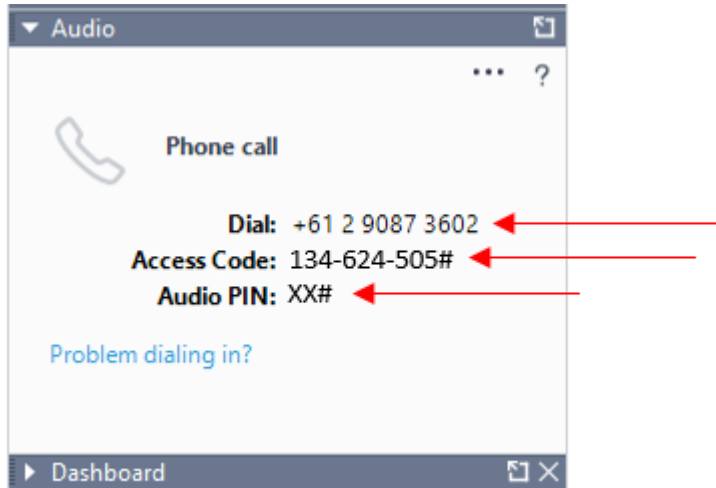# ISO 20022 Technical Committee Meeting

Tuesday 6 February 2018

Joining by webinar

Please note that ASX is now using the GoToWebinar platform for this meeting. Details provided by email. Once you have registered and clicked on the link to join the webinar you will need to join the audio by phone, not PC. Each attendee will have a unique PIN assigned, as shown below.
Please follow any instructions to check your system, PC.

Attendee Participation

Join audio:
- Choose Telephone and dial using the information provided

- You will need the unique 2 digit audio pin to ask questions.

Agenda

1. Agenda overview

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 (verbal)

6. Matters for Consideration:

    6a Review of Technical Committee member survey responses

    6b Update from SWIFT Standards team

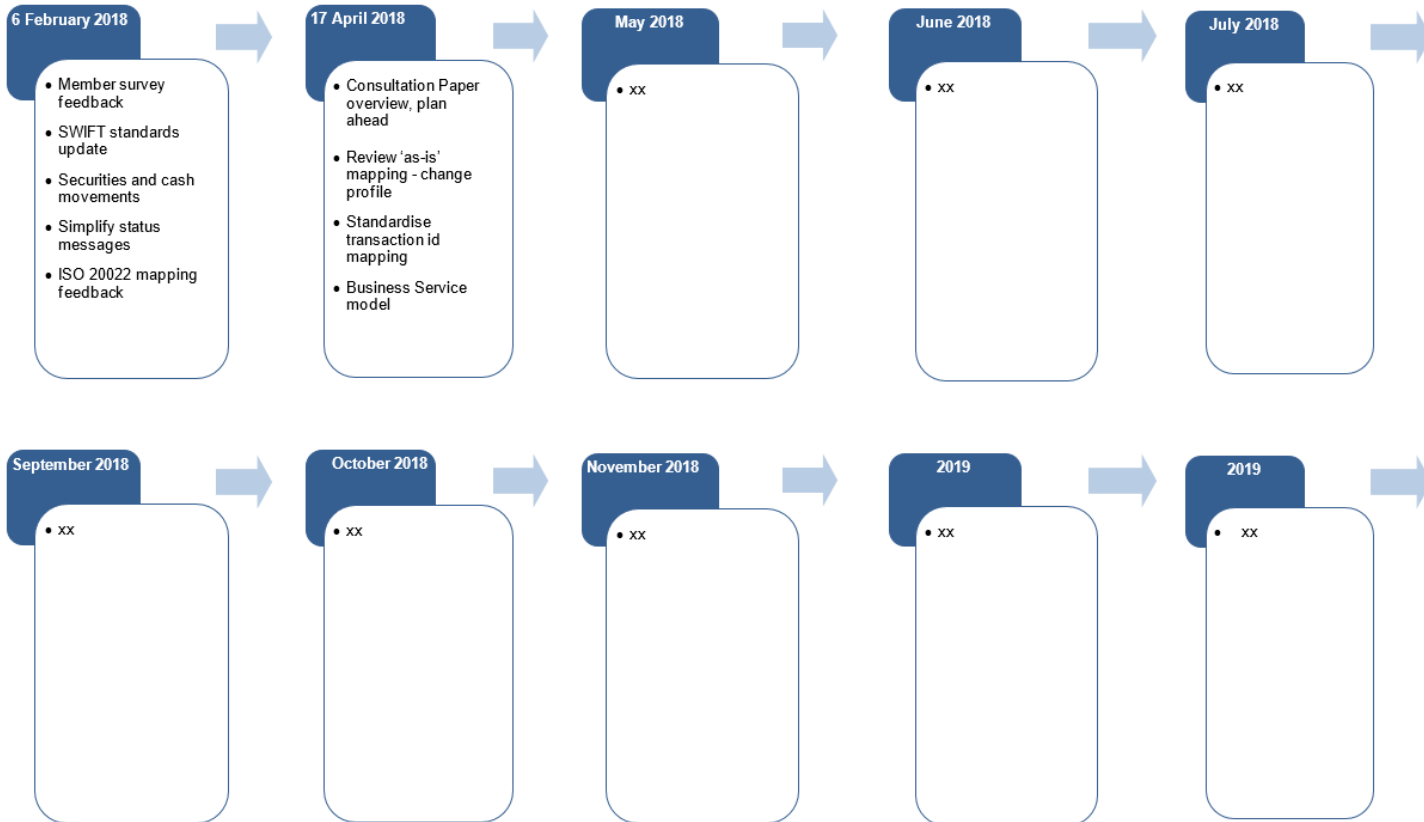   6c MyStandards Community – usage guideline feedback

    6d Securities and cash movements

    6e Simplify status messages

    6f Usage guidelines for review

Next meeting

ASX

Forward agenda overview

6 February 2018

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

17 April 2018

- Consultation Paper overview, plan ahead
- Review 'as-is' mapping - change profile
- Standardise transaction id mapping
- Business Service model

