



CHESS Replacement project update

ASX National Issuer Roadshow

October/November 2019

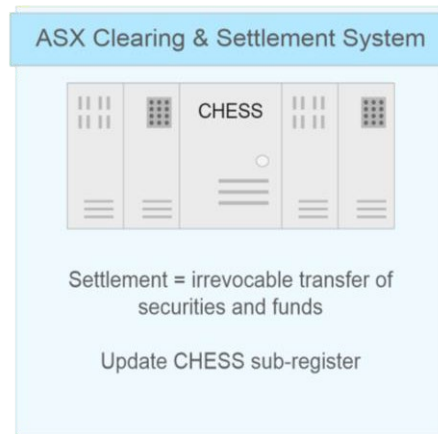
EGM, Equity Post Trade – Cliff Richards

What is CHESS?

The Clearing House Electronic Subregister System

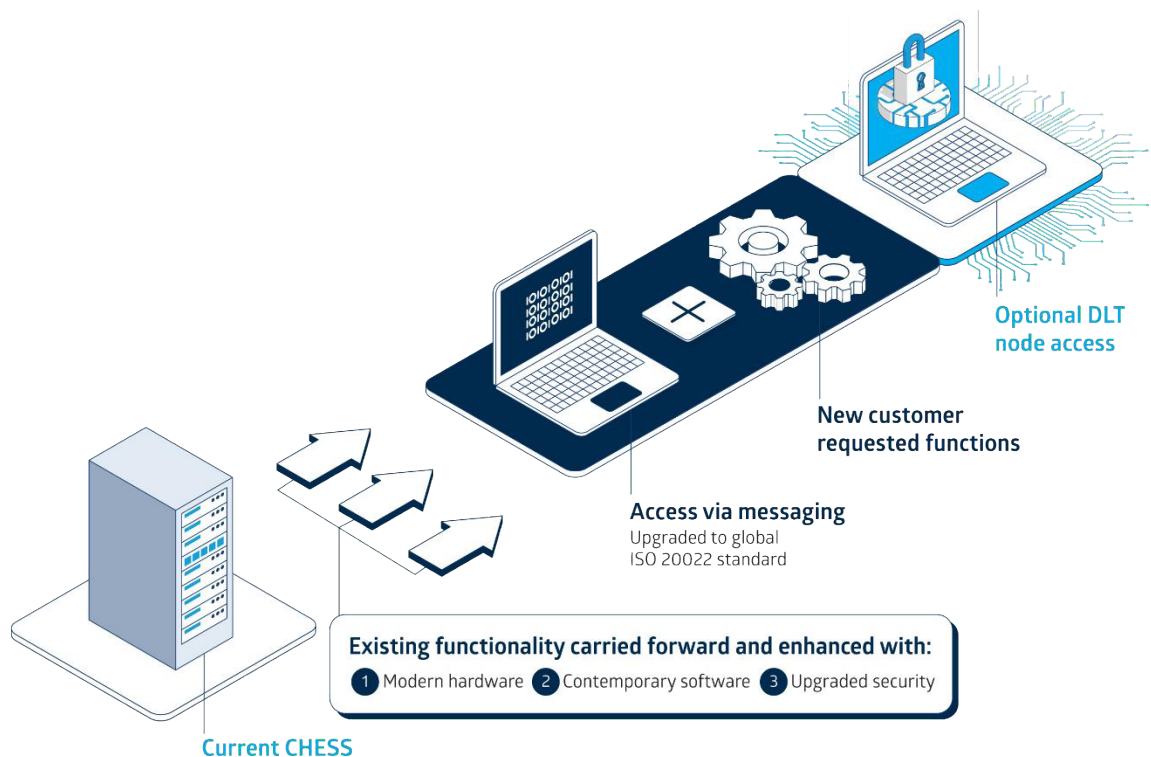
What is CHESS?

