Solution Powered by IBM Blockchain in Partnership with Stellar.org and KlickEx Group Collaboration with Banking Leaders to Accelerate Financial Exchange and Settlement Across Currency Corridors

Toronto - 16 Oct 2017: SIBOS: IBM (NYSE: IBM) today announced a new blockchain banking solution that will help financial institutions address the processes of universal cross-border payments, designed to reduce the settlement time and lower the cost of completing global payments for businesses and consumers. Using <u>IBM Blockchain</u>, and in collaboration with technology partners <u>Stellar.org</u> and <u>KlickEx Group</u>, the solution is intended to improve the speed in which banks both clear and settle payment transactions on a single network in near real time.

Today, making international payments can be costly, laborious and error-prone. Transactions in different currencies can require multiple intermediaries and take days or weeks to complete. According to the World Bank, initiatives to modernize payments and provide financial access could improve the flow of currency and commerce, and help achieve the goal of extending financial services to one billion people by 2020*.

The solution is already processing live transactions in 12 currency corridors across the Pacific Islands and Australia, New Zealand and the United Kingdom. Using a blockchain distributed ledger, all appropriate parties have access and insight into the clearing and settlement of financial transactions. It is designed to augment financial flows worldwide, for all payment types and values, and allows financial institutions to choose the settlement network of their choice for the exchange of central bank-issued digital assets.

For example, in the future, the new IBM network could make it possible for a farmer in Samoa to enter into a trade contract with a buyer in Indonesia. The blockchain would be used to record the terms of the contract, manage trade documentation, allow the farmer to put up collateral, obtain letters of credit, and finalize transaction terms with immediate payment, conducting global trade with transparency and relative ease.

IBM has convened an initial group of diverse banking leaders as part of the development and deployment process, including Banco Bilbao Vizcaya Argentaria, Bank Danamon Indonesia, Bank Mandiri, Bank Negara Indonesia, Bank Permata, Bank Rakyat Indonesia, Kasikornbank Thailand, Mizuho Financial Group, National Australia Bank, Rizal Commercial Banking Corp. (RCBC) Philippines, Sumitomo Mitsui Financial Group, TD Bank, Wizdraw (HK) of WorldCom Finance, and other financial institutions.

"With the guidance of some of the world's leading financial institutions, IBM is working to explore new ways to make payment networks more efficient and transparent so that banking can happen in real-time, even in the most remote parts of the world," said Bridget van Kralingen, Senior Vice President of IBM Industry Platforms. "Making distributed ledger technologies more interoperable is the latest example of IBM's leadership driving the rapid advancement of blockchain."

"TD Bank is pleased to participate along with fellow banking leaders to observe how IBM Blockchain can support more secure and effective payments solutions," said Rizwan Khalfan, EVP and Chief Digital and Payments Officer, TD Bank. "We're focused on innovation that adds value for our customers and our business, and blockchain presents a tremendous opportunity to transform and enhance payment systems, enabling us to continue to evolve the products and services we can offer."

In keeping with IBM's commitment to open source, the solution is run from the IBM Blockchain Platform on <u>Hyperledger Fabric</u> and was built in collaboration with Stellar.org, a non-profit organization and associate member of <u>Hyperledger</u>, and KlickEx Group, a regional financial services company in the Pacific region. Stellar is an open-source blockchain network that is purpose-built for the issuance and exchange of digital assets. Digital assets are issued on the Stellar network as a foreign exchange bridge to allow for near real time settlement. KlickEx Group serves as the founding financial institution for the region, servicing banks, retail clients and consumers using this new network.

IBM will continue to advance the solution with the goal of expanding capabilities in order to support central bank-issued digital currencies, securities, bonds and structured financial assets. IBM Blockchain provides high performance orchestration to move payments among parties. Each payment is immutable once recorded, and settlement instructions are provided via smart contracts on Hyperledger Fabric. Initially, Stellar will provide the network and digital asset to facilitate the settlement of transactions cleared on Hyperledger.

