



Technical Committee Meeting

CHES messaging & ISO 20022
Project

Tuesday 13 December 2016



Agenda

Welcome

Update - December Business Committee Meeting

Objectives and Charter

ISO 20022 consultation responses

Global ISO 20022 adoption

High level gap analysis overview

MI Harmonisation for adoption of ISO 20022

ISO 20022 adoption and engagement roadmap

Next steps

Update - December Business Committee Meeting

Roadmap for Post-Trade Service Infrastructure

| | 2015 | 2016 | | | | 2017 | | | | 2018 | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-----------|-----------|-----------|
| | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Review of technology options | Active | | | | | | | | | Completed | Completed | Completed | Completed |
| Selection of DLT partner | | Active | | | | | | | | Completed | Completed | Completed | Completed |
| DLT prototype build | | Active | Active | | | | | | | Completed | Completed | Completed | Completed |
| Vendor system build | | | | Active | Active | Active | Active | Active | Active | Active | Active | Completed | Completed |
| Project updates - webinars, web & email | | | | | | Active | Active | Active | Active | Active | Active | Active | Active |
| ISO 2022 analysis - ASX & SWIFT | | | | Active | Active | Active | Active | Active | Active | Active | Active | Completed | Completed |
| | | | | | | | | | | | | | |
| Stakeholder DLT prototype demonstrations | | | | Active | Active | Active | Active | Active | Active | Active | Completed | Completed | Completed |
| Stakeholder consultation activities | | | | | Active | Active | Active | Active | Active | Active | Active | Active | Active |
| Stakeholder business requirements process | | | | | Active | Active | Active | Active | | Active | Completed | Completed | Completed |
| Stakeholder technical workshops | | | | | | | | Active | Active | Active | Active | Active | Active |
| Technical Committee – ISO 2022 – ASX & customers, stakeholders | | | | | Active | Active | Active | Active | Active | Active | Active | Completed | Completed |

Objectives and Charter

- Roles and responsibilities
- Activities
- Membership
- Updates to other working groups
- Confidentiality
- Chair
- Meetings
- Secretariat, publishing material

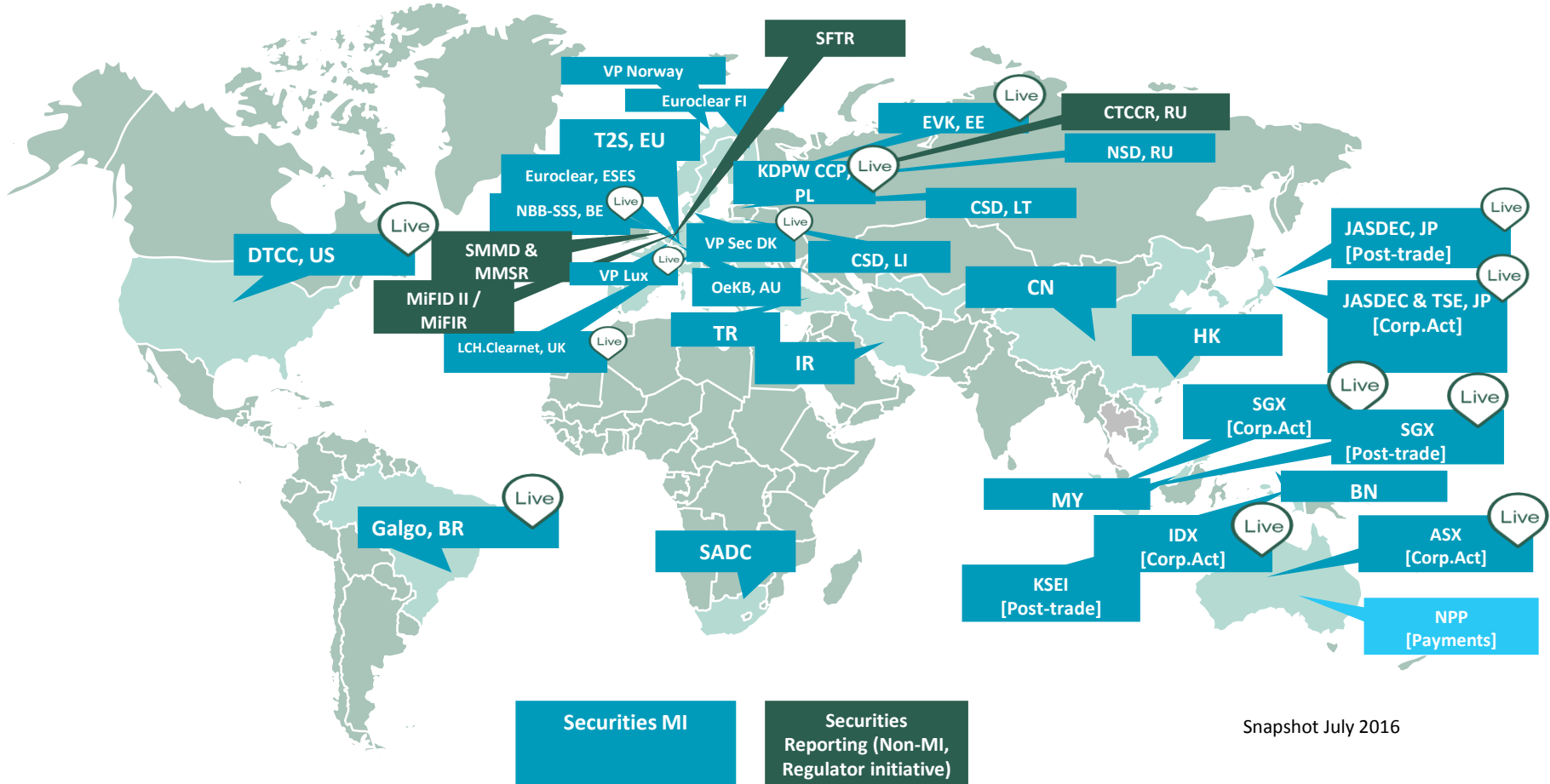
Comments?

