





Cross-Border Payment Linkages – Project Nexus and the Push for a Multilateral Approach

Making cross-border retail payments and fund transfers faster, cheaper and more transparent

Making payments or sending money domestically within Malaysia has never been easier. Since the roll-out of our IPS in December 2018, users can make domestic retail payments just by scanning a QR code at merchants using DuitNow QR, or send money instantly via DuitNow Transfer simply by keying-in his or her mobile number. However, making payments overseas and sending money to another country remains a hassle. The fees and exchange rate could be high, not transparent, and at times, the recipient may only receive the money after a few days.

To mimic the benefits of faster, cheaper and more seamless payments that we currently enjoy domestically in the cross-border payment space, the Bank has been working on linking our IPS with other IPSs in several neighbouring countries. To date, we have established bilateral cross-border payment linkages for QR payments with Thailand, Indonesia and Singapore. This means that Malaysians travelling to these countries can make instant retail payments just by scanning QR codes displayed at participating merchants in these countries¹, and vice versa. Complementary work is also underway to enable P2P transfers between these countries (Diagram 1). This would enable a sender to transfer funds to a recipient in the other countries instantly simply by using his or her mobile or national identification numbers. These efforts have collectively contributed towards increased payment connectivity in ASEAN with nine live linkages² already operational.

Diagram 1: Status of Bilateral Linkages with Malaysia

Partner countries	Cross border QR payments	Cross border P2P fund transfers
Thailand 	Live	Under development
Indonesia 	Live	Under discussion
Singapore 	Live ³	Under development
Philippines 	Under development	Under discussion

Source: Bank Negara Malaysia

¹ Further details on the bilateral payment linkages can be found in the Annual Report 2021 spotlight article on 'Real-Time Payment System Linkages for Efficient Cross-Border Payments'.

² Seven cross-border QR payments: Cambodia-Thailand, Indonesia-Malaysia, Indonesia-Thailand, Malaysia-Thailand, Malaysia-Singapore, Thailand-Singapore, Thailand-Vietnam.

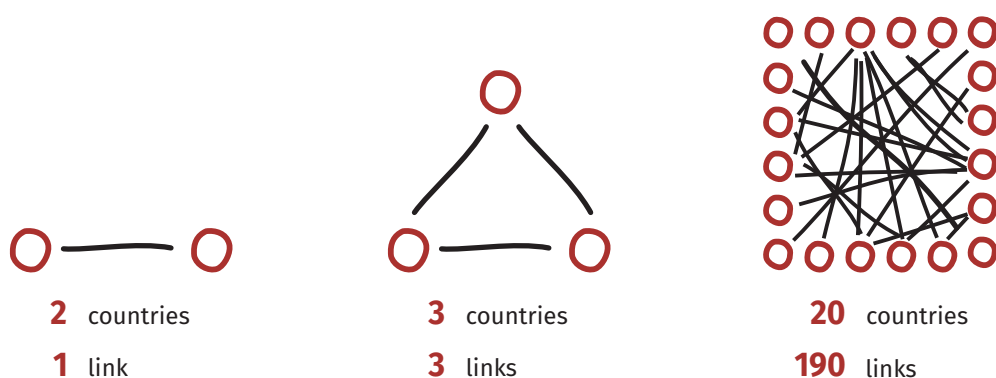
Two P2P fund transfers: Cambodia-Malaysia, Singapore-Thailand.

³ To go live on 31 March 2023.

A multilateral approach can address challenges in connecting IPS bilaterally

Given the region’s experience in building these linkages and their clear benefits, there has been growing interest from other countries to establish new bilateral payment linkages with ASEAN countries. However, a bilateral linkage with many different countries is highly inefficient (Diagram 2) for several reasons. Firstly, it can take significant time and resources to tailor each bilateral linkage to suit local infrastructure and requirements. Replicating the infrastructure across multiple countries can also be costly. Secondly, each bilateral linkage involves negotiations among many parties including the central banks, IPS operators, banks and other payment service providers to address operational matters such as user experience and payment settlement between banks in both countries. Dedicated resources are also needed to develop and test newly built systems.

