G20 SOUTH AFRICA 2025

Solidarity
Equality
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Retail payments evolution: the rise of instant payments

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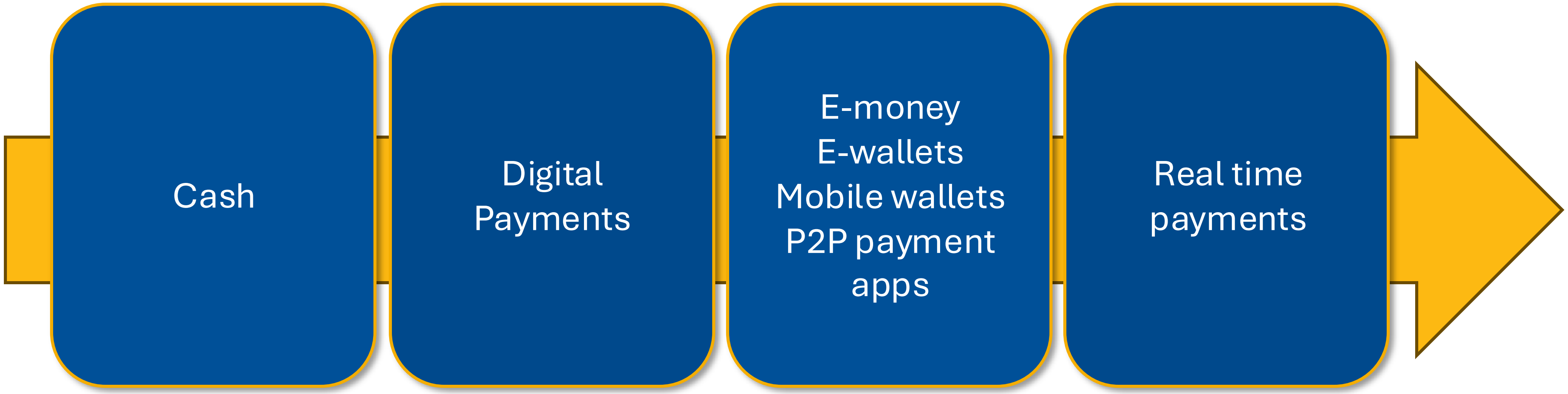
BIS Innovation Hub | NPCI भारतीय राष्ट्रीय भुगतान निगम NATIONAL PAYMENTS CORPORATION OF INDIA | भारतीय रिज़र्व बैंक Reserve Bank of India India's Central Bank | South African Reserve Bank