Consultation responses – ISO 20022

36 responses received, general themes from responses to Q7 to Q14:

- majority support for adoption of global standard; alignment with NPP standard, other markets
- range of opinions from negative to positive on initial expense, expected benefits, cost savings; global vs. domestic players
- maintaining existing CHES messaging though transition is preferable; shouldn't hold up any new services offered on ISO 20022 only
- reliance on vendors to assist with ISO 20022 adoption, transition
- more clarity required on scope, phasing, messages not ISO 20022
- be mindful of diminished benefit if it becomes "Australianised"
- ASX provided interface options (e.g. CHES PC, CHES Access) should be maintained
- ISO 20022 knowledge/capability across the equity post trade industry varies greatly
- time to implement varies from needing more information to assess, 6 months to 3 years
- expect further consultation on implementation model, ASX to share other market experiences
- support for connectivity/network options

Global ISO 20022 adoption



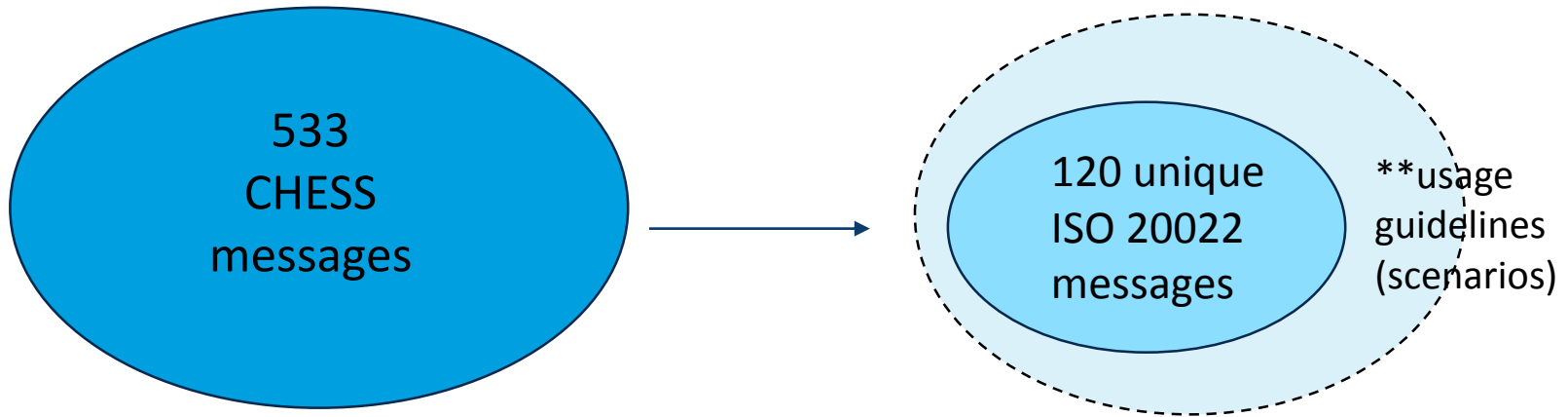
High level gap analysis outcomes

CHES business area and EIS message scope

| CHES Business Area scope | # CHES messages |
|---------------------------------|------------------------|
| Holder Management | 57 |
| Holding Movement | 63 |
| Clearing and Settlement | 80 |
| Collateral Management | 68 |
| Takeover | 22 |
| mFund | 85 |
| Miscellaneous | 6 |
| Operations Admin | 7 |
| Reporting | 43 |
| RTGS Settlement | 28 |
