



Monetary Authority  
of Singapore

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**JOINT MEDIA RELEASE**

**MAS and SGX partner Anquan, Deloitte and Nasdaq to harness blockchain technology for settlement of tokenised assets**

Singapore, 24 August 2018... The Monetary Authority of Singapore (MAS) and Singapore Exchange (SGX) today announced a collaboration to develop Delivery versus Payment (DvP)<sup>1</sup> capabilities for settlement of tokenised assets across different blockchain platforms. This will allow financial institutions and corporate investors to carry out simultaneous exchange and final settlement of tokenised digital currencies and securities assets, improving operational efficiency and reducing settlement risks.

2 Three companies, Anquan, Deloitte and Nasdaq have been appointed as technology partners for this project. They will leverage on the open-source software developed and made publicly available in Project Ubin Phase 2. The project will produce a report that examines the potential of automating DvP settlement processes with Smart Contracts<sup>2</sup> and identify key design considerations to ensure resilient operations and enhanced protection for investors. The report will be released by November 2018.

3 Sopnendu Mohanty, Chief FinTech Officer of MAS, said, "Blockchain technology is radically transforming how financial transactions are performed today, and the ability to transact seamlessly across blockchains will open up a world of new business opportunities. The involvement of three prominent technology partners highlights the commercial interest in making this a reality. We expect to see further growth in this space as FinTechs leverage on the strong pool of talent and expertise in Singapore to develop innovative blockchain applications and benefit from the new opportunities created."

4 Tinku Gupta, Head of Technology at SGX, and Project Chair, said, "This initiative will deploy blockchain technology to efficiently link up funds transfer and securities transfer, eliminating both buyers' and sellers' risk in the DvP process. This is a collaborative innovation

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<sup>1</sup> Delivery versus Payment (DvP) is a settlement procedure where securities and monies are simultaneously exchanged to ensure that delivery of securities occurs if and only if the corresponding payment is made.

<sup>2</sup> Smart Contracts are self-executing contracts where contractual terms or business logics are codified as software code to be executed upon the fulfilment of pre-defined conditions.

bringing together multiple players to pursue real-world opportunities that will benefit the ecosystem.”

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### **Additional Information**

[Project Ubin](#) started in November 2016 as an industry collaboration to explore the use of Distributed Ledger Technology (DLT) for clearing and settlement of payments and securities. This is with the aim of understanding DLT’s potential in making financial transactions and processes more transparent, resilient and at lower cost.

The first two phases of Project Ubin focused on domestic inter-bank payment and settlement.

- Phase 1 achieved the objectives of producing a digital representation of the Singapore dollar for interbank settlement, testing methods of connecting bank systems to a DLT, and making the MAS Electronic Payment System (MEPS+) interoperate with the DLT for automated collateral management.
- Phase 2 successfully developed software prototypes of three different models for decentralised inter-bank payment and settlements with decentralised netting of payments in a manner that preserves transactional privacy. The source-codes and technical documentations are available for public access under Apache License, Version 2.0. Central banks, financial institutions, as well as academic and research institutions are encouraged to tap on the open source-codes to facilitate their experiments, research and innovation.

## **Annex A – Quote Sheet**

The technology partners for this project are Anquan Capital Pte Ltd., Deloitte and Nasdaq.

Max Kantelia, Co-founder of Anquan Capital	“Anquan is proud to be invited by SGX to join this important initiative to support Project Ubin. Anquan’s involvement is a follow-on to a successful earlier trial with SGX on BondChain. This utilised Anquan’s proprietary combination of high on-chain scalability, decentralised security and privacy preserving features based on a hardware root of trust.”
Ho Kok Yong, Financial Services Industry Leader, Deloitte Southeast Asia	<p>“Deloitte is excited to partner SGX and MAS on this initiative and extend our expertise in blockchain technologies in conjunction with our APAC Blockchain Lab to make this visionary project a success.</p> <p>Using two different open source blockchain technologies to implement and design the Distributed Ledger Technologies (DLT) prototype, we are able to mitigate counterparty risks in DvP (Delivery versus Payment) and achieve DvP settlement finality with clearing members. This will also enable transactions to be facilitated in a secure and transparent way, in turn strengthening investors’ experience and confidence.”</p>
Magnus Haglind, Senior Vice President and Head of Product Management, Market Technology, Nasdaq	“In our experience of developing projects to leverage blockchain to improve market and operational efficiencies, the willingness to collaborate by cross-industry parties was – and is – the most essential component for success. As we partner to develop technological capabilities to bridge between blockchains from both SGX and MAS, we are excited to join forces in backing and advancing Singapore’s focus on building a Smart Financial Centre ecosystem.”

### **About the Monetary Authority of Singapore**

As Singapore's central bank, the Monetary Authority of Singapore (MAS) promotes sustained, non-inflationary economic growth through the conduct of monetary policy and close macroeconomic surveillance and analysis. It manages Singapore's exchange rate, official foreign reserves, and liquidity in the banking sector. As Singapore's integrated financial supervisor, MAS fosters a sound financial services sector through its prudential oversight of all financial institutions in Singapore – banks, insurers, capital market intermediaries, financial advisors, and stock exchanges. It is also responsible for well-functioning financial markets, sound conduct, and investor education. MAS works with the financial industry to promote Singapore as a dynamic international financial centre. It facilitates the development of infrastructure, adoption of technology, and upgrading of skills in the financial industry.

### **About Singapore Exchange (SGX)**

Singapore Exchange is Asia's leading and trusted market infrastructure, operating equity, fixed income and derivatives markets to the highest regulatory standards. As Asia's most international, multi-asset exchange, SGX provides listing, trading, clearing, settlement, depository and data services, with about 40% of listed companies and 75% of listed bonds originating outside of Singapore.

SGX is the world's most liquid offshore market for the benchmark equity indices of China, India, Japan and ASEAN and offers commodities and currency derivatives products. Headquartered in AAA-rated Singapore, SGX is globally recognised for its risk management and clearing capabilities. For more information, please visit [www.sgx.com](http://www.sgx.com).

For media queries, please contact:

Bridgitte Lee  
Assistant Director (Communications)  
Monetary Authority of Singapore  
Tel: +65 6229 9262  
Email: [bridgitte\\_lee@mas.gov.sg](mailto:bridgitte_lee@mas.gov.sg)

Yee Kai Pin  
Vice President  
Marketing & Communications  
Singapore Exchange  
+65 6713 6455  
[kaipin.yee@sgx.com](mailto:kaipin.yee@sgx.com)