"This new innovation and collaboration represents a significant milestone for Stellar as well as the financial technology industry as a whole," said Jed McCaleb, co-founder of Stellar. "We are using blockchain technology in production to facilitate cross-border payments in multiple integrated currency corridors. Currently, cross-border payments tend to take up to several days to clear. This new implementation is poised to start a profound change in the South Pacific nations, and once fully scaled by IBM and its banking partners, it could potentially change the way money is moved around the world, helping to improve existing international transactions and advancing financial inclusion in developing nations."

The network is currently in use by <u>Advanced Pacific Financial Infrastructure for Inclusion</u> (APFII) members, a public-private partnership initially funded by the United Nations and SWIFT. It is expected to process up to 60 percent of all cross-border payments in the South Pacific's retail foreign exchange corridors including Australia, New Zealand, Fiji, Samoa and Tonga by early next year. Commercial banks such as Banco Bilbao Vizcaya Argentaria, Bank Danamon Indonesia, Bank Mandiri, Bank Negara Indonesia, Bank Permata, Bank Rakyat Indonesia, Kasikornbank Thailand, Mizuho Financial Group, National Australia Bank, Rizal Commercial Banking Corp. (RCBC) Philippines, Sumitomo Mitsui Financial Group, TD Bank, and Wizdraw (HK) of WorldCom Finance will be invited to join the network and help it expand in different parts of the world beginning in 2018.

"This is the first time anyone has made blockchain work at an institutionally viable scale," said Robert Bell, Chairman of APFII and founder of KlickEx Group. "Through KlickEx, the Pacific has had relatively low-cost, realtime, multi-currency payments for most of the past decade, and this project was a natural next step following our work to create seamless and borderless payments across the Pacific. We look forward to the results with using IBM Blockchain as we continue to push forward with our mission to remove payment friction across borders."

This production blockchain network with KlickEx and Stellar is one of many blockchain projects underway by IBM in financial services including foreign exchange payments netting, private equity administration, securities lending and trade finance.

About IBM

IBM is the leader in open-source blockchain solutions built for the enterprise. As an early member of Hyperledger, an open source collaborative effort created to advance cross-industry blockchain technologies, IBM is dedicated to supporting the development of openly-governed blockchains. IBM has worked with more than 400 clients across financial services, supply chains, IoT, risk management, digital rights management and healthcare to implement blockchain applications. For more information about IBM Blockchain, visit https://www.ibm.com/blockchain/

About KlickEx

<u>KlickEx.co</u> is an award winning regional cross-border payments system delivering financial infrastructure for emerging markets. It has been responsible for dramatic uptake in digital financial services in unbanked regions of the world, and lowering costs for banks, central banks and consumers in low liquidity currencies. KlickEx is also a regional compliance system, active in reducing compliance costs for countries linked to the system. KlickEx owns many of the Pacific's largest Money Transfer Operations, and is the region's largest clearing hub, accounting for over 60% of annual retail foreign exchange transactions (by value and volume) in key corridors. Its key presence is in the Pacific and Europe, and it is a founding member of <u>www.APFII.org</u> processing more than 775,000 transactions per second, per billion of population.

About Stellar.org

Stellar.org is a Silicon Valley based nonprofit organization that supports the Stellar network, a free, opensource network that connects diverse financial systems and lets anyone build low-cost financial services payments, savings, loans, insurance—for their community. The Stellar network enables money to move directly between people, companies and financial institutions as easily as email. This interconnectivity means more access for individuals, lower costs for banks, and more revenue for businesses. For more on Stellar.org, visit <u>http://www.stellar.org</u>.

*Source: World Bank UFA2020 Overview: Universal Financial Access by 2020. April 20, 2017. <u>http://www.worldbank.org/en/topic/financialinclusion/brief/achieving-universal-financial-access-by-2020</u>

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