| Electronic Trade Confirmation | 30 |
| Stock Lending | 12 |
| Tri Party Collateral | 32 |
| Total | 533 |

High level gap analysis outcomes

Indicative mapping of CHES messages to ISO 20022



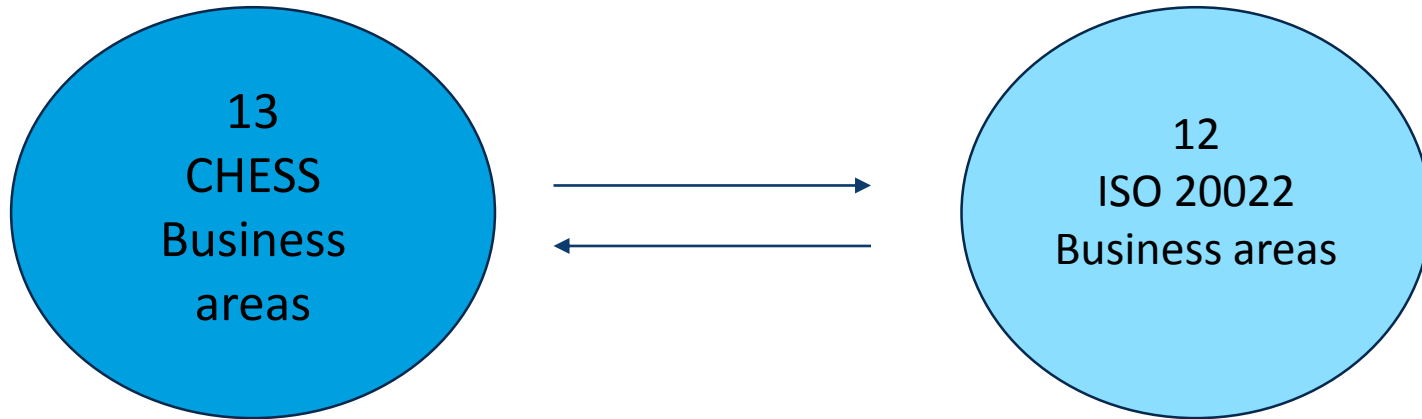
| CHES message scope for HLGA | Expected # existing ISO messages | Expected # new messages | Expected # T2S* messages | Total expected # ISO messages |
|-----------------------------|----------------------------------|-------------------------|--------------------------|-------------------------------|
| 533 | 60 + | 32 + | 28 + | = 120 |

*T2S has developed new messages yet to be registered with ISO

**usage guideline = instance of a message to define a business scenario

High level gap analysis outcomes

Indicative ISO 20022 business areas



CHES Business areas

| | |
|-------------------------|-------------------------------|
| Holder Management | Operations Admin |
| Holding Movement | Reporting |
| Clearing and Settlement | RTGS Settlement |
| Collateral Management | Electronic Trade Confirmation |
| Takeover | Stock Lending |
| mFund | Tri Party Collateral |
| Miscellaneous | |

ISO 20022 Business areas

| | | | |
|-----------------|------|-----------------------|------|
| Account Mgmt | acmt | Reference Data | reda |
| Administration | admi | Securities Clearing | secl |
| Authority | auth | Securities Event | seev |
| Cash Mgmt | camt | Securities Mgmt | semt |
| Collateral Mgmt | colr | Securities Settlement | sese |
| Payment C&S | pacs | Securities Trade | setr |