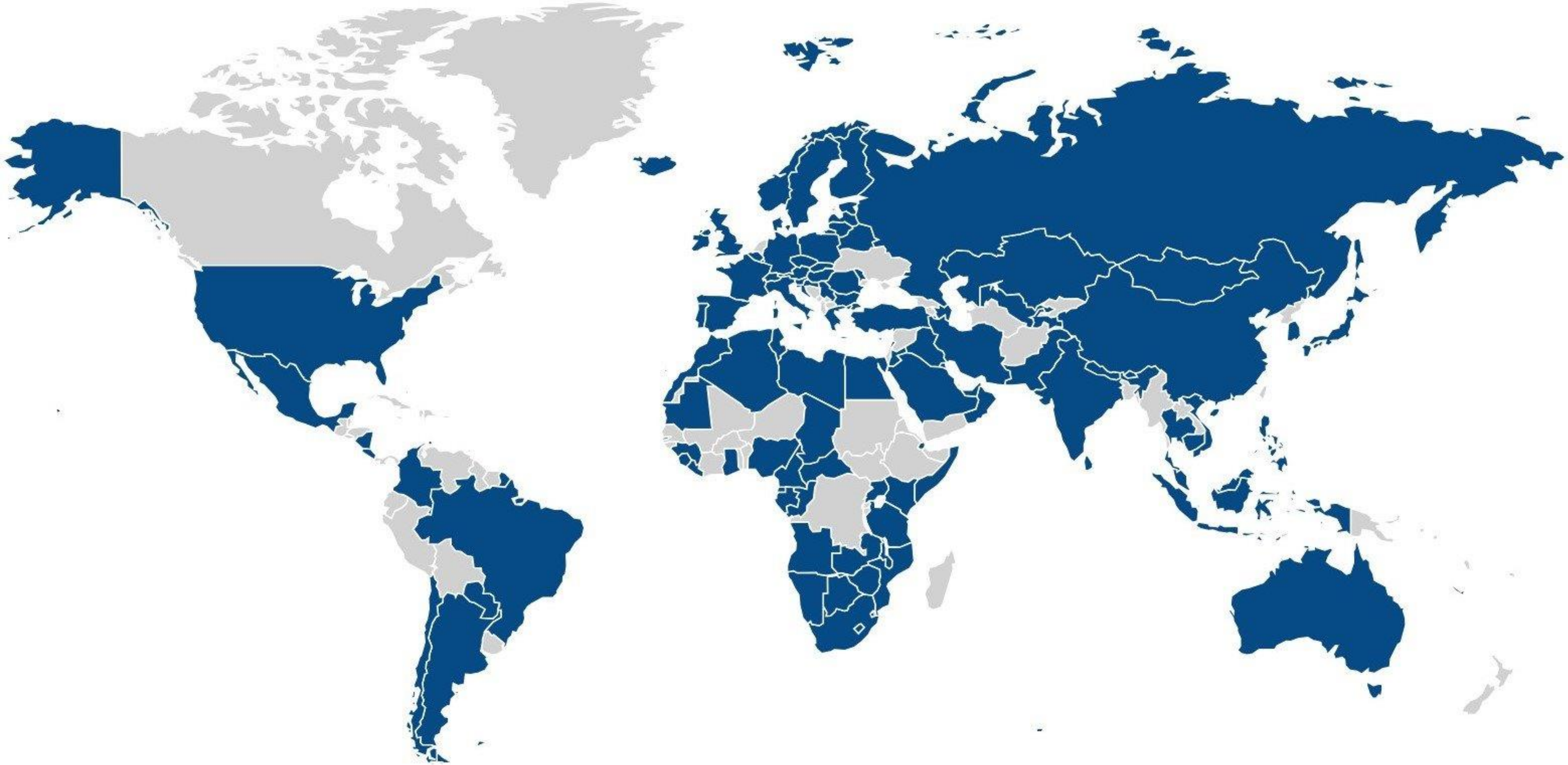
Presentation outline

- Evolution of payments: from cash to a myriad of electronic offerings
- Domestic instant payments: India and Sub-Saharan experiences and learnings
- Promising future of cross-border instant payments

Evolution of payments



Globally, over 75 countries have implemented fast payment systems (FPS)



Source: World Bank

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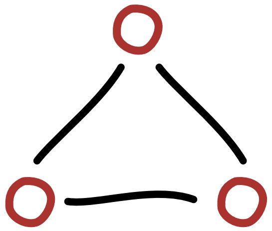
Instant payments systems interlinking

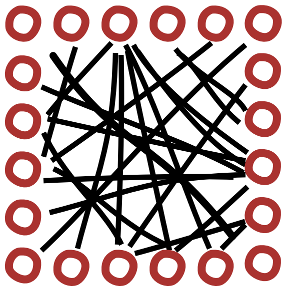
Every link requires a complex legal negotiation and technical integration project