May 2018

- xx

June 2018

- xx

July 2018

- xx

September 2018

- xx

October 2018

- xx

November 2018

- xx

2019

- xx

2019

- xx

ASX

2. Minutes and actions

Minutes for 21 November 2017 meeting available on CHESS Replacement web page, including all open, closed action items. Open action items:

No.	Meeting Date	Open Action Items	Owner	Due Date	Status
19	2 May 2017	Provide sample of demonstration of comparison between ISO 20022 and ISO 15022 messages.	Scott Oakland, JPM	On hold	Close
20	2 May 2017	Provide details of a proposed plan including potential topics for the remaining training webinars for feedback, including identification of business vs. technical topics.	ASX	On hold	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 Nov 2017	On hold
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 Nov 2017	Close
41	22 Aug 2017	Conduct bilateral discussions with share registries and mailing houses regarding structuring of registration details and associated static data.	ASX	21 Nov 2017	WIP
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 Nov 2017	WIP

2. Minutes and actions

Open action items, cont'd:

No.	Meeting Date	Open Action Items	Owner	Due Date	Status
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 Nov 2017	Propose to close – refer ISO 20022 project update
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	Open

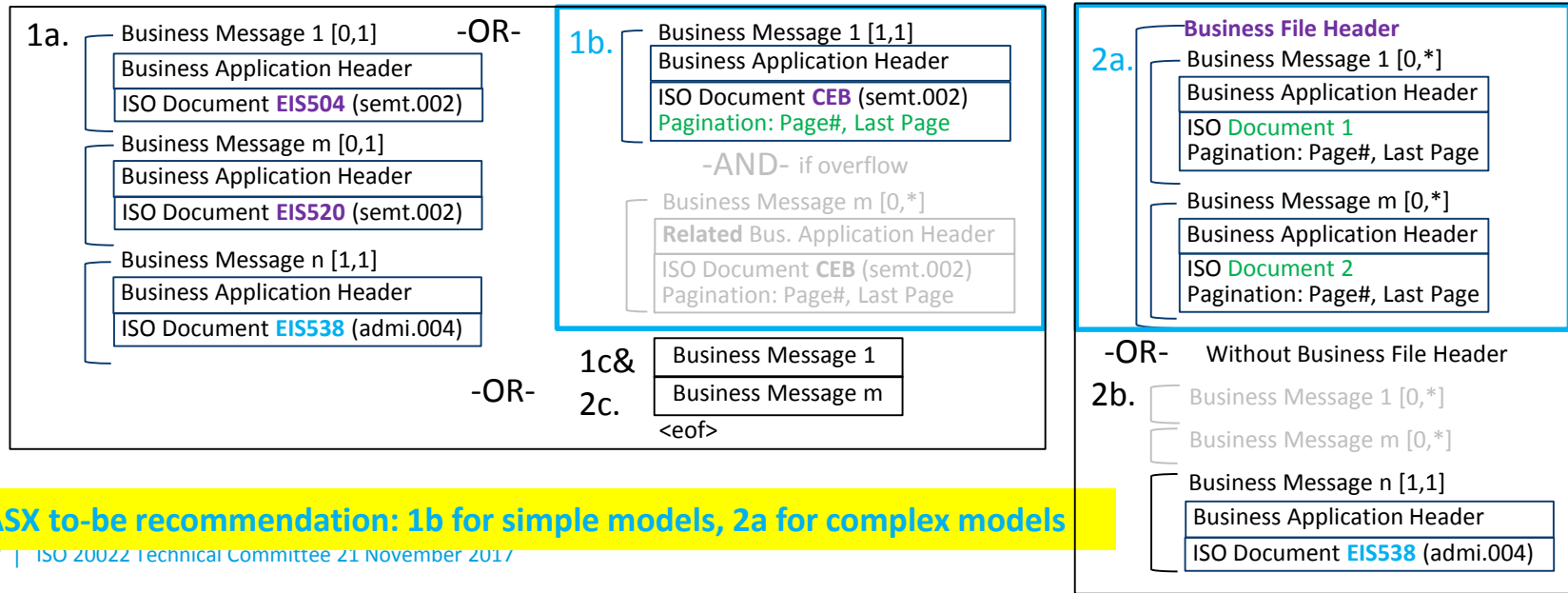# Action item 48 - Reporting – 1. simple & 2 complex report models
Options for instance per EIS or consolidate like instances