- CHESS is ASX's clearing and settlement system and maintains the CHESS subregister on behalf of Issuers and Investors.
- CHESS is ultimately about a trusted place to maintain a record of securities, their holders, any changes to those holders and their holdings, supporting around 2,300 Issuers.
- CHESS and the services provided by ASX Clear and ASX Settlement are known as critical market infrastructure.
- This is highly regulated activity by agencies including the Reserve Bank of Australia (RBA), the Australian Securities and Investments Commission (ASIC), the Australian Competition and Consumer Commission (ACCC) and the Federal Treasury.



Replacing Australia's equity clearing and settlement system

Delivering upgraded security, resilience and performance



Customer benefits

The new system will provide:

- Upgraded performance, resilience and security
- New functions and ability to implement enhancements easily and quickly
- New messaging ISO 20022 protocol - aligns with local and global standards

Optional DLT node access offers:

- Perfectly synchronised and standardised data across multiple permissioned parties
- Advanced audit trail and ability to perform data analytics
- Capability for market to build new, innovative applications

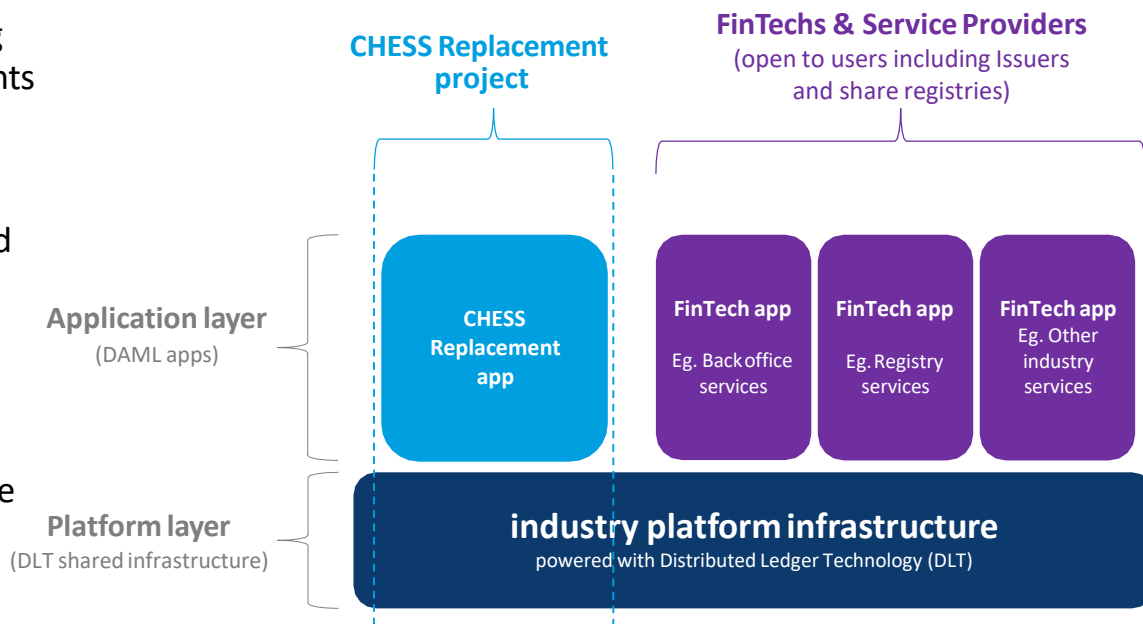
Industry innovation opportunities starting with CHES replacement

A system replacement in two parts, an application sitting on a platform infrastructure

CHES is a single system today. It is being replaced with two technology components – an application and a platform.

Application (“app”) - contains the functions that create the services offered to the market. Coded in DAML, a smart contracting language which replaces COBOL.

Platform – an infrastructure upon which the CHES replacement app’s services are accessed. This will deliver services as messages, like today, or optionally via distributed ledger APIs.



Technology firms can innovate by developing smart contract software applications to be deployed on this platform infrastructure.