Bilateral

2 countries **1** link



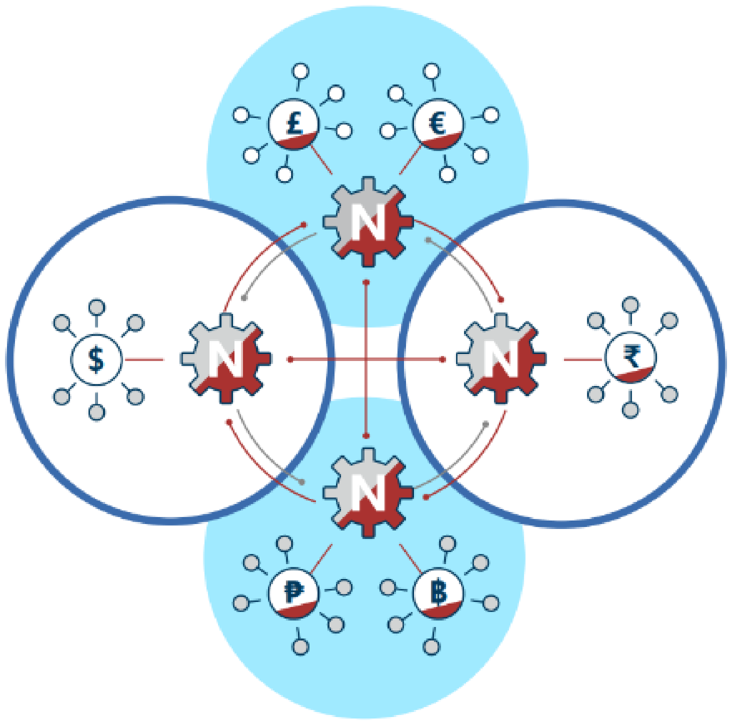
3 countries **3** links



20 countries **190** links

75 countries **2,775** links

Multilateral (Nexus)



Domestic instant payments: **India**

Key enablers: Jan Dhan Yojana, Aadhaar, and Mobile telecom expansion

Impact: financial inclusion and economic growth, empowering millions of citizens and MSMEs

UNIFIED PAYMENTS INTERFACE

From 0.1 mill trans Oct-2016 to 19+ billion mid-2026

85.5% of Indian households have access to UPI services

491 million users
65 million merchants
678 million merchants QRs
85% of all digital transaction

Domestic instant payments: **India**

Challenges:

- Cybersecurity
- Rural connectivity
- Digital literacy

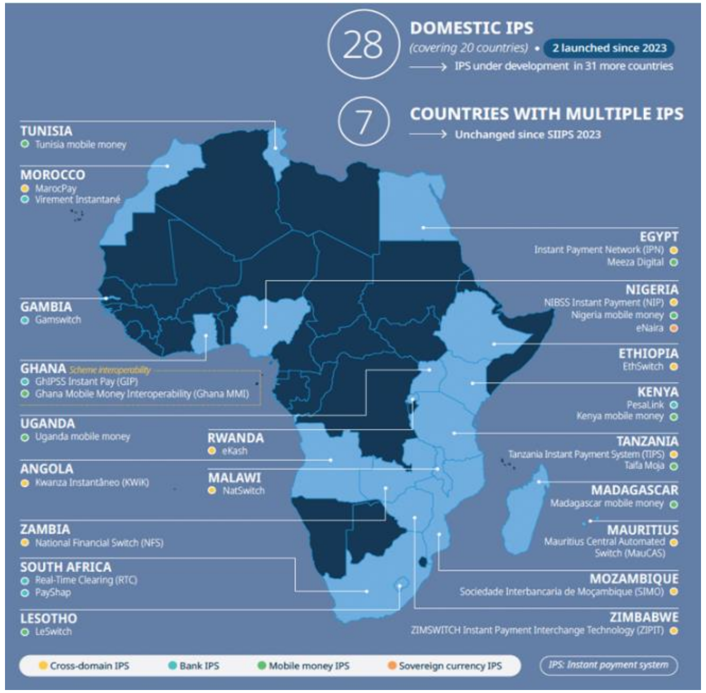
New opportunities:

- Domestically: credit integration, e-commerce and agriculture use cases
- International expansion by connecting to other instant payment systems

Domestic instant payments: **Sub-Saharan Africa**

Background and origin:

- 54 countries, 40 currencies, inequality
- Mobile money, pioneered by M-Pesa, revolutionised financial inclusion across Africa



Source: AfricaNenda

Impact: financial inclusion

- Account ownership, 34% to 58% of adults 2014-24

Challenges: fragmentation, limited interoperability, and persistent cash reliance