Simple report model
1a.   As-is: Different Cum Entitlement messages for Daily Balance and Balance records (plus end-of-report)
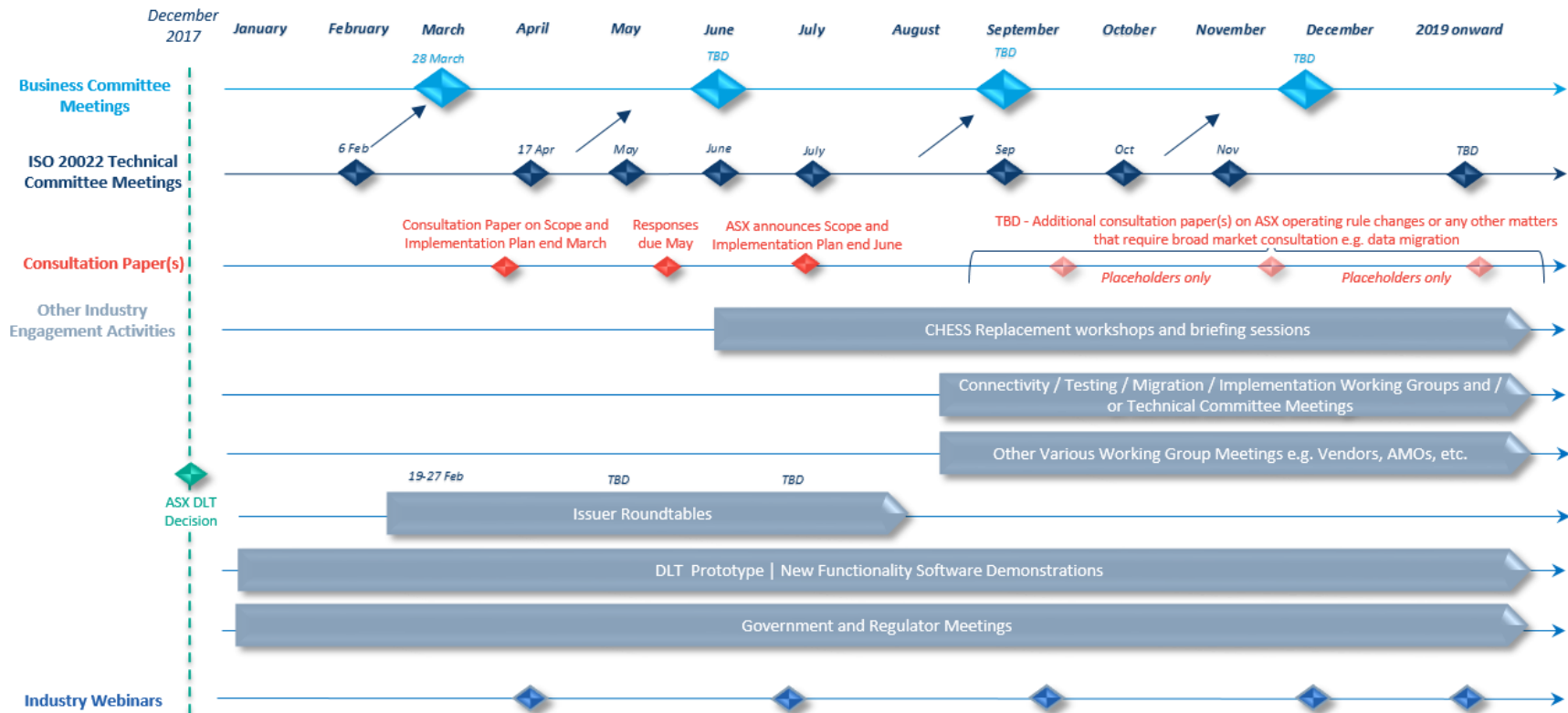1b.   To-be: Rationalise and/or Consolidated Cum Entitlement messages based on single semt.002 (using pagination)

Complex Report Model
2a&b. To-be: Rationalise and/or Consolidate complex report model   2c. Create file with record structure for each report type
        2a using Business File Header or 2b. using End-of-Report message   using xml and iso elements

ASX to-be recommendation: 1b for simple models, 2a for complex models

3. Proposed CHESS Replacement Engagement Plan – 2018

4. ISO 20022 project update by ASX

As-is mapping:

- 30 Nov 2017 – achieved minimum 1st draft of all ISO 20022 usage guidelines developed for in scope EIS messages

- \>130 usage guidelines now considered "finalised" on an as-is basis, remainder to be finalised by mid March 2018

- April 2018 onward – commence 'to-be' mapping changes to align with Day 1 scope

ASX

4. ISO 20022 project update by ASX

Scope

CHESS business lines	# of EIS messages
HLGA scope	533
Descoped messages:	
Securities Lending	10
Electronic Trade Confirmation	30
Other	16
Total descoped	56
TOTAL scope – detailed mapping	477

As-is detailed mapping:

CHESS business lines	# of EIS messages types	
	Mapped to Guidelines	Descoped EIS
Clearing & Settlement	59	4
Holding Movement	53	13
Holder Management	55	
Collateral Management	66	
Takeover	22	
mFund Service	87	
Operations Admin	9	
Reporting	33	9
RTGS Settlement	33	
Miscellaneous (includes 32 TPC)	34	
Descoped events	n/a	26
TOTAL	451	477

ISO 20022 business lines	# unique base messages*	# individual EIS messages
Account management (acmt)	3	11
Administration (admi)	3	40
Authorisation (auth)	4	21
Cash management (camt)	15	48
Collateral management (colr)	2	4
Collateral transfer (colt)	2	14
Reference data (reda)	12	36
Securities clearing (secl)	2	6
Securities events (seev)	1	2
Securities management (semt)	14	115
Securities Settlement (sese)	10	131
Securities trade (setr)	10	24
Business Application Header (head)	1	ALL
TOTAL	79	452

*including new messages

Action item 43 Governance - Technical Committee and other groups
Relevant groups

ASX endorsed to represent Australian equities post trade market for adoption of ISO 20022 for CHESS Replacement

➢ Standards Australia IT-005 (Australia) (mirrors global technical committee TC-68)
Meeting Frequency: tbc. Waiting for reconstituted committee to be approved, with scheduling expected post February 2018.
Agenda: tbc

➢ Securities Standards Evaluation Group – ISO 20022 (global)
Meeting Frequency: monthly
Agenda: only known just prior to each meeting, reports from evaluation teams

  ➢ T2S Evaluation Team (sub group of SEG) (global)
  Formed to specifically review the T2S sponsored new messages for registration; makes recommendation to SEG
  Meeting Frequency: weekly/fortnightly
  Agenda: specific review of each message package as promoted by T2S, with member input, discussion

ASX

Action item 43 Governance - Technical Committee and other groups
Governance approach

Change requests - If ASX propose change request to existing message on behalf of Australia
- Market practice (usage guideline) developed with SWIFT's guidance and reviewed, agreed with Technical Committee
- ASX promotes at appropriate forums
- ASX provides Technical Committee with updates, outcomes

New messages - If ASX propose registration of a new message on behalf of Australia
- Market practice (business justification, message definition, usage guideline) developed with SWIFT's guidance and reviewed, agreed with Technical Committee
- ASX promotes at appropriate forums
- ASX provides Technical Committee with updates, outcomes