Market comparison – ISO 20022 adoption

| SMI | Business area coverage | No. of ISO business areas | ISO Business area | # of ISO messages | Adoption |
|---------------|---|---------------------------|---|--|---|
| ASX | Clearing and Settlement, Collateral – TPC, Collateral Management, ETC, Holder Management, Holding Movement, mFund, Miscellaneous, Operations Admin, Reporting, RTGS Settlement, Stock Lending, Takeover | 12 | Securities trade, Securities clearing, Securities settlement, Securities management, Securities Event, Collateral management, Account management, Reference data, Cash management, Payment clearing and settlement, Administration, Authority | 120 – estimated after HLGA | Timeline tbc |
| SGX | Post trade system refresh Phase 1- Settlement and reconciliation including earmarking, Payment services (EPS/Giro direct debit, cash reporting) | 4 | Securities settlement, Securities management, Payments initiation, Cash management | 25 (Phase 1) | Phased approach with Phase 1 for clearing members and Phase 2 for depository agents (~2-3 years) |
| JASDEC | PSMS (Pre-Settlement Matching System) and BETS (Book-entry Transfer System for Stocks, Corporate Bonds and CP, and Investment Trusts) | 6 | Securities settlement, Securities management, Securities trade, Administration, Cash management, Payment clearing and settlement | 33 (if excluding BAH, 32) | 5 years co-existence of ISO 15022 based proprietary messages with ISO 20022 till 2019 January |
| T2S | Securities settlement, liquidity management, auto-collateralisation, static data | 6 | Securities settlement, Securities management, Cash management, Reference data, Account management, Collateral management | 130 including 82 T2S specific messages | Phased approach through migration waves: T2S is expected to end the full migration of the CSDs who participate in T2S by end of 2017. |

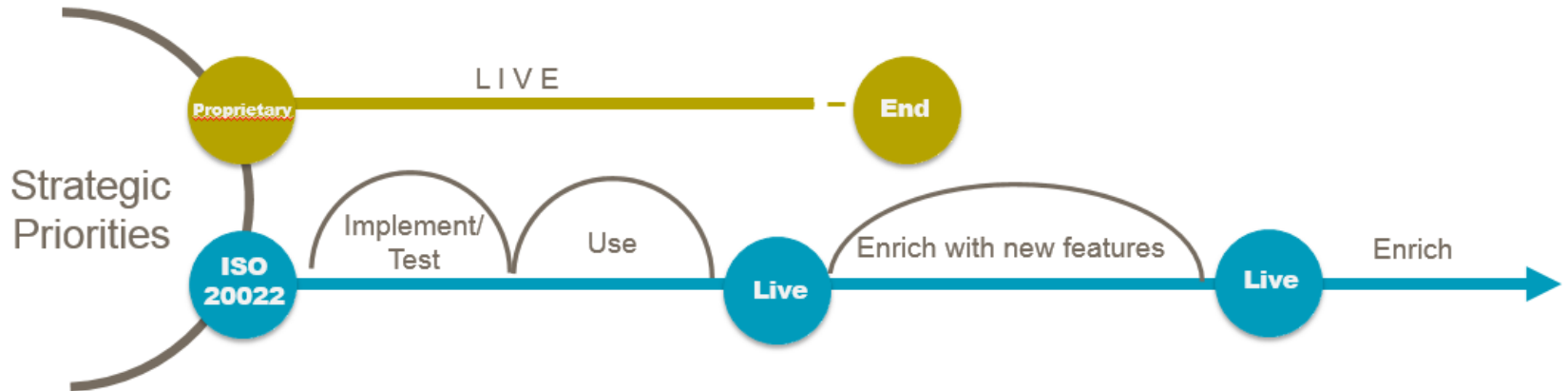
Source: ISO 20022 Adoption Report at iso20022.org

SWIFT - High level gap analysis recommendations

- Adopt ISO 20022 business model concepts
- Adopt standard message for common functions
- Use ISO standard reference identifiers where possible
- Support multi-currency – currency indicator is mandatory
- Use of Business Application Header to identify services
- Simplify reporting model
- Comply with Market Infrastructure Harmonisation Principles
- Market training and consultation
- ISO adoption roadmap and timeline
 - Implementation model/strategies
 - Lead times for change requests, new message registration

Market implementation strategies – adoption of ISO 20022

Big Bang Adoption



- Eliminate proprietary standards (e.g. CHESSE messaging)
- Launch of potential of new or updated services or functionalities following live date