New opportunities: cross-border payment initiatives

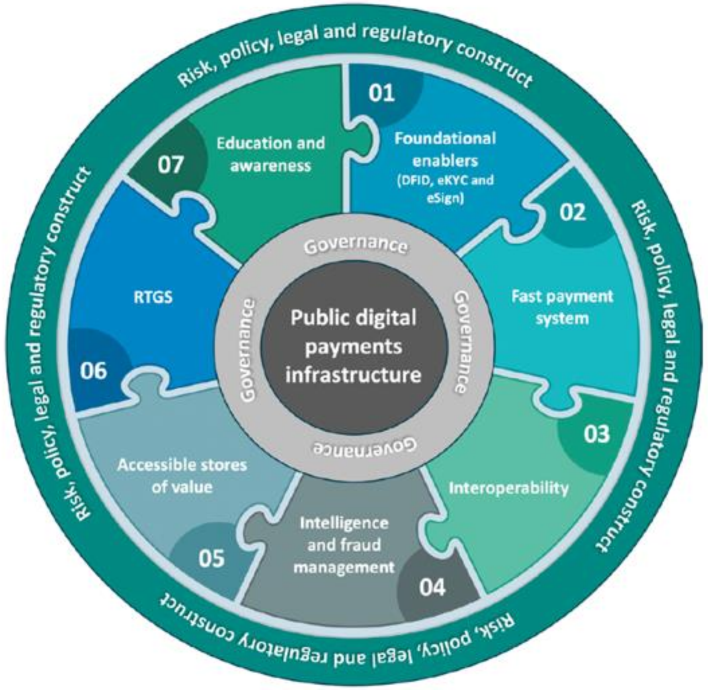
Domestic instant payments: **South Africa**

Background and origin: economy remained stuck between developed and developing

Impact: implementation of PayShap domestic fast payment system

Challenges: predominantly cash-based economy

New opportunities: South Africa's Payments Ecosystem Modernisation (PEM) programme



Promising future of cross-border instant payments

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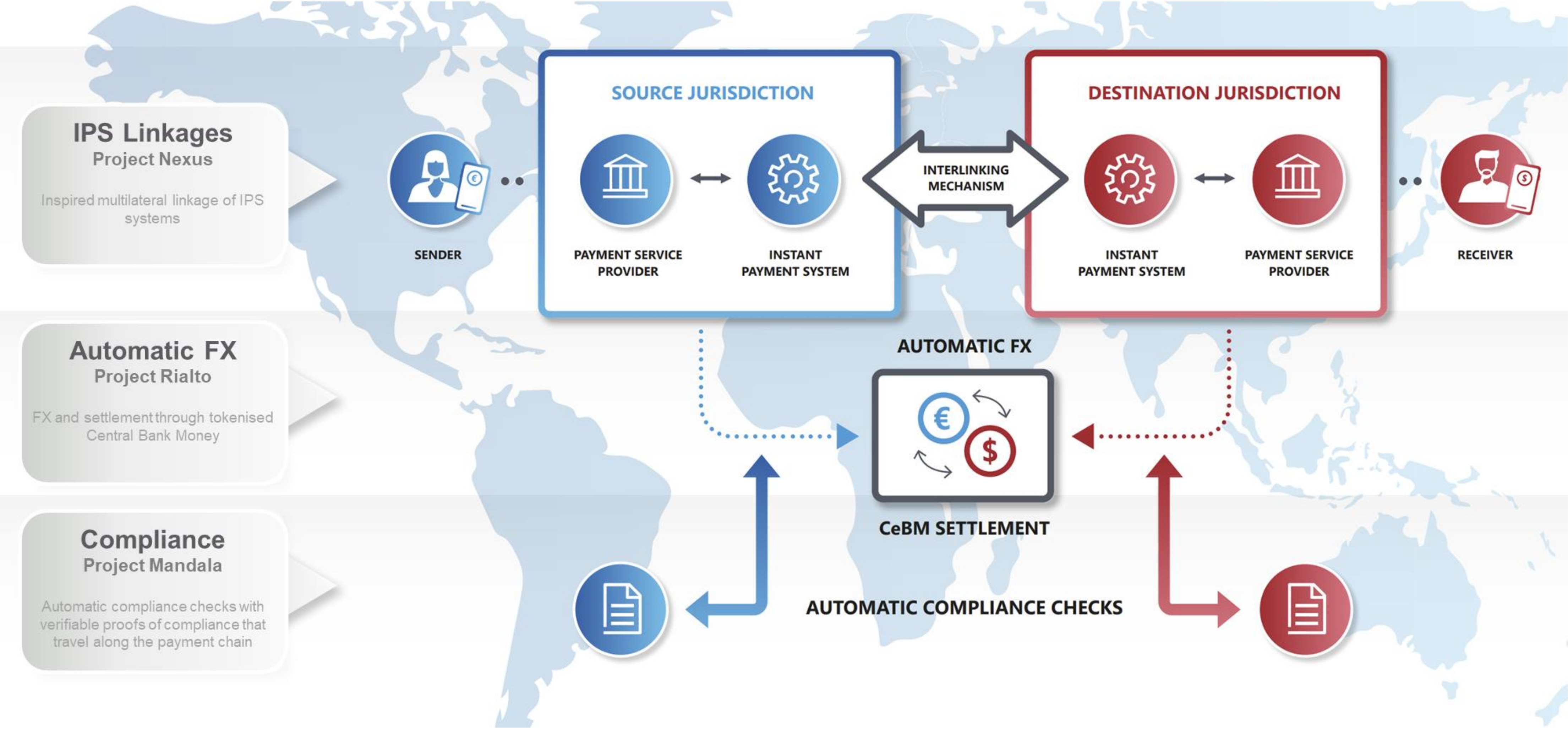
Overview of the priority themes and actions for achieving the G20 targets