Review of other changes – promoted by others (ISO 20022)
- Discussion of significant changes and potential impact on Australian market practice via Technical Committee
- ASX promotes views at appropriate forums
- ASX provides Technical Committee with updates, outcomes

ASX to provide a summary of meeting outcomes to following Technical Committee meeting, as part of ISO 20022 project update
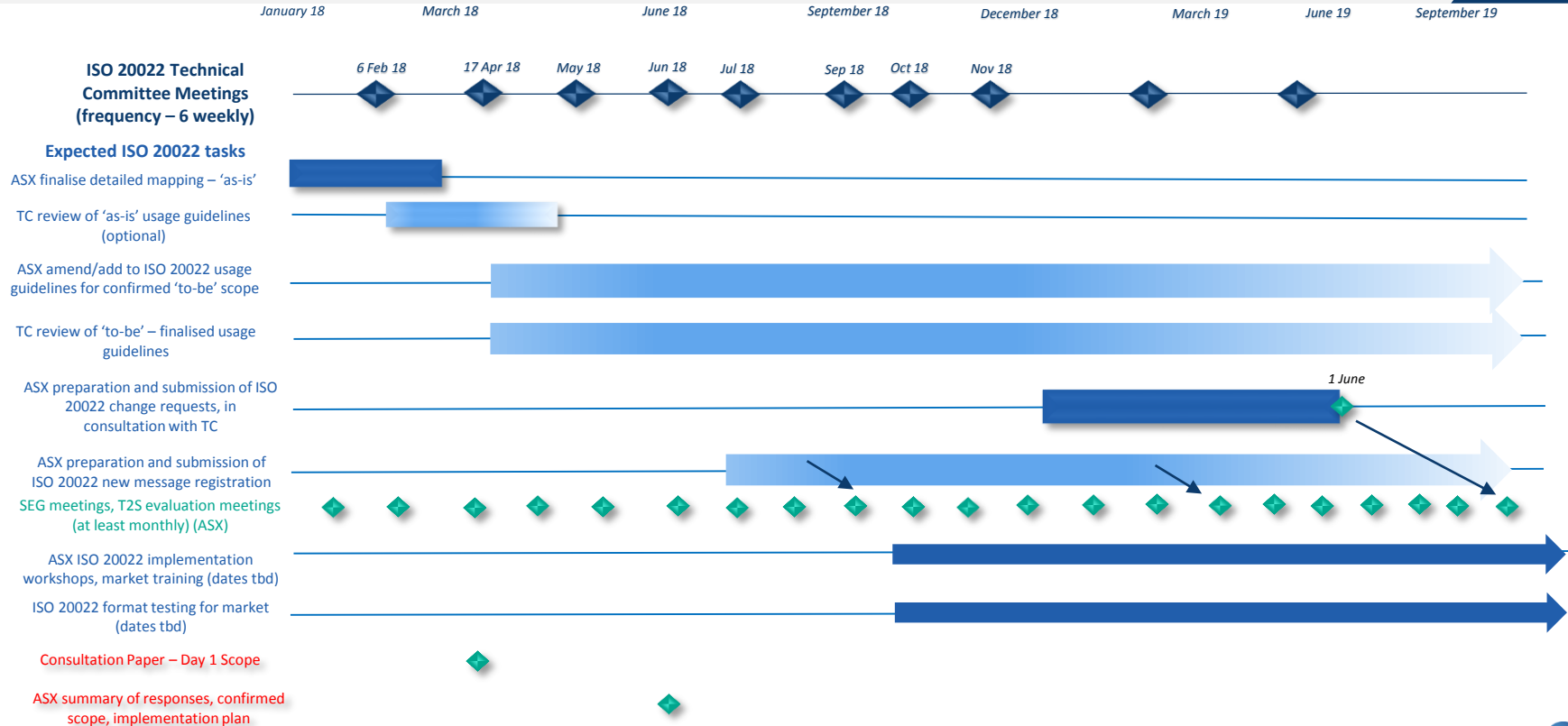
Updates from recent meetings:
Securities SEG meetings:
27 November 2017, 29 January 2018

T2S Evaluation Team:
10 January, 24 January, 31 January 2018

ASX

4. Indicative ISO 20022 Technical Committee activities 2018/19

| | January 18 | March 18 | June 18 | September 18 | December 18 | March 19 | June 19 | September 19 |

ISO 20022 Technical Committee Meetings (frequency – 6 weekly)

6 Feb 18 · 17 Apr 18 · May 18 · Jun 18 · Jul 18 · Sep 18 · Oct 18 · Nov 18

Expected ISO 20022 tasks

ASX finalise detailed mapping – 'as-is'

TC review of 'as-is' usage guidelines (optional)

ASX amend/add to ISO 20022 usage guidelines for confirmed 'to-be' scope

TC review of 'to-be' – finalised usage guidelines

ASX preparation and submission of ISO 20022 change requests, in consultation with TC

1 June

ASX preparation and submission of ISO 20022 new message registration

SEG meetings, T2S evaluation meetings (at least monthly) (ASX)

ASX ISO 20022 implementation workshops, market training (dates tbd)

ISO 20022 format testing for market (dates tbd)

Consultation Paper – Day 1 Scope

ASX summary of responses, confirmed scope, implementation plan

ASX

5. Update from Business Committee

ASX

6. Matters for consideration

ASX

6a Review of Technical Committee member survey responses

- 26% of members responded to the survey, with representation from all stakeholder types

- Majority of members consider TC membership valuable and helps their organisation to understand processes around ISO 20022

- Majority of members want to retain current frequency of meetings

  - ASX: we will hold meetings approx. every 6 weeks, likely 8 meetings during 2018. Members should expect more "homework".

- Majority of members support current style of meeting with combination of face to face and webinar, either Sydney or Melbourne, though some technical issues during 2017

  - ASX: we will continue to hold a combined face to face and webinar meeting, either Sydney and Melbourne. New webinar provider commenced Nov 2017 – already positive feedback from members.