A system replacement project with industry-wide optionality

Underpinned with contemporary technology infrastructure

WILL

- ✓ Replace current functionality and add 35 market requested functions
- ✓ Embrace ISO 20022 global message standards
- ✓ DLT functionality is 100% optional

WILL NOT

- ✗ Force new information to be provided
- ✗ Increase the cost of like-for-like services
- ✗ Force a change of service providers

CHES Replacement

=

More accessible

More reliable

In real time

THREATS

Some may not like information to be more freely available

Some currently benefit from fragmented, siloed and inconsistent data sources

Some currently benefit from information delays allowing money to sit idle

OPPORTUNITIES

Increased accessibility opens up ability of Fintech to create new services

Removing duplication and error-prone data and processes reduces cost to investors

Real time synchronised data leads to dividends delivered faster into share portfolios, increasing returns

What CHESS Replacement will NOT do

Addressing misinformation in the public domain

The replacement of CHESS has comprehensive regulatory oversight (RBA, ASIC, Treasury and ACCC) and **will not**:

- Increase Issuer services fees to recover the cost of CHESS replacement;
- Mandate the provision of new data to the system;
- Force Issuers or their share registries to adopt new distributed ledger technology (DLT);
- Lessen competition – the potential for efficient competition is increased by lowering barriers to entry and lowering costs for the construction, maintenance and sharing of Issuer's registry data.

Issuers' Issues

Addressing near term and structural friction to reduce challenges for Issuers

Key Issuer pain points:

- Shareholder data – impossible to know who owns your securities now and with detail
- Shareholder communications – suppressing paper, using electronic / email communications
- Costs and fees – the costs of managing shareholders exacerbated by structural legacy
- Corporate actions – management overhead, lack of process status and timetables
- Data analytics and insights – extracting clear insights from your data
- Rules and compliance – navigating complexity

Benefits for Issuers

New features and infrastructure services for Issuers and their service providers

Day 1 – Go Live (targeting April 2021)

- Electronic CHESS Holding eStatement delivery option for Investors and associated cost savings for Issuers
 - We are accelerating our work on the collection, investor consent and use of email addresses for CHESS Holding eStatements before new system implementation
- Standardised (ISO 20022) processes and messaging formats industry wide to support:
 - Electronic dividend reinvestment plan (DRPs) and bonus share plan (BSP) elections*
 - Electronic acceptance of entitlement offers*
 - Electronic payment for entitlement offers*
 - Investor/holder account (registration) details (180 to 2,000+ characters) supporting long names and addresses and multiple trustee holders. Noting that no new investor data is required to migrate registration details.
- Via the optional DLT infrastructure open to Issuers, share registries and others.

* These services do not prevent existing methods of completing these functions. These were features requested as a part of ASX's public industry consultation process by a majority of the industry to improve the speed, accuracy and efficiency of fulfilling these functions.

Benefits for Issuers (continued)

New features and infrastructure services for Issuers and their service providers

- Via the DLT infrastructure, support for share registries and other third party service providers to offer services that could include:
 - Electronic proxy voting;
 - Continuous register holding balance information;
 - Electronic processing of dividend claims;
 - A virtually combined, synchronised, real-time company register (CHESS + Issuer subregisters); and
 - The ability for Issuers or share registries to optionally add new data to the DLT infrastructure to share this with other users on a permissioned basis while retaining data ownership and/or access rights.

Day 2 – Post Go Live

- Common Investor Number (CIN) allowing a mapping and aggregation of an investor's HINs and SRNs
- DLT infrastructure: Other non-equity services provided by third parties for the industries Issuers operate within. These could include: banking, insurance, mining, healthcare, supply-chain logistics, provenance tracking, green energy trading and numerous others.^

[^] These are not CHESS Replacement related.

What Issuer related changes are required by go-live 2021?