Diagram 2: Scaling Up Bilateral Payment Linkages is Challenging due to the Amount of Effort and Resources Needed to Develop Each Linkage



Source: Bank for International Settlements (BIS)

Recognising the challenge in scaling up bilateral payment linkages, the Bank for International Settlements Innovation Hub (BISIH) in Singapore has developed a blueprint⁴ for multilateral cross-border payment connectivity. Known as Project Nexus, the Bank, BISIH, PayNet as well as central banks and IPS operators in Singapore and Italy undertook a one-year experiment to test if such a connectivity model is feasible. The experiment, which was completed in December 2022, demonstrated that a multilateral model for connecting IPSs is technically feasible. This successful Nexus solution included a test model (or Nexus gateway) and draft participant rules (or Nexus scheme). The gateway acts as a central platform for IPSs to connect to and manage instant cross-border payments and fund transfers and payment-related processes such as payment messaging, currency conversion, and compliance screening. The scheme outlines the roles and responsibilities of all participants in the Nexus solution. These include the IPS operators and payment services providers. It also outlines key operational processes of the Nexus model. During the experiment, cross-border payments were successfully credited into a beneficiary’s account within 60 seconds.

Despite the experiment showing that the Nexus solution is technically feasible, there are other factors that still need to be considered before it can be implemented in the real-world. One example is the governance arrangement for the entity that will eventually manage and operate the Nexus solution. This would require, among others, identifying the right structure, composition and voting mechanism for its board of directors that would appropriately represent the interests of various parties, while ensuring that decisions are made efficiently. Other factors include developing a viable business model for participating banks and other payment services providers, and establishing an appropriate supervisory oversight arrangement to ensure the solution remains safe and resilient.

(Detailed findings can be found in the Project Nexus report⁵)

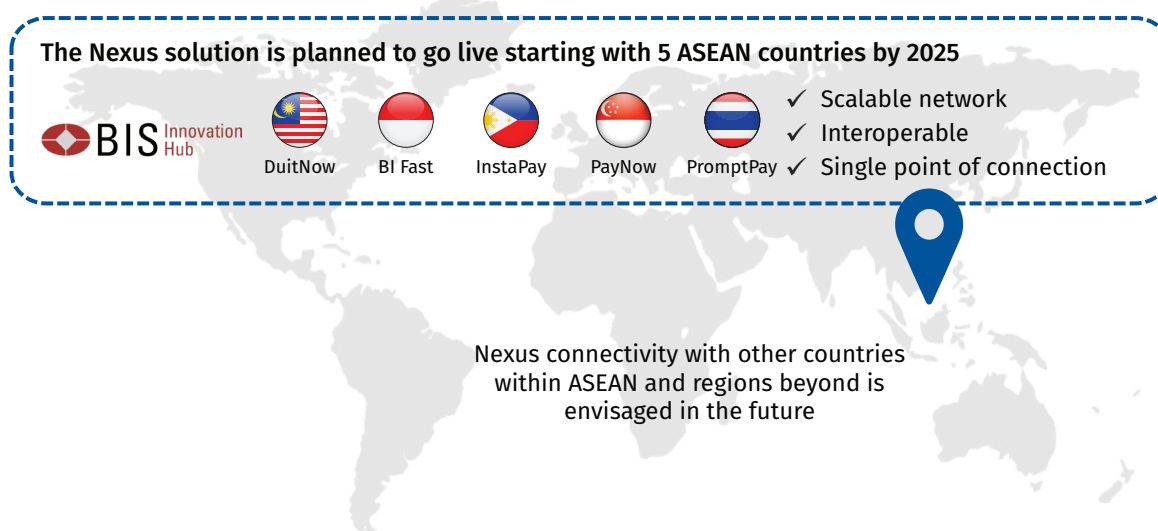
⁴ <https://www.bis.org/about/bisih/topics/fmis/nexus.htm>.

⁵ <https://www.bis.org/publ/othp62.pdf>.

Bringing Nexus to the real world, with ASEAN as the ‘first-mover’

Given the experience with bilateral payment linkages in the region, a push for multilateral payment connectivity is a natural next step for ASEAN. To realise this vision, the Bank has signed a Memorandum of Understanding (MoU) on Regional Payment Connectivity with the central banks of Indonesia, Philippines, Singapore and Thailand during the G20 Summit in Bali in November 2022. The five countries will participate in the next phase of Project Nexus which aims to translate the current Nexus solution into an operationally and commercially viable model by 2025. This project has tremendous potential for the region. Consumers would be able to enjoy cheaper, faster and more transparent payment and fund transfers among the participating countries in the future. It can also strengthen intra-regional trade and economic cooperation, and spur greater innovation in the payments space. Ultimately, it is envisaged to set the global benchmark for next-generation payment infrastructure that can be used by all, for cheaper and more transparent cross-border payments (Diagram 3).

Diagram 3: Multilateral Payments Connectivity between 5 ASEAN Countries and Beyond



Source: Bank Negara Malaysia