ASX

6a Review of Technical Committee member survey responses

- Majority of members would like to receive agenda and materials at least 1 week prior to the meeting, and feel that documentation and its availability on the web page helps them to adequately prepare for the meetings

    - ASX response: noted, and will continue to send documents by email and publish on the web page

- Existing standing agenda is considered appropriate and valuable

    - ASX response: we will continue to plan the meeting with standing agenda + additional matters

- Good feedback on quality of documentation, content and process for "matters for consideration"

    - ASX response: going forward the 'to-be' mapping and discussion will be aligned with business requirements and scope; ASX will provide recommendations and seek timely feedback and close

ASX

6a Review of Technical Committee member survey responses

- Suggestions from members regarding the presentation of recommendations and decisions needed, with quick resolution

    - ASX response: good feedback, we have a lot to work through in the coming year and will be clear on the options related to an issue, the ASX recommendation and seek quick resolution

- The SWIFT MyStandards tool is useful, particularly for making comments and reviewing others' comments

    - ASX response: great, we are going to be extending our usage during the project & beyond

- Members are interested to know more about the technical solution and connectivity, particularly now DLT has been selected

    - ASX response: refer CHESS Replacement update, webinar and soon to be released consultation paper including user engagement plan; expect working groups and/or Technical Committee meetings re connectivity, testing, migration, implementation

ASX

6b Update from SWIFT Standards team
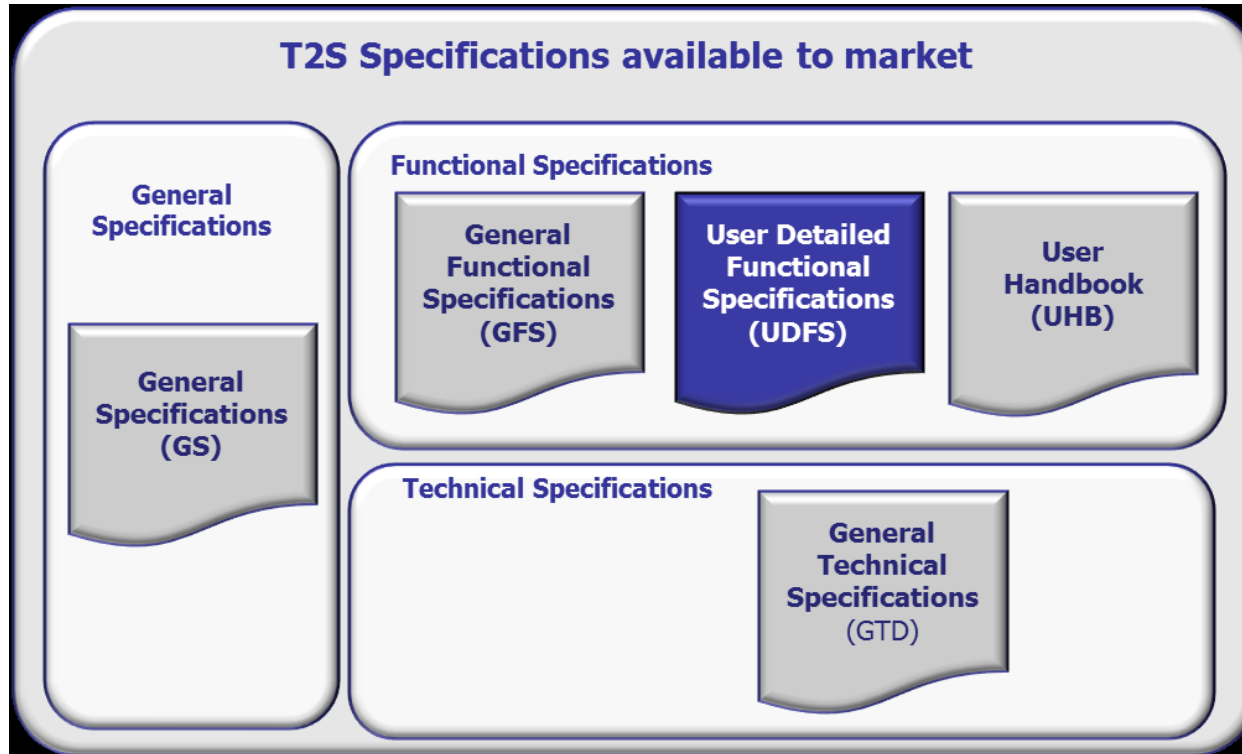
T2S
Documentation overview

ASX

T2S – documentation overview
Key documents

All project documents published under http://www.t2s.eu

T2S – documentation overview

Key documents – list of technical documents

T2S Specifications available to market

General Specifications

General Specifications (GS)

Functional Specifications

General Functional Specifications (GFS)

User Detailed Functional Specifications (UDFS)

User Handbook (UHB)

Technical Specifications

General Technical Specifications (GTD)

ASX

T2S – documentation overview

Key documents – User Requirement Document and User Detailed Functional Specifications

User Requirement Document (URD):

- The URD describes the features of T2S as required by the CSDs and market participants.

- The URD embodies the users' concept of T2S and provides the foundations for all further T2S technical documentation.

