



CHES Replacement Project

**Implementation & Transition
Webinar**

26 February 2020

Housekeeping: trouble shooting

- Check your system requirements
- Audio options:
 1. Use your computer's mic and speakers ("Computer audio"). Check that your computer's audio is unmuted.
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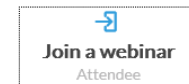


- ✔ OS - Windows 8.1
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- ✔ Internet connection - Strong
- ✔ Flash - Enabled

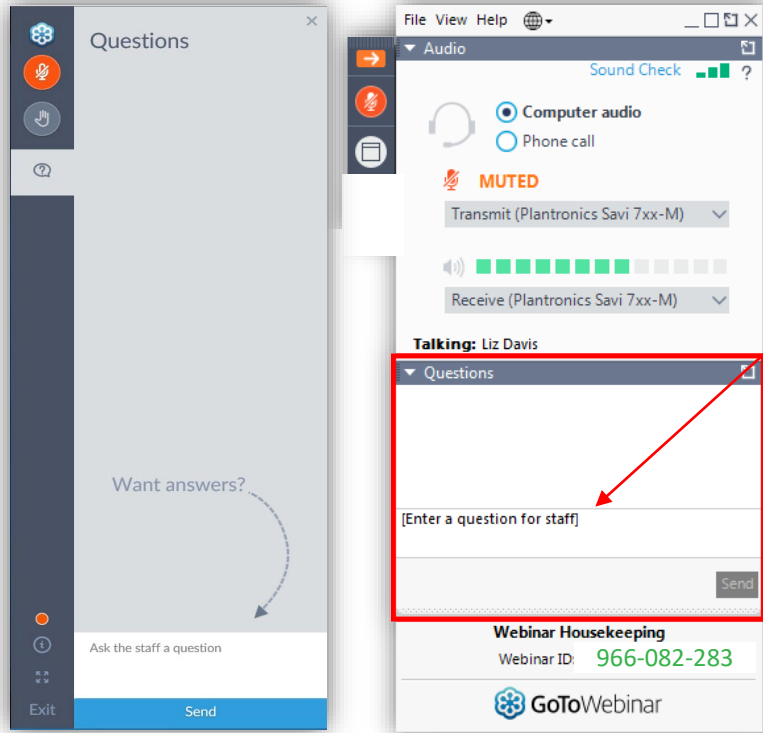
Test your system again

View System Requirements

Next steps



Housekeeping: how to submit questions



Your Participation

- To submit your text questions and comments use the Questions panel
- Note that your questions will not be seen by other attendees

For more information - refer to the webinar tips published on the ASX [CHES Replacement web page](#)

Terminology

- **CHES User**

An entity that has access to some or all CHES functionality in production. This includes clearing participants, settlement participants, product issuer settlement participants (PISPs), approved market operators (AMOs), payment providers and share registries

- **Software providers**

Third party software vendors or CHES Users who have their own in-house systems, who provide connectivity and software solutions that connect to CHES

- **Messaging**

Includes both ISO 20022 messages as well as DAML commands via the Ledger API

Agenda

- Technical Accreditation - Overview
 - Connectivity Accreditation
 - Message Accreditation
- Account & Holder Management Message Accreditation Examples
- Stakeholder Engagement
 - Inflight Transactions
 - Public Consultation on Operating Rule Amendments
- Q&A
- Next steps

Presenters and introductions



Fraser Moodie

**Senior Manager,
Connectivity &
Integration**
Equity Post Trade



Keith Purdie

**Senior Manager,
Stakeholder
Engagement**
Equity Post Trade

Technical Accreditation Overview

Technical Accreditation

Why is technical accreditation required?

Technical accreditation is a mandatory requirement for all systems connecting to CHES in a production environment.

Who needs to perform technical accreditation?

Only software providers need to perform technical accreditation

What is technical accreditation?

