

Restricted

Press release

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BIS and central bank partners demonstrate that policy compliance can be embedded in cross-border transactions with Project Mandala

- Project Mandala addresses the significant challenges in maintaining compliance with disparate regulatory and policy frameworks across jurisdictions.
- Project Mandala successfully demonstrates the automation of compliance procedures for cross-border financial transactions.
- Project Mandala is a collaboration between the BIS Innovation Hub, the Reserve Bank of Australia, the Bank of Korea, Bank Negara Malaysia and the Monetary Authority of Singapore.

The Bank for International Settlements (BIS) and its central bank partners have successfully demonstrated with Project Mandala that regulatory compliance can be embedded in cross-border transaction protocols.

This experimental project is a collaboration between the BIS Innovation Hub Singapore Centre, the Reserve Bank of Australia, the Bank of Korea, Bank Negara Malaysia and the Monetary Authority of Singapore.

The project, which has now reached proof of concept stage, aligns with the G20 priority actions for enhancing cross-border payments, as it has the potential to reduce costs and increase transaction speed, while preserving regulatory compliance.

“Mandala is pioneering the compliance-by-design approach to improve cross-border payments without compromising privacy or the integrity of regulatory checks,” said Maha El Dimachki, Head of the BIS Innovation Hub Singapore Centre.

“We are optimistic about the potential of these early results to enhance cross-border payments,” she added.

Streamlining cross-border transaction compliance

Regulatory frameworks pertaining to cross-border transactions are essential to the safe and secure operation of the global financial system, but complying with disparate jurisdictional regimes presents challenges that have contributed to increased costs and affected the speed of transactions.

Project Mandala aims to increase the speed and efficiency of cross-border transactions by automating compliance procedures, enhancing transparency of country-specific policies and providing real-time reporting and monitoring for regulators and supervisors.

Key innovations and technical achievements

Project Mandala developed a compliance-by-design decentralised system that could help streamline cross-border payments by embedding regulatory compliance within a network of financial institutions and central banks. This decentralised architecture integrates three core components: a peer-to-peer messaging system, a rules engine and a proof engine.

It ensures that all necessary compliance checks have been completed before the payment instruction is initiated. Once all checks have been completed, the Mandala system automatically generates a compliance proof, which can accompany any digital settlement asset or payment instructions across borders.

To preserve privacy, the compliance proof can be verified without revealing underlying customer data.

The project proved its technical feasibility through two primary use cases:

1. **Cross-border lending between Singapore and Malaysia:** Mandala streamlined the compliance processes for capital flow management measures (CFM) and sanctions screening for financial institutions and facilitated real-time compliance monitoring for central banks.
2. **Cross-border financing for capital investments between South Korea and Australia:** Mandala automated the sanctions screening and CFM reporting requirements for an unlisted securities transaction.

Integration with digital asset and legacy systems

Mandala successfully integrates with both nascent digital asset settlement systems, such as a wholesale central bank digital currency, and traditional payment messaging systems like Swift.

This dual integration ensures the Mandala system's versatility and modularity in supporting both future digital asset ecosystems and existing financial infrastructures. For digital assets, Mandala deployed programmable compliance that can be embedded into smart contracts.

Ends.