



# Media Release

7 December 2017

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## ASX selects distributed ledger technology to replace CHES

ASX today announces its intention to replace CHES using distributed ledger technology (DLT) developed by its technology partner Digital Asset (DA).

CHES (Clearing House Electronic Subregister System) is the system used by ASX to record shareholdings and manage the clearing and settlement of equity transactions in Australia. It was world-leading when introduced in the 1990s, providing name-on-register functionality, electronic communications and removing paper share certificates. It continues to be a robust and reliable system. ASX is now taking the opportunity to replace CHES with a next generation post-trade platform using contemporary technology.

Today's decision follows the successful build of enterprise-grade DLT software for core equity clearing and settlement functions, and the completion of extensive suitability testing by ASX and DA over the past two years. The testing confirms ASX's confidence in the functional, capacity, security and resilience capabilities of DA's application of DLT to meet the needs of Australia's financial marketplace and maintain the highest regulatory and operational standards. The testing included two independent third party security reviews of DA's technology.

The testing was conducted in parallel with a stakeholder consultation program, which included briefing of regulators, to enable ASX to develop a comprehensive understanding of what the market wants in replacing CHES.

ASX will now work with stakeholders on finalising the scope of Day 1 functionality for the new system, drawing on its extensive consultation that will continue in 2018. Day 1 functionality and the proposed timing for transition are expected to be released for market feedback at the end of March 2018.

The new system will be operated by ASX on a secure private network where participants are known, 'permissioned' to have access, and must comply with ongoing and enforceable obligations.

The system will be designed without access barriers to non-affiliated market operators and clearing and settlement facilities. It will also give ASX's customers choice as to how they use ASX's post-trade services. Customers will be able to connect in a similar way they do today, with the addition of using contemporary global ISO 20022 messaging, or they may interact directly with the distributed ledger. The transition period to the new system will be determined in consultation with stakeholders.

**Dominic Stevens, ASX Managing Director and CEO**, said: "ASX has been carefully examining distributed ledger technology for almost two-and-a-half years, including the last two years with Digital Asset, in order to understand its potential application. Having completed this work, we believe that using DLT to replace CHES will enable our customers to develop new services and reduce their costs, and it will put Australia at the forefront of innovation in financial markets. While we have a lot more work still to do, today's announcement is a major milestone on that journey."



**Peter Hiom, ASX Deputy CEO**, said: “ASX has consulted extensively on the needs and priorities for replacing CHES, including with customers, share registries, software vendors, other exchanges and industry associations. I am very grateful for their input and support. We’ve given over 80 DLT system demonstrations to more than 500 attendees, and conducted over 60 CHES replacement workshops for more than 100 organisations from the global financial services industry.

“ASX has also formed a strong partnership with Digital Asset over the past two years, and we’re confident we have chosen the right partner. Together, we look forward to continuing to work with the industry as we finalise the requirements and the roadmap for implementation of the new system.”

**Blythe Masters, Digital Asset CEO**, said: “After so much hype surrounding distributed ledger technology, today’s announcement delivers the first meaningful proof that the technology can live up to its potential. Together, DA and our client ASX have shown that the technology not only works, but can meet the requirements of mission critical financial infrastructure.”

Coinciding with today’s decision, ASX will exercise its pro-rata right to participate in DA’s recent Series B fundraising and subscribe for US\$3.5 million convertible notes. ASX and DA have agreed to work exclusively on DLT in Australia and New Zealand. This agreement applies while the Day 1 functionality of the new system is being finalised, and will continue subject to agreement of the full contractual arrangements for the development and support of the new system. These decisions underscore ASX’s strong commitment to working with DA to unlock the benefits of DLT.

#### **About ASX**

ASX operates at the heart of Australia’s financial markets. Our integrated listings, trading, clearing and settlement businesses provide customers with efficient access to and exchange of capital, management of risk, and provision of data and other solutions. We operate across multiple asset classes including equities, fixed income, commodities and energy. ASX is the global leader in A\$ and NZ\$ financial markets, one of the top 10 securities exchanges in the world and the largest interest rate derivatives market in Asia. We have trading and information hubs in many of the world’s major financial centres, attract company listings from all around the globe and are based in Australia, which has one of the five largest investable assets pools in the world. ASX operates and invests in the infrastructure that promotes the stability and development of Australia’s financial markets. We advocate for regulations that support investors and issuers, promote market integrity and strengthen Australia’s global competitiveness. Our vision is to be the world’s most respected financial marketplace. More information about ASX can be found at [www.asx.com.au](http://www.asx.com.au)

#### **About Digital Asset**

Founded in 2014, Digital Asset has over 135 employees in offices in New York, London, Zurich, Budapest, Sydney and Hong Kong, serving global clients like the ASX and DTCC. Since launch, Digital Asset has sought complementary talent and technology by acquiring four companies: Hyperledger, Bits of Proof, Blockstack and Elevance. In 2016, the firm became a founding premier member of the Linux Foundation’s open source initiative Hyperledger, to drive the adoption and standardization of Distributed Ledger Technology. [www.digitalasset.com](http://www.digitalasset.com)

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