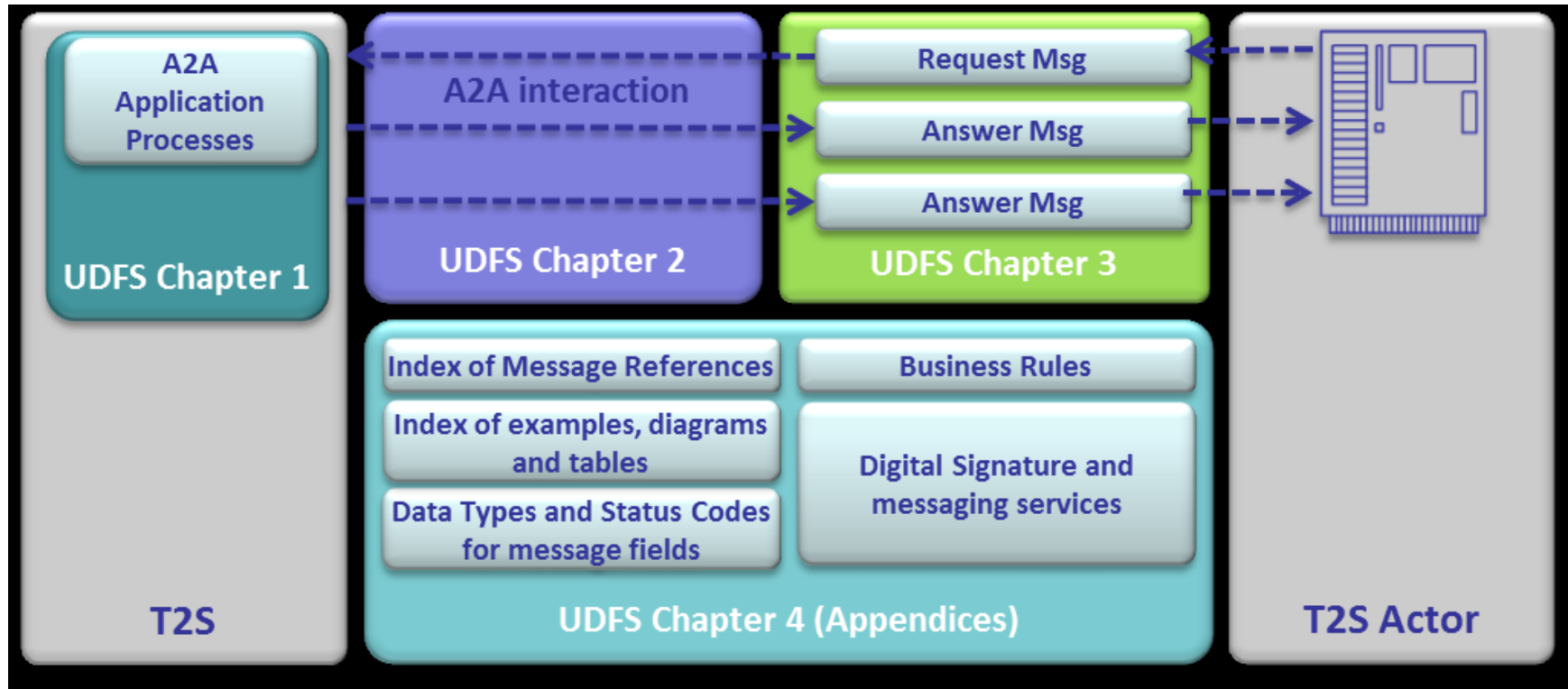**User Detailed Functional Specifications (UDFS):**

- The UDFS provides information to:

  - Business analysts of the T2S Actors, who find in the UDFS a description of the application processes and the information flows between their own business applications and the T2S platform;

  - Developers, who find in the UDFS the necessary information to design and build the interface of the T2S Actors' business applications with T2S.

- The UDFS is a self-contained document, structured along 3 different but complementary chapters.

Link between the UDFS and MyStandards:

- Each ISO 20022 message description in chapter 3 of the UDFS links to a usage guideline in MyStandards

- There is one usage guideline per ISO 20022 message type defined in MyStandards, for all UDFS scenarios

ASX

T2S – documentation overview
Key documents – User Detailed Functional Specification

Learnings and best practices

Learnings and best practices applied in the scope of the ASX project
From other MIs projects

Building a strong ISO 20022 knowledge:
- ASX project team: Transfer of knowledge through ongoing interactions and explanation of the ISO 20022 business flows, message scopes and market practices.
- Users: Early involvement of the future users in the specifications

Mapping the CHESS flows to the ISO 20022 flows:
- In all previous projects, the first step has been to ensure we understand the user requirements and business flows of the existing environment or the future system requirements.
- We used similar approach to identify and understand the current CHESS user requirements through the specification of the high level gap analysis (HLGA) of the existing system vs ISO 20022
- Allow for space to fine tune / review the mapping established during the HLGA

Use of MyStandards:
- Single source of information for all technical documents (XML schemas, samples, message definition reports)
- Building commonly agreed mapping templates from the beginning (and not changing them at a later stage)
- Define base components which are consistently applied throughout all usage guidelines

Implementation and testing:
- Avoid to go live with "Unregistered / DRAFT" ISO 20022 messages (newly developed messages)
- Ensure a "freeze" of the ISO 20022 versions during the implementation and testing phase

ASX

ISO 20022
Use of
Supplementary Data

ASX

ISO 20022 best practices
ISO 20022 supplementary data usage

Supplementary Data acceptable usage:

- An interim measure until the next maintenance cycle in which the missing element would be implemented through an ISO 20022 Change Request; or

- Extend the base message for local market practice elements which would be rejected as an ISO 20022 Change Request.

Supplementary Data cannot be used to change the scope of the message.

