Technology strategy key to building an exchange for the future
Achieved through transforming our technology, strengthening resilience and focusing on opportunities

FY17 – Commenced execution of business strategy to build an exchange for the future

OBJECTIVES

Enable Australia’s financial markets to operate on world-leading, contemporary and flexible technology

Reduce incidents and outages across the technology portfolio

Exploring opportunities to leverage increased technology focus
Significant reduction in technology debt since 2016
Achieved through renewal and replacement of foundational hardware and software

Age of equity and key infrastructure technologies (as at calendar year-end)

- Equity data warehouse
- Website
- Surveillance systems
- Reference data
- Equity clearing and settlement system
- Secondary data centre
- ASX Net communications
- Equity trading
- Market announcements platform
- Australian Liquidity Centre
Distributed ledger services

Distributed ledger technology - An open platform for growth

- Ledger
- CHESS register
- Issuer services
- Settlement
- Clearing
Distributed ledger services

Distributed ledger technology - An open platform for growth

- Ledger
- Common libraries and applications
- CHESS equities register
  - Superannuation register
  - Private equity register
  - KPMG Building code
  - Track and trace
- Settlement
  - Clearing
  - Issuer services
  - Registry
  - Custody
  - Takeovers
- Payments
  - Fund administrators
  - Fund managers
  - Custodians
  - Registries
  - Advisers
  - Insurers
  - Developers
- Settlement
- Payments
CHESS Replacement project

CHESS replacement benefits

Contemporary technology enabling digitisation and simplification of processes

- Upgrade messaging to global ISO 20022 standard
- New, open technology to support global inter-operability and accelerate innovation
- New customer functions e.g. DRP/BSP electronic elections
- Strengthened investor protections, improved performance and security
- New connectivity options
- Simpler permissioning of data
Project update
As at May 2022

- Industry Test Environment testing is well progressed, since opening end November 2021:
  - 26 software providers working through testing the full coverage of functionality
  - The ledger is performing well and application code fixes are in line with expectations
  - The next software release, v1.3, will be tested and deployed by ASX into Industry Test Environment 1 late July
  - Accreditation can commence following applicable testing of v1.3 by software providers

- Industry Test Environment now open for CHESS user onboarding:
  - CHESS user testing will commence following connectivity and onboarding and after v1.3 software release has been tested and deployed by ASX into Industry Test Environment 2

- Comprehensive documentation published including:
  - functional specifications and messaging requirements, and the scenarios for software provider accreditation and CHESS user operational readiness

- Conclusion of consultation on the three tranches of draft rule changes, with ASX’s response to feedback to be published in June
Synfini - ASX’s ‘DLT as a Service’

We are creating Australia’s largest DLT ecosystem and network

- 4,000 Customers
- $4.5t Assets held
- Operates Equity, Derivatives and Debt markets, ALC and ASXNet
- Millions of transactions, Billions of $ of value transacted per day

- Enterprise DLT: reliability, scalability, performance
- Trusted blockchain platform for multi-party applications
- Works with 95% of Australia’s listed companies
- Market cap over $US 50B

- Daml, Digital Asset’s core technology, is a platform for building multi-party applications
- Automated business logic, rights & obligations with in-built permission control
- Language used to model the business rules for CHESS Replacement
- Interoperability with other DLT’s and traditional databases
Eliminate set up costs with a host of built in features ready to go

**DIY DLT**

- Smart Contract application
- Off-ledger application & data storage
- On-ledger data storage
- DLT operations & governance
- DLT permission management
- DLT availability & disaster recovery
- DLT software upgrades
- DLT node management
- DLT privacy & security
- DLT network & connectivity
- DLT dedicated infrastructure

**You manage**

**DLT as a Service**

- Smart contract application
- Off-ledger application & data storage
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**ASX Managed**

Without the need to run and support your own environment, you can reduce cost, complexity and risk
Thank you.