

## **HSBC And IBM Successfully Design And Test Interoperable Multi-Ledger Central Bank Digital Currency, Securities And Foreign Exchange Settlement Capability**

**Initiative is the Latest Innovation Resulting from Groundbreaking CBDC Experimentations Led by Banque de France**

**-- Cross-border, cross-CBDC and digital currency, cross-asset, cross ledger, end-to-end securities and foreign exchange transactions successfully executed;**

**-- Direct ledger interoperability achieved in a hybrid cloud environment across multiple technologies;**

**-- Demonstration of token-based FX settlement approach may be used for wholesale and retail use-cases.**



LONDON and NEW YORK, Dec. 16, 2021 /PRNewswire/ -- HSBC and IBM (NYSE: IBM) today announced the successful test of an advanced token and digital wallet settlement capability encompassing direct transactions between two central bank digital currencies (CBDC) in a hybrid cloud environment.

Several previous initiatives have individually demonstrated support for CDBC's, securities and/or foreign exchange. The experiment, which was designed and implemented within a four-month period, successfully executed across ledgers in support of such a complex multi-asset transactional scenario.

The experiment successfully tested an end-to-end transactional lifecycle covering CDBC's (minting and allocation), eBonds (Delivery Versus Payment (DVP) across primary issuance and secondary trading and coupon payments), and foreign exchange (pricing and Payment Versus Payment (PVP) settlement). It was conducted in a hybrid cloud environment incorporating public and private clouds and on premise data sources. Distributed ledgers based on IBM's Hyperledger Fabric and R3's Corda were integrated using IBM Research's Weaver interoperability tool.

The project was initiated by Banque de France - a leader among central banks in its breadth of CBDC experimentation - as part of a multi-pronged program to explore the potential of the digital Euro. HSBC, one of the world's largest foreign exchange banks, and IBM, a leading provider of consulting services and technology to the financial services industry, were chosen from a diverse field of highly-regarded financial and technology applicants.

Mark Williamson, Managing Director GFX eRisk, Partnerships & Propositions at HSBC, said: "We were pleased to be selected by Banque de France to conduct this exciting experiment. Our collaboration with IBM on this initiative has resulted in this milestone of streamlining front-to-back securities and foreign exchange DVP and PVP settlement processes. Interoperability across different DLT's and technologies was key in demonstrating how to save time, reduce market risk and improve security for transactions between central banks, commercial banks and in time our clients around the world."

"Our collaboration with HSBC, a leader in foreign exchange trading, and Banque de France, a pioneer in the use of central bank digital currency, to create a foreign exchange settlement capability that has the potential to reduce costs and improve security, is an important accomplishment that stands to benefit the global financial services industry broadly," said Likhith Wagle, General Manager Global Banking & Financial Markets at IBM. "As central banks around the world begin to explore the potential for CBDC to bring greater transparency and security to financial transactions, this initiative provides a comprehensive roadmap."

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### **HSBC Holdings plc**

HSBC Holdings plc, the parent company of HSBC, is headquartered in London. HSBC serves customers worldwide from offices in 64 countries and territories in its geographical regions: Europe, Asia, North America, Latin America, and Middle East and North Africa. With assets of \$2,969bn at 30 September 2021, HSBC is one of the world's largest banking and financial services organisations.

### **IBM**

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