ASX

ISO 20022 best practices
ISO 20022 supplementary data usage

Supplementary Data defined in Current Mapping			
Types	**Definition**	**Resolution**	**Example**
Extension of T2S Candidate Messages	Element is impacting the T2S Candidate messages, for which the registration has started. ASX and SWIFT are both providing input, and additional elements might be implemented in the ISO 20022 registered message. Remaining elements not accepted by the ISO 20022 Evaluation team will have to be implemented as Domestic Market Practices	Use of the final ISO 20022 registered message, which includes the additional element, once integrated.	Email characteristics in the reference data messages.
Probable ISO 20022 change requests	Element is currently a gap in the ISO 20022 message, and a change request should be submitted to the ISO 20022 RA for registration for the next maintenance cycle.	Submit an ISO 20022 change request and use the ISO 20022 message version resulting from the next maintenance cycle	Ex dividend date in the ISO 20022 IntraPositionMovement message
Domestic market practices	1. Element is a pure local practice and will not be accepted as a change request	Maintain element in SupplementaryData	Element TFN Number, when no specific element allows its mapping.
	2. Element is not covered in the ISO 20022 message, as specific to the local market practice, but not inline with the ISO 20022 practices.	Review the process in the To-Be scenario to adjust to the ISO 20022 process.	Element NewHoldingBalance in the Settlement Confirmation messages

ASX

6. Matters for consideration cont'd

ASX

6c MyStandards community – usage guideline feedback
Updated guidelines republished, with 12 new guidelines for review

Technical Committee member comments since 21 November 2017 covering:

- Demand Dual-entry (Bilateral) CHESS Transfer
- CHESS to Issuer Sponsored Conversion
- Corporate Actions including Applied Code Change

Comments on   9 of 12 new guidelines by 2 members (1 Custodian, 1 Registry)
         Also   8 previously reviewed guidelines – with to-be recommendations

Themes: Redundant EIS Fields
- As-is guidelines have mapped Stamp Duty but not to be carried-forward to to-be

Business Process changes for To-be
- Consultation on   market practices including buyer protection and ex-date processing
                 scheduled linkage of market and delivery obligations

Corrections and omissions
- EIS416: Mapping of BP59 Registration Details as for EIS418
         BP17 and <AcctSvcrTxId> incorrectly noted as Optional. Made mandatory

New Usage Guidelines for	
EIS 005	EIS 011
EIS 006	EIS 416
EIS 012	EIS 128
EIS 024	EIS 142
EIS 037	EIS 162
EIS 048	EIS 430

ASX

6d Securities and cash movements
ISO Delivery/Receipt with EIS Amounts and Pay/Receive Indicator

2	Securities Movement Type	text	New Data Requirement - Title: Securities Movement Type - Description: Value must be DELI if Sender of the message is Delivering PID, and RECE if Sender of the message is Receiving PID
3	Delivery	DELI	
3	Receive	RECE	

Unit Movement

- Mandatory Securities Movement type of Delivery/Receive.
- → Describes the direction of unit movement from perspective of the initiating party*
  e.g. for Bilateral SI, if Deliverer initiates, EIS101 and EIS102 = DELI. Matching EIS101 = RECE.
- → Party1 in Delivering/Receiving Settlement parties specifies these counterparty roles
- * Exception for single-sided incl. Conversions and Subregister transfer. SMPG requires DELI (Delivery)

1	Delivering Settlement Parties		
2	Party 1		EIS Message Field Specification - Bit Position: 20 - Field Name: Delivering PID - Size: 5, Format: N, Cardinality: M - Field Definition: See defintion of either Delivering PID or Payee PID The PID of the participant which controls the delivering HIN of a securities movement.

Signed Amounts

- EIS Amounts are +/- 15 characters. Corresponds to +/- sign and 14 numeric.
- Sign is represented as ISO Credit Debit Indicator within the Amount component. Credit = +ve
- → -ve Sign of EIS Amounts do NOT indicate direction of funds. Occurs in Netting & accrual adjustment
  EIS Amounts normally +ve (implied) meaning "funds in opposite to direction to units".
  When EIS Amounts –ve (explicit) an OVERRIDE applies and "funds in same direction as units".

2	Amount		Credit Debit Indicator provides the sign part of the settlement amount. td = 14, fd = 2
2	Credit Debit Ind	text	
3	Credit	CRDT	- Allowable Value: + - Description: + Sign
3	Debit	DBIT	- Allowable Value: - - Description: - Sign

Pay Receive Indicator used on Funds Messages

- EIS field to indicate if funds are to be Payed or Received on behalf of the Participant
- EIS Amount is unsigned. No EIS messages where both –ve signed amount and Pay Receive Indicator defined
- → EIS Pay Receive Indicator also mapped to ISO Credit Debit Indicator element, unrelated to Amount.
  Guidelines contain Business Rule that Credit = "Receive" and Debit = "Pay"

2	Amount		
3	Amount		- Bit Position: 67 - Field Name: Amount - Field Definition: The dollar value of a transaction in CHESS. td = 14, fd = 2
3	Credit Debit Ind	text	- Field Definition: Indicates if funds are received or paid by a user.
4	Credit	CRDT	- Allowable Value: R - Description: Receive
4	Debit	DBIT	- Allowable Value: P - Description: Pay

Credit Debit Indicator does <u>not</u> indicate cash movement. Consult guideline business rules for as-is cash posting process
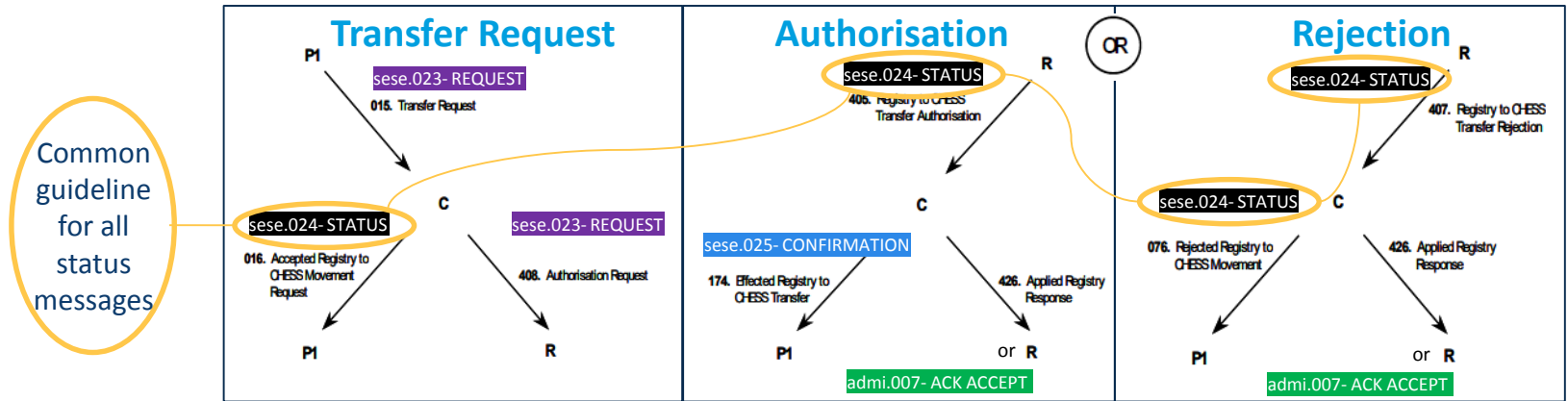
ASX