- **Payment system interoperability and extension**
- **Legal, regulatory and supervisory frameworks**
- **Data exchange and message standards**

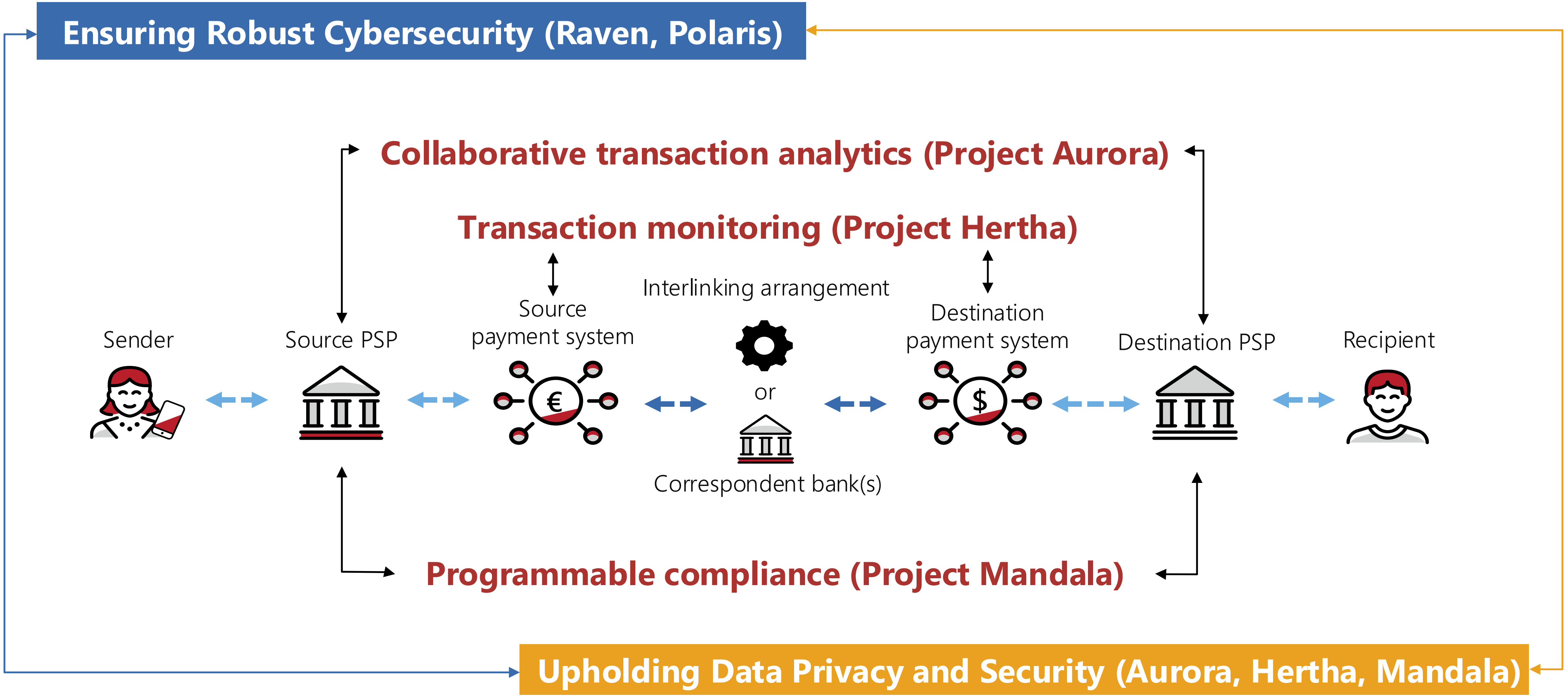
Source: FSB (2023), Priority actions for achieving the G20 targets, February.