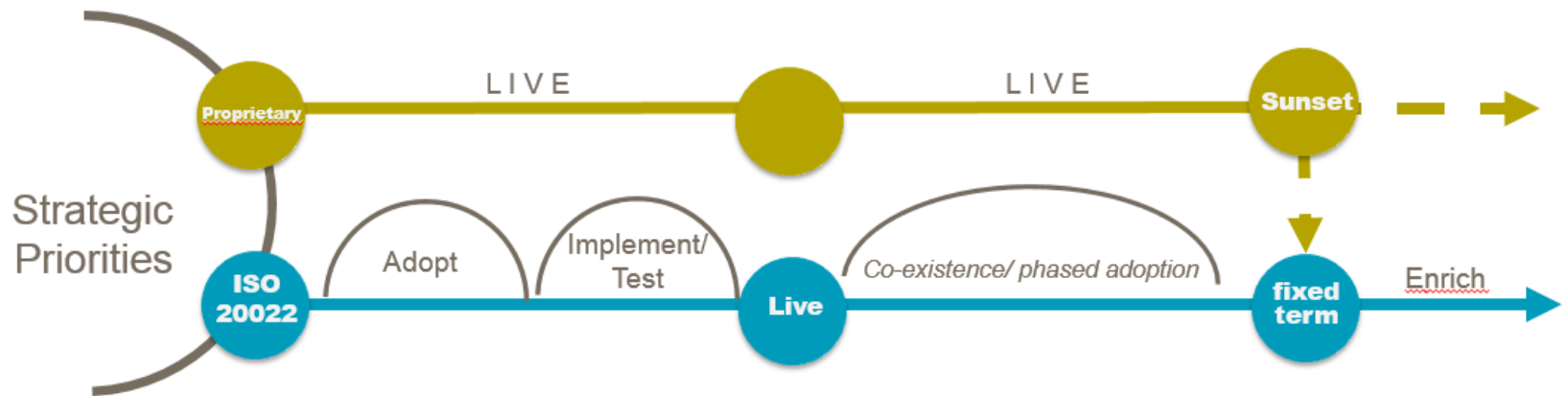
Examples:

- RBI
- BOJ
- ...

Generally central banks

Market implementation strategies – adoption of ISO 20022

Planned *Co-existence with sunset*



- Phase out proprietary standards (e.g. CHESSE messaging) progressively (1-3 years)
- Implementation of ISO 20022 at later planned stage
- Have a fixed term for co-existence or specified sunset date (e.g. set by number of years, number of participants on-boarded, community suggestion, etc)

Examples:

- Jasdec
- SGX

Generally CSDs

Market Infrastructure Harmonisation for adoption of ISO 20022



ISO 20022 Harmonisation Charter



More information available here: <https://www.swift.com/standards/iso-20022-harmonisation-programme>

Requirements and message definition

Business requirements defined between ASX and customers through stakeholder engagement

Draft message definition based on CHES replacement requirements

- assume as-is mapping, unless requirements indicate a change
- iterative approach may lead to change, re-visit definition

What's out of scope for ISO 20022?

- business area review – what is carried forward?
- trade reporting from AMOs will be via FIX messaging. Consultation on message format with AMOs.

Community view of usage guidelines via SWIFT MyStandards online portal

ISO 20022 work streams

| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
|--|------|----|----|----|------|----|----|----|------|----|----|----|
| | 2016 | | | | 2017 | | | | 2018 | | | |
| CHES vs. ISO 20022 high level gap analysis | | | | | | | | | | | | |
| Detailed message mapping CHES vs. ISO 20022 | | | | | | | | | | | | |
| Message guidelines finalisation, maintenance and change request management | | | | | | | | | | | | |
| Preparation and submission to ISO of formal changes requests, new message specifications | | | | | | | | | | | | |
| Technical Committee with stakeholders – monthly meetings | | | | | | | | | | | | |

Next steps

- Q1 2017 - ASX to publish summary and response to consultation responses
- Next Technical Committee meeting - February 2017
 - Agenda available 2 weeks prior
 - Detailed discussion on HLGA recommendations and key principles for adoption
 - Market education and training
 - Overview of MyStandards, ASX to set up MyStandards community, member access
- More information on ISO 20022: <http://www.iso20022.org>
- More information on CHES Replacement & Technical Committee documents: <http://www.asx.com.au/services/chess-replacement.htm>

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



Thank you

