SC Ventures by Standard Chartered Bank and Giesecke+Devrient Complete the First Central Bank Digital Currency Transactions on the Universal Digital Payments Network

Singapore – 5th December 2023. In a significant milestone demonstrating the benefits of digital currency transactions, SC Ventures by Standard Chartered Bank and Giesecke+Devrient (G+D) have successfully completed a proof-of-concept (PoC) on the Universal Digital Payments Network (UDPN), executing real-time cross-border test transactions between different types of Central Bank Digital Currency (CBDC) systems representing different distributed ledger technology (DLT) and non-DLT representations of currency.

The goal of the Central Bank Digital Currency Systems and Cross-Border Payments PoC was to demonstrate how commercial banks can integrate two different types of CBDC systems into their banking infrastructure and perform end-to-end multilateral cross-currency transfers via the UDPN. The trials of Central Bank Digital Currency Systems and Cross-Border Payments demonstrated the ability to successfully integrate both direct and indirect, as well as DLT-based and non-DLT CBDC technologies. In the indirect model, commercial banks manage CBDC wallets and settlements directly on the UDPN, while the central bank handles wholesale settlement between commercial banks and keeps all transaction records. In the direct model, the central bank manages the wallets and conducts settlements directly within a centralized CBDC system. The direct model of a CBDC system was G+D's CBDC solution Filia®, a non-DLT system with its APIs connected to the UDPN infrastructure via a UDPN Transaction Node. Filia, being a token-based CBDC, is designed with interoperability in mind and can be integrated into both traditional account-based environments and DLT solutions. The indirect model of a CBDC system is implemented as an on-chain DLT-based solution by the UDPN engineers. Commercial bank participants, through their own instances of UDPN Business Nodes, can actively engage in various activities, such as CBDC issuance (for issuing banks), wallet creation, linking wallets to bank accounts and KYC systems, fiat-CBDC exchange, AML/CFT compliance, and initiation of CBDC transfers, swaps, and settlement.

The showcase demonstrated comprehensive cross-currency transfers, covering various processes like FX conversion, liquidity management, and CBDC issuance of both retail and wholesale CBDCs (rCBDCs and wCBDCs). The participants observed dramatic improvement in the efficiency of cross-border transactions by reducing costs, improving speed, and augmenting data sharing and transparency. The transactions were executed across 10 systems distributed among five entities, indicating the UDPN's capability to manage distributed operations and collaborate across multiple entities and systems.

Over 130 countries globally are currently investigating, developing, or have already launched CBDCs according to CBDC Tracker[1]. The Bank for International Settlement (BIS) expects 24 central banks to have digital currencies in circulation by 2030[2] and it is estimated that CBDC transactions will increase by 260,000% from $100 million in 2023 to $213 billion in 2030[3]. The International Monetary Fund has reported that CBDC adoption would give access to a significant part of the 1.6 billion unbanked people in developing countries[4]. Additionally, a full-scale CBDC implementation has the potential to reduce cross-border transaction costs by around 80%, which is expected to be $100 billion annually[5].

[1] CBDC Tracker: Today's Central Bank Digital Currencies Status (2023)
[2] BIS Papers: Making headway – Results of the 2022 BIS survey on central bank digital currencies and crypto (2023)
[3] Juniper Research: CBDCS ~ A NEW WAVE IN PAYMENTS (2023)
[4] International Monetary Fund: Central Bank Digital Currency and Financial Inclusion (2023)
[5] Ekberg, Jason; Chia, Tek Yew; Ho, Michael: Unlocking $120 Billion Value in Cross-border Payments

Thorsten Neumann, CTO, SC Ventures
"SC Ventures is excited to have participated in the successful completion of PoC #10 on the UDPN. This proof of concept not only demonstrates the integration of diverse CBDC systems but also the frictionless transfer of cross-border transactions. Through this PoC, we've demonstrated the potential infrastructure of the financial system of the future," said Thorsten Neumann, CTO at SC Ventures.

Dr. Raoul Herborg, Managing Director CBDC at G+D.
"Business and commerce globally depend on cross-border payments. Central Bank Digital Currencies must therefore be able to work together quickly, easily and securely across national borders. A cross-border retail CBDC would furthermore provide cost-effective access to financial services to migrant workers globally and offer them financial inclusion," comments Dr. Raoul Herborg, Managing Director CBDC at G+D.

Announced in Davos during the World Economic Forum week in January, UDPN is a distributed ledger technology (DLT) underpinned messaging backbone that provides interoperability between the fast-growing number of regulated stablecoins and CBDCs to enable seamless connectivity between any business IT system and regulated digital currencies. The network was developed with contributions from global IT engineering and solutions provider GFT, decentralised cloud infrastructure company Red Date Technology, and tier one financial service providers. The UDPN Alliance is currently running a series of 12 PoCs with multiple global banks, technology companies, and payment service providers that allow participants to explore different use cases and scenarios.

The UDPN Alliance believes that the future of money is digital, sovereign, and regulated – but it is widely recognised that much of today's payments infrastructure is analogue, fragmented, and expensive. Digital money will make cross-border transactions simpler, cheaper, and faster - and it is expected to become increasingly integrated with the regulated financial system as its use grows in consumer and wholesale payments. UDPN is a gateway for businesses and financial institutions to use regulated digital currencies in cross-border transactions, across a wide spectrum of use cases.

Parties interested in exploring our PoC portfolio or joining the UDPN Alliance are invited to visit the UDPN official website at https://www.udpn.io or contact us at contact@udpn.io.

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About G+D
Giesecke+Devrient (G+D) is a global SecurityTech company headquartered in Munich, Germany. G+D makes the lives of billions of people more secure. The company shapes trust in the digital age, with built-in security technology in three segments: Digital Security, Financial Platforms and Currency Technology.
G+D was founded in 1852 and today has a workforce of more than 14,000 employees. In the fiscal year 2022, the company generated a turnover of 2.53 billion euros. G+D is represented by 123 subsidiaries and joint ventures in 40 countries. Further information: www.gi-de.com.

About Standard Chartered Bank
Standard Chartered Bank is a leading international banking group, with a presence in 53 of the world's most dynamic markets and serving clients in a further 64. Our purpose is to drive commerce and prosperity through our unique diversity, and our heritage and values are expressed in our brand promise, here for good.
Standard Chartered PLC is listed on the London and Hong Kong Stock Exchanges.

About SC Ventures
SC Ventures is part of the Standard Chartered Bank Group that provides a platform & catalyst for Standard Chartered to promote innovation, invest in disruptive financial technology and explore alternative business models.

About GFT
GFT is a digital transformation pioneer. By leveraging next-generation technologies, we enable clients to boost their productivity with intelligent software solutions. We focus on Digital Finance, Enterprise AI & Data Solutions, and Platform Modernisation. For more please visit https://www.gft.com

About Red Date Technology
Red Date Technology is a decentralised cloud infrastructure company headquartered in Hong Kong that is dedicated to building next-generation public IT system infrastructures for internet communications, digital economies, and digital payments.