commence work on building their interfaces to the new platform.

There were no questions from members on the Technical Committee update.

### AGENDA ITEM 3: Administration

### a)   Minutes from the 30 November 2017 Business Committee Meeting

The minutes of the 30 November 2017 meeting were approved without change.

### b)   Forward work program and BC Meeting dates for 2018

The Chair noted that while the Committee's forward work program will be dominated by CHESS replacement this year, if there were other matters that members thought could be usefully added to the forward agenda (e.g. the implications of Brexit on Australian markets) they should let ASX know.

### c)   Other matters

There were no other matter raised by members.

### Next meeting

The next meeting is scheduled to be held on 5 July 2018.

The meeting closed at 1.30pm.


Signed as a correct record of the meeting.



_____     _____
Chairman                              Date

| BUSINESS COMMITTEE MEETING PAPER AGENDA ITEM 4B | |
|---|---|
| **Topic** | **Forward Work Program** |
| **Date** | 5 July 2018 |
| **Purpose of this paper** | **To update Members on the forward work program of the Business Committee for 2018.** |

## OVERVIEW

It is proposed to have two more meetings of the Business Committee and four more meetings of the Technical Committee on ISO 20022 over the course of 2018. The proposed Business Committee dates are:

- 19 September; and

- 29 November.

Subject to any input from members who wish to add additional items, the forward work program of the Business Committee this year will be predominately focused on CHESS replacement: technology development, business requirements, and implementation processes.

A second major stream of work will be Corporate Action STP Phase 2. A working group drawing on a range of stakeholders will commence work shortly.
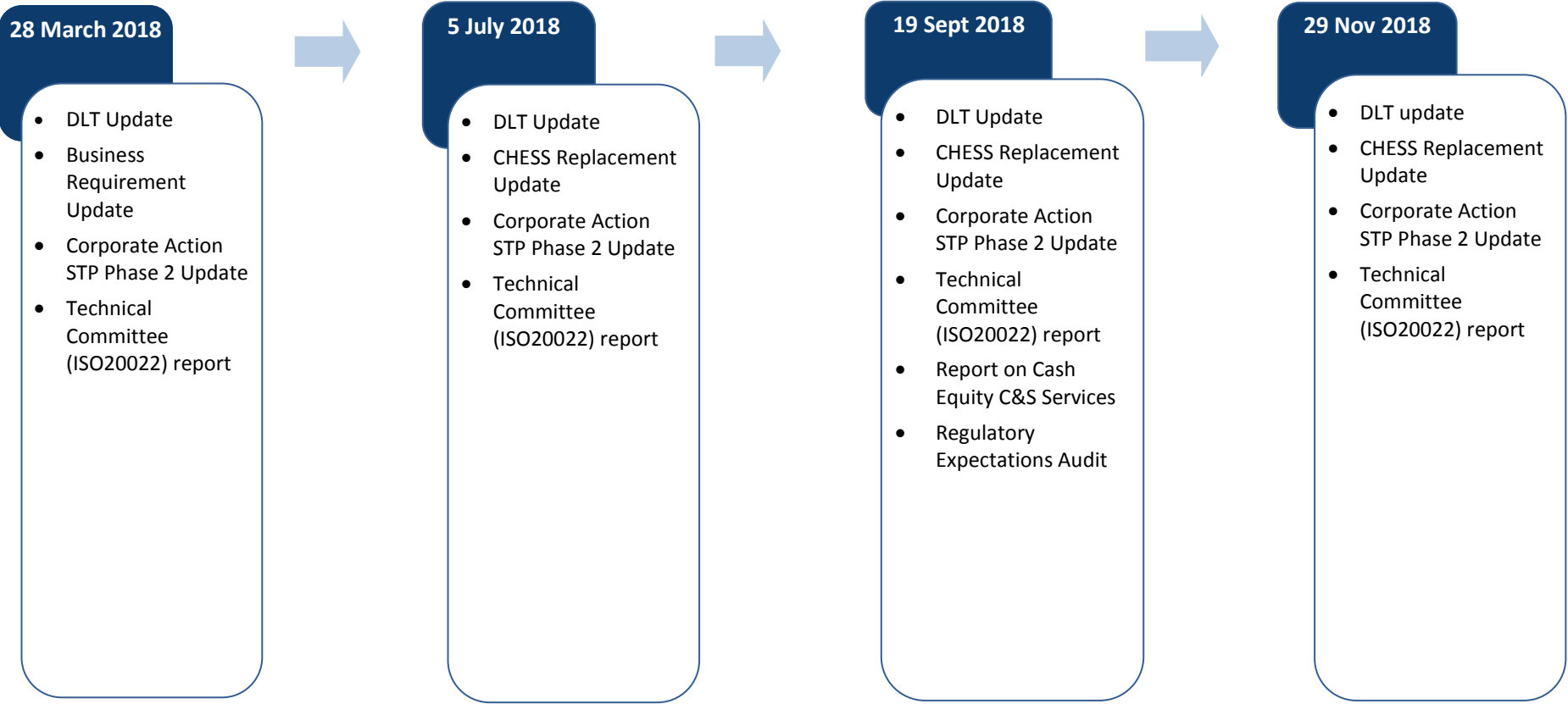
Members of the Business Committee are invited to suggest topics for inclusion in the forward work program for 2018 at any time by contacting the Business Committee Secretariat.

The forward work program for the Technical Committee can be found at Agenda Item 3C (Attachment B).

## ATTACHMENTS

Attachment A – Business Committee Forward Work Program

**Attachment A: Business Committee Forward Work Plan**

**28 March 2018**

- DLT Update
- Business Requirement Update
- Corporate Action STP Phase 2 Update
- Technical Committee (ISO20022) report

**5 July 2018**

- DLT Update
- CHESS Replacement Update
- Corporate Action STP Phase 2 Update
- Technical Committee (ISO20022) report

**19 Sept 2018**

- DLT Update
- CHESS Replacement Update
- Corporate Action STP Phase 2 Update
- Technical Committee (ISO20022) report
- Report on Cash Equity C&S Services
- Regulatory Expectations Audit

**29 Nov 2018**

- DLT update
- CHESS Replacement Update
- Corporate Action STP Phase 2 Update
- Technical Committee (ISO20022) report

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