- Interoperability of payment infrastructures
- Streamlining compliance and fighting financial crime
- Improving FX clearing and settlements

Start somewhere but imagine the future



Streamlining compliance and fighting financial crime through a **technology stack**



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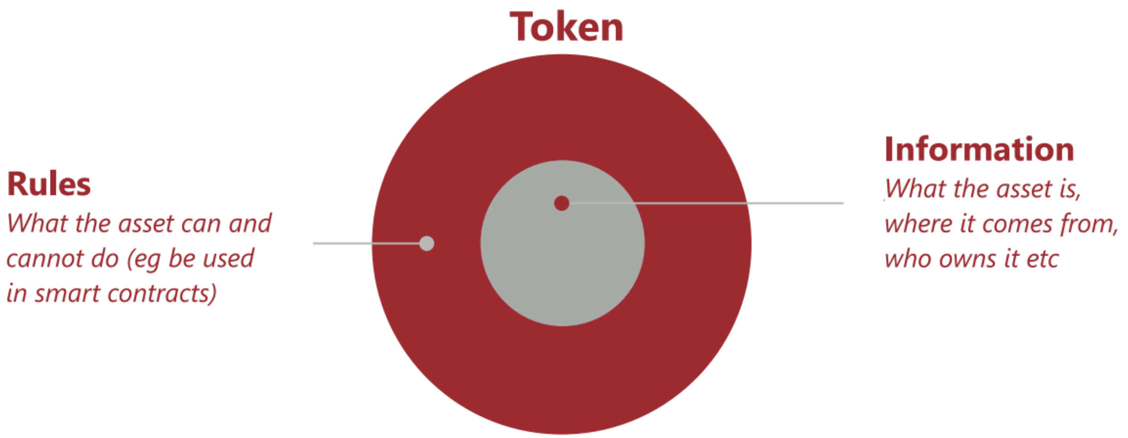
The future of money in a tokenized world

Tokens both define assets and specify what can be done with them — Graph 1



Source: Aldasoro et al (2023).

Source: [BIS Annual Economic Report 2023]

Tokenisation enables multiple assets and financial services deployed on shared ledgers bringing unique value

- **Programmability**
- **Atomicity**
- **Composability**

- **Improve the existing** – complement by overcoming inefficiencies of current architecture
- **Enable the new** – substitution through new contracting possibilities

Conclusion

Success in the future of both domestic and cross-border instant payments

- **Innovation and robust digital public infrastructure** built through interoperability, standardisation and systems interlinking
- Higher **public-private collaboration** to decrease fragmentation
- Alignment in purpose and **commitment to inclusion**
- **Design and governance** of payment systems are central to broader goals of economic development, financial stability, and social equity

Thank you