Technical accreditation comprises of two components, connectivity and messaging:



Connectivity: ensures secure connectivity, resiliency and performance



Messaging: ensures software can successfully send and receive messages

Technical accreditation by connectivity channel

	Ledger API	AMQP	SWIFT	Browser (CHESS UI)
Connectivity				
Secure connectivity	✓	✓	✓	✓
Resilience	✓	✓		
Performance	✓	✓		
Messaging				
As defined by accreditation scripts	✓	✓	✓	



Indicates accreditation requirements for software providers

Connectivity accreditation

Connectivity accreditation

	Secure connectivity	Resilience	Performance
Ledger API	<ul style="list-style-type: none"> Establish secure connection to node (include acquisition of authorisation token from ASX IAM) Successfully submit / receive an ISO 20022 equivalent choice Updating expired authorisation token Successfully disconnect <ul style="list-style-type: none"> User initiated ASX initiated 	<ul style="list-style-type: none"> Recover without message loss after an unexpected link disconnection while sending / receiving Technical duplicate detection and handling Recover from node loss (and subsequent restoration) Handle ledger time-out Handle ledger back pressure indicators 	<ul style="list-style-type: none"> Achieve target sustained send and receive message rates*
AMQP	<ul style="list-style-type: none"> Establish secure connection to AMQP brokers IP/port Establish sessions to your input and output queue(s) Successfully send / receive an ISO 20022 XML message Successfully disconnect <ul style="list-style-type: none"> User initiated ASX initiated 	<ul style="list-style-type: none"> Recover without message loss after an unexpected link disconnection while sending / receiving Technical duplicate detection and handling Recover from loss (and subsequent restoration) of AMQP broker 	<ul style="list-style-type: none"> Achieve target sustained send and receive message rates*
SWIFT	<ul style="list-style-type: none"> Session management closed user group Successfully send / receive an ISO 20022 XML message 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

**target sustained rates depend on the requirements of CHES Users*

Messaging accreditation

Messaging accreditation - overview

Messaging accreditation will include:

- Sending messages (CHESS User to CHESS Replacement)
 - Details will be defined in the accreditation script per CHESS User type
- Receiving messages (CHESS Replacement to CHESS User)
 - All systems must demonstrate the consumption of incoming message content



Which system is accredited?

ASX will accredit the system that generates the ISO 20022 message construct

Messaging accreditation does not:

- Demonstrate a system is functionally compliant via end to end workflow (this is covered by Operational Readiness)
- Imply that the accredited system complies with ASX rules and procedures, which include, but not limited to: ASX Clear Operating Rules, ASX Settlement Operating Rules and Guidance Notes

Messaging accreditation by CHES User and function

- Software providers need to be accredited based on the CHES User type(s) and features their system supports
- ASX will publish a list of features applicable for each CHES User type in the Technical Documentation portal

Function (sample only)	CHES User type						
	Clearing & Settlement Participant	Settlement Participant	Sponsoring Participant	PISP	Issuer (Registry)	Payment Provider	Specialist SP (Offeror)
Accounts	✓	✓	✓				✓
Market Trade	✓						
Netting	✓						
Holding Transfers	✓	✓	✓		✓		
Batch Settlement	✓	✓	✓	✓		✓	

Optional field usage

- The move to ISO 20022 standard has resulted in greater message optionality
- Where an optional field drives functionality, or impacts production, it will be required for messaging accreditation
- Where an optional field exists within an optional feature (Day 1), accreditation will not be required, until the feature is mandated
- For optional fields that do not drive functionality, or impact productions, accreditation will be at the discretion of the system provider

Account & Holder Management (Example)

Message accreditation by function – account management

Account Management	Clearing & Settlement Participant	Settlement Participant	Sponsoring Participant	PISP	Issuer (Registry)	Payment Provider	Specialist SP (Offeror)
Account creation request	acct_001	acct_001	acct_001				acct_001
Account notification	acct_002	acct_002	acct_002		acct_002		acct_002
Account modification instruction	acct_003	acct_003	acct_003				acct_003
Account modification instruction ackn.	acct_018	acct_018	acct_018				acct_018
Controlling participant enquiry	acct_019	acct_019	acct_019				
Payment facility details	acct_004	acct_004				aact_004	

Management of optional fields for Account Creation

	Mandatory field	Optional fields Required (for accreditation)	Optional fields not required (for accreditation)
Transaction ID	YES		
Instruction Type	YES		
Designation		YES	
Account Type	YES		
Ownership Type	YES		
Account Name		YES	
Address Line 1	YES		
Address Line 2		YES	
Address Line 3		YES	
Post Code		YES	
Town Name	YES		
State (Country sub-division)		YES	
Country	YES		
Communication Preference		YES	
Email Address		YES	
Mobile Number			YES
Residency Indicator	YES		