6e Simplify status messages

Adopting common guidelines for like message flows

EIS/as-is ISO defines specific message definitions (guidelines) per data flow

Similar status messages for Business Accepted(Ack) and Business Rejected (Nack) responses

Reuse a common guideline within a business event, for same base message, or across ISO Business Area

Similar reuse to EIS Technical Rejects (EIS518 and EIS540) including meaningful reason code
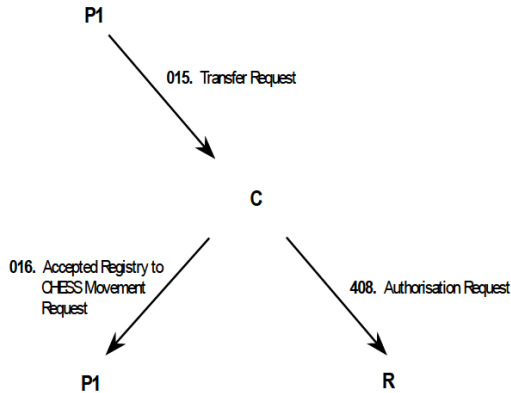
Guidelines not 1:1 with EIS. Need to identify each usage and business rules for optional elements

- Use Business Application Header (BAH) elements to identify message usage
- Use annotations or supporting documents to specify elements

6e Common guidelines with BAH elements
Utilising Business Service and Related BAH

ISO Transfer Request

BAH Messages

BAH	Illustrative Sample (EIS015)
From	01402
To	00001
Business Message Identifier	01402YYYYYYYY00 (Tx Id)
Message Definition Identifier	sese.023.001.07
Business Service	TransferRequest_R1_BAH001_R1!p
Creation Date	2017-10-23T07:43:22.002Z

BAH	Illustrative Sample (EIS016)
From	00001
To	01402
Business Message Identifier	00001XXXXXXXX00 //20171023 (NEW Tx Id)
Message Definition Identifier	sese.024.001.07
Business Service	TransferStatus_R1_BAH001_R1!p
Creation Date	2017-10-23T07:50:20.001Z
Related	
From	01402
To	00001
Business Message Identifier	01402YYYYYYYY00 (Tx Id)
Message Definition Identifier	sese.023.001.07
Business Service	TransferRequest_R1_BAH001_R1!p
Creation Date	2017-10-23T07:43:22.002Z

Related

Common Transfer Status

Data Flow	Business Service	Related BizMsgIdr	Related BizSvc
016	TransferStatus_R1_BAH001_R1!p	Tx Id of EIS015	TransferRequest_R1_BAH001_R1!p
405	TransferStatus_R1_BAH001_R1!p	Tx Id of EIS408	TransferAuth_R1_BAH001_R1!p
407	TransferStatus_R1_BAH001_R1!p	Tx Id of EIS408	TransferReject_R1_BAH001_R1!p
076	TransferStatus_R1_BAH001_R1!p	Tx Id of EIS407	TransferReject_R1_BAH001_R1!p

Using Common guidelines

✓ **New BizSvc values** replace legacy EIS Message Type e.g. TransferStatus and TransferRequest

✓ **Related BizMsgId** links to previous message

✓ **Related BizSvc values** identify initiating event

→ Same schema for like purpose in an event
  e.g. EIS016, 405, 407, 076

→ Can extend scope beyond single event:
  a) same purpose in multiple events and/or
  b) same base message with like data flows*

* Requires conditional business rules and
  cross-element validation outside of schema

ASX to-be recommendation: Standardise status messages with a common guideline supported by usage rules

6f Technical Committee review of as-is ISO 20022 guidelines

Draft ISO 20022 Usage Guidelines added to Collection

2017 Technical Committee reviews:

- of 'core' <u>as-is</u> business processes for: Trade Registration, Clearing, Settlement and Holding Management
- to build familiarity with ISO 20022, validate mapping approach and in preparation for to-be reviews.

2018 Technical Committee reviews:

'as-is' mapping:

- ASX could publish guidelines for the following business processes: Funds Settlement, Holder Management, Collateral, mFunds, Reporting; with likely availability Q2 2018

  Noting these may not be indicative of final to-be business processes or Day 1 CHESS Replacement scope

Q: Which CHESS as-is message sets would the Technical Committee want published for review, if any?

'to-be' mapping:

- Draft 'to-be' ISO guidelines will be available following Day 1 CHESS Replacement scope consultation and confirmation – timeline tbd
- ASX will provide project documentation as part of project deliverables to allow estimation, planning, build for CHESS Replacement

ASX

Closing

Next meeting

- Noted actions from this meeting

  - Member review of messages, if any – to be determined in meeting

- Draft minutes from this meeting will be distributed for review

- Next meeting to be held 17 April 2018 – likely to be Melbourne

  Matters for consideration:

  > Consultation Paper overview, project delivery plan

  > Review as-is mapping change profile (supplementary data, change requests, new messages, T2S)

  > Standardise transaction id mapping

  > Business service model

- More information on CHESS Replacement & Technical Committee documents:

  http://www.asx.com.au/services/chess-replacement.htm

  Or email ASX project team: CHESSReplacement@asx.com.au

ASX

Thank you.