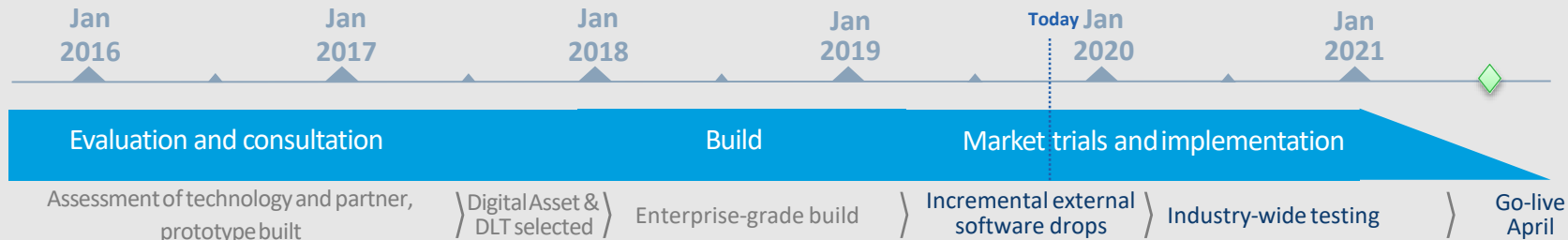
Changes affecting service providers

- The ability to capture Issuers' registered members' address details in broader format
- The ability to interact with regulatory endorsed, global standard ISO 20022 message format
- The ability to support election entitlements (Eg. DRPs, BSPs)
- ✓ ASX continues to engage with brokers and registry service providers on these matters.

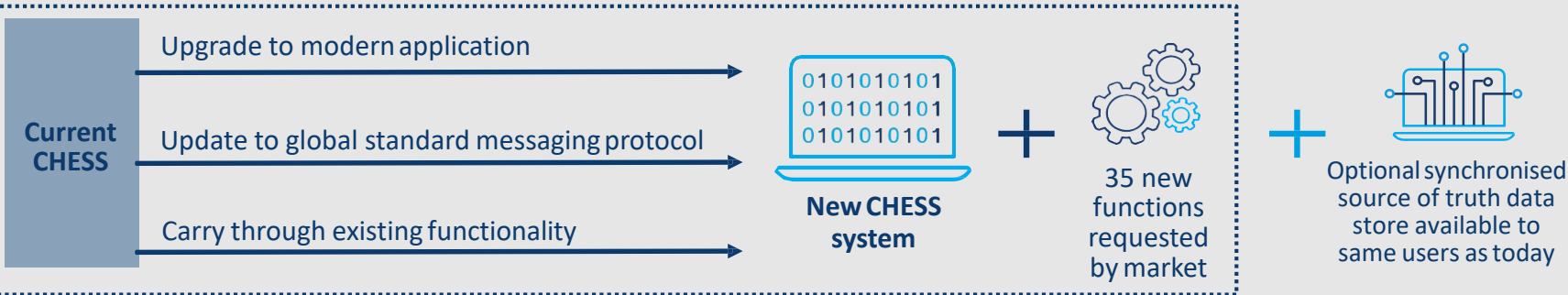
CHESS Replacement - project timeline

An enhanced equities clearing & settlement system and new opportunities for the market

On-track for March/April 2021 go-live of DLT-based CHESS



DLT-based CHESS will offer existing functionality, new features and an option to connect to synchronised source of truth data



How is ASX communicating with Issuers?

Regular engagement leveraging existing and new communication channels

We are engaging:

- Via relevant industry associations (AIRA, ASA and GIA)
- Where Issuers need to be directly notified, we are using the existing ASX channels of:
 - Listed@ASX Compliance Update email;
 - Via your ASX Listings Compliance Adviser;
 - Listed@ASX magazine; and,
 - Issuer roadshows.
- You can also subscribe to the CHESSE Replacement Project email newsletter @ chessreplacement@asx.com.au

Thankyou.

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