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BIS's Project Nexus prototype successfully links Eurosystem, Malaysia and Singapore payment systems; partners in Indonesia, Malaysia, the Philippines, Singapore and Thailand to work towards wider payment connectivity

- To enhance cross-border payments, the BIS Innovation Hub Singapore Centre developed the Nexus concept of a first-of-its-kind multilateral network connecting multiple domestic instant payment systems (IPS).

- Nexus prototype successfully connected the test IPS of the Eurosystem, Malaysia and Singapore, allowing payments to be sent across the three using only mobile phone numbers.

- In the next phase, BIS and the central banks of Indonesia, Malaysia, the Philippines, Singapore and Thailand will jointly work towards connecting their domestic IPS through Nexus.

The BIS Innovation Hub Singapore Centre and partners today announced the successful connection of the test versions of three established IPS using the Nexus model and outlined the next phase of the project to work on the real-world potential of a multilateral network that could be scaled up across more countries.

The year-long collaboration included the Bank of Italy, Central Bank of Malaysia (BNM) and Monetary Authority of Singapore (MAS), plus the payment systems operators PayNet and Banking Computer Services (BCS). Test payments were initiated using only the mobile phone numbers or the recipients' company registration numbers via the Eurosystem's TARGET Instant Payment Settlement (TIPS), Malaysia's Real-time Retail Payments Platform (RPP) and Singapore's Fast and Secure Transfers (FAST) payment system.

The Nexus [report](#), published today, provides details on the early experiments and technical specifications for the multilateral interlinking of payment systems. The success of the experiment paves the way for the BIS Innovation Hub Singapore Centre to explore the practical applications of a distributed multilateral network.

Nexus aims to support the G20 [priorities](#) of improving the cost, speed, access and transparency of cross-border payments by connecting domestic IPS across multiple countries through a standardised and multilateral approach. It is designed to accommodate differences between IPS, rather than trying to homogenise them.

For the next phase of the project – in line with their November 2022 [Memorandum of Understanding on Cooperation in Regional Payment Connectivity](#) – Bank Indonesia, BNM, Bangko Sentral ng Pilipinas, MAS and the Bank of Thailand will leverage experiences from Phase I and Phase II of the project towards connecting their countries' IPS and facilitate cross-border transactions across a combined population of about 500 million people.





The Innovation Hub’s Singapore Centre will collaborate with these central banks to facilitate their design processes, as they aim to connect their domestic payment systems.

“I am thrilled at our success in connecting three national payment systems and the potential this indicates for Nexus. It paves the way for further development, and we look forward to collaborating with our partner central banks on the next phase of the project,” said Cecilia Skingsley, Head of the BIS Innovation Hub.

“Project Nexus is revolutionizing cross-border payments by linking multiple fast payment systems to create a globally scalable network. The Bank of Thailand is pleased to be a key part of this project, leveraging our experiences in developing Thailand and Singapore’s groundbreaking ‘PromptPay-PayNow’ linkage. Nexus aims to deliver a fast, efficient, and low-cost alternative for cross-border payments, with user experiences similar to those in domestic payments”, said Ms. Siritida Panomwon Na Ayudhya, Assistant Governor, Bank of Thailand.

Looking ahead, the BIS and the five central banks envisage that Nexus could eventually be implemented globally. To achieve this, they will aim to establish a Global Advisory Panel of central banks and payment system operators to advise on the project’s development beyond the Southeast Asian region. The Bank of Italy and the European Central Bank will be invited to join this panel.

Nexus concept

There are more than 60 instant payment systems around the world, which typically allow people to send money to each other within seconds. However, they are all domestic and international payments remain opaque, slow and expensive. Trying to connect domestic systems bilaterally with other countries would be expensive and complex, generating an exponential number of links.

The Nexus concept is of a standardised and multilateral network designed to accommodate the many differences between national systems. Rather than a payment system operator building custom connections for every new country that it wishes to connect to, it needs to establish only one connection to the Nexus network.

History of development

Inspired by the pioneering bilateral linkage between Singapore’s PayNow and Thailand’s PromptPay, launched in April 2021, the BIS Innovation Hub’s Singapore Centre developed the blueprint for a multilateral cross-border network.

In 2022, the BIS Innovation Hub Singapore Centre and a group of partners – the central banks of Italy, Malaysia and Singapore, plus the payment systems operators of the last two (BCS and PayNet, respectively) developed a successful working prototype, connecting the Eurosystem’s TIPS, Malaysia’s RPP and Singapore’s FAST.





The tests show that payments could be sent across the three jurisdictions using only the recipients' mobile numbers.

Bank of Thailand
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