Sponsored account scenario

Function	Scenario Code	Scenario	Field	Value	Optional Fields	Acceptance Criteria	ISO 20022 message	
							Send (Participant to CHES)	Reply (CHES to Participant)
Account opening	1	Send request to create Account with account type Sponsored where ownership type is single and a holder type is Company	Account Transaction Id Instruction Type Designation Account type Ownership type Registered Address Communication preference Residency indicator Holder Holder Name Holder type	New Account Opening (NEWA) Sponsored (SPSD) Single (SIGL) (<PmryOwnr> XML tag) Company (COMP)	Mobile Number Company Incorporation Date	<ul style="list-style-type: none"> Input message must include all fields and values specified in "Field" and "value" column Message must be successful 	Account Creation Request (acct_001)	Account Notification (acct_002)
	2	Send request to create Account with account type Sponsored where ownership type is joint (4 holders) and a holder type is Individual	Account Transaction Id Instruction Type Account type Ownership type Registered Address Communication preference Email Address Residency indicator Holder Holder Name Holder type	New Account Opening (NEWA) Sponsored (SPSD) Joint (JOIT) - (4 Holders) (<JntOwnr> XML tag) Holder block to be repeated four times Individual (Holder attributes to be provided within the <IndvPrsn> XML tag)	Mobile Number Date of Birth	<ul style="list-style-type: none"> Input message must include all fields and values specified in "Field" and "value" column Message must be successful 	Account Creation Request (acct_001)	Account Notification (acct_002)

Messaging accreditation scenarios based on key points

- Accreditation required by software providers
- Separate accreditation test sets will be required per CHES User type
- Support all mandatory fields
- Support appropriate optional fields
- Test a sample of field values only
- ISO message signing on AMQP required
- Test scripts progressively released starting with account management
- Accreditation to be performed in the ITE – Industry Test Environment



Stakeholder Engagement

Inflight transactions

Recap of last month's Implementation & Transition Working Group

- Only inflight settlement instructions and underlying market trades for net broker obligations (NBOs) will be migrated
- All other inflight transactions will need to be accepted, rejected, cancelled or completed by normal course workflow prior to EOD
- Transaction IDs will be migrated and form part of the new obligation ID which settlement participants will need to map over the cut-over weekend
- Further details to be provided regarding treatment of active corporate actions, support of un-netting post migration and fails management including standard settlement pricing (SSP)

Inflight transactions

Market feedback on inflight transactions

- Overall market feedback has been supportive on ASX's proposed approach to managing inflight transactions
- Stakeholders requested further information on:
 - What, if any, reports will be made available for reconciliation of transaction IDs with new obligation IDs?
 - How will participants be advised of any unsuccessful migration of settlement instructions?
 - Will ASX issue a timetable for the Friday before the cut-over weekend, noting when CHES Users will need to complete certain actions during the cutover weekend?

Public consultation on operating rule amendments

Tranche 2 rule amendments

- On 21 February 2020, ASX released a **consultation paper** on the second of three tranches of operating rule amendments.
- Rule amendments relate to corporate actions, mFund, RTGS payment aspect for 'Day 1' implementation of CHESS replacement system functionality.
- ASX expects to provide a response to consultation for the tranche 1 draft rule amendments in mid-April 2020 and a response to consultation for the tranche 2 draft rule amendments in early-June 2020.
- ASX also expects to provide a response to consultation for the tranche 3 draft rule amendments and a combined draft rules package (including the draft rules from each of the three tranches), at the end of July 2020.
- Feedback on the second tranche of rule amendments is **due 3 April 2020**.
- Please send all written feedback to **regulatorypolicy@asx.com.au**.

Q&A

Next Steps

Next Steps

Immediate steps following today's session

Review and feedback:

- Webinar recording and slides will be published on the CHES Replacement webpage
- Provide feedback by contacting CHESReplacement@asx.com.au – use “I&T webinar” as the subject heading
- Feedback welcome by **COB Wednesday, 18 March 2020**

Next Meeting:

- Date: **Wednesday, 25 March 2020**; invitations and topic to follow

Thank you.



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