

# **EMBRACING INNOVATION PUTS THE ASX AT THE FOREFRONT OF NEW TECHNOLOGY**

The ASX is moving to a blockchain-based system that will unlock efficiencies for the entire financial services industry.

**BY DAVID KNIGHTS**

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— Dominic Stevens, ASX Ltd

**IN A BOLD** move, the Australian Securities Exchange (ASX) is forging ahead with a new generation post-trade settlement solution. The planned replacement of the Clearing House Electronic Sub-register System (CHES) for cash equities clearing and settlement uses Distributed Ledger Technology (DLT) and heralds the next wave of transformation for the Australian financial services industry.

The ASX has steadily progressed toward its vision of replacing the 25-year-old CHES technology for equities clearing and settlement functions by 2021, in what has been reported as the first industrial-scale blockchain-based system for a stock exchange globally.

The ASX’s application of blockchain-based DLT has been described as microeconomic reform for the digital age and will unlock significant efficiencies for customers and the financial services industry.

NAB is working closely with the ASX to support the adoption of new DLT CHES platform and we are excited to be part of this change.

“ASX and Australia led the world in dematerialising and removing paper share certificates from the stock market with the introduction of CHES in the ‘90s,” says Dominic Stevens, Chief Executive of ASX Limited.

“We are now continuing our history of innovation by providing a replacement of the CHES system with new features, global standards and distributed ledger technology (DLT). Replacing CHES with a DLT based system lays a foundation for the market to leverage this infrastructure investment and realise efficiencies and develop new solutions in ways not previously possible,” he says.

### Real-time data

The DLT based CHES system will offer existing functionality along with the option to take up new features and connect with perfectly synchronised source data. The switch to synchronised real-time data will provide a solution to the long-standing inefficiencies associated with transaction matching and reconciliation.

Being uniquely positioned as the only full service domestic bank with a custody business, NAB can participate in all possible applications of the technology in financial services.

There are currently about 100 ASX participants who will need to transition to the new platform, including multiple NAB group business units.

We will continue to support post-trade processing accepting clients’ existing messaging formats, and will also be uplifting SWIFT messaging standards to ISO20022 (a standard for electronic data interchange) to ensure all NAB group participants can transition seamlessly to the new generation CHES platform.

### Inbuilt trust features

DLT by its very nature is coded with inbuilt trust features such as the use of mutualised rules in Smart Contracts. We see this as a positive step towards streamlining the effort required to complete asset lifecycle management processes such as corporate actions and transaction reconciliation processes.

The ASX can see a future environment where more participants in the trading value chain will have access to not only the validated, authenticated source of truth of their data but also a marketplace of technology applications based on a digital smart contract language (DAML). This will reduce the time to complete operational tasks and enable richer and more efficient exchanges of trade information.

Over time the following benefits may also be realised:

- Faster settlement of trades than the current T+2
- Innovation of functionality available to investors and issuers
- Third party data access and analytics, including regulatory oversight

### Implementation timeline

The ASX plans to have the platform implemented and fully tested for transition of all existing participants in April 2021. Refer to the timeline below for milestones.

### The role NAB plays

NAB has mobilised a project team to ensure all our investor clients are enabled to settle trades on the new CHES platform when it goes live. We will continue to monitor advancements in DLT capability to ensure the solution provided to NAB best serves our Corporate and Institutional clients.

We will continue to keep you updated. As a Corporate & Institutional client we encourage you to get involved in one of the ASX webinars, review the stakeholder engagement calendar of events on the [ASX website](#) or [contact your NAB banker](#).

