



## Expert Forum

# Instant payments systems - general information and key features



### **Twinning Project UA 19 ENI FI 01 19**

Strengthening the institutional and regulatory capacity of the National Bank of Ukraine to implement EU-Ukraine Association Agreement



# Instant payment system definition



payment system available 24/7/365 enables exchange of payments resulting in the real-time interbank clearing of payments and crediting of the payee's account (within seconds of payment initiation)



# Why instant payments?



Improving efficiency and speed of payments: real-time payments enable to move money quickly between customers, corporates and banks

Meeting market's and customers expectations by introducing innovative and convenient payments method

Customers needs and readiness to making payments in real time

Increasing the competitiveness of banks

Benefits for banks, customers and system operators

Expanding the scope of business by the system operators

# Insant payments use cases



P2P, B2B, B2C, C2B

mass payments  
(invoices, bills)

credits/ loans  
repayment

E-commerce

tax, administrative  
payments (B2G,  
C2G)

POS payments

remuneration

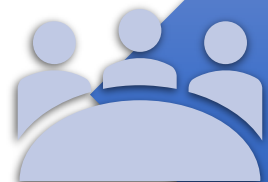
# Role of instant payments



New normal



Complementary service



Alternative for cash and card payments (in some cases)

# Instant payments vs card payments



## Instant payments

- Based on credit transfer
- Crediting of the beneficiary account in real-time
- Available 24/7/365
- Usually the customer pays the fees
- Lower fees for merchants than Merchant Service Charge for card acceptance
- Mainly domestic payments or limited to one currency
- Cross-currency payments in plans (e.g. P27 initiative, TIPS)
- Value added services – R2P, P2P mobile payments
- Proxy service - e-mail, mobile phone number etc. are used as a proxy to an IBAN
- Methods of payment initiation: mobile phone app (NFC, QR codes), internet banking, e-commerce
- Loyalty programmes – special bonus points, discounts
- Independence from international card schemes and global big tech providers

## Card payments

- Crediting of the issuing bank account and the beneficiary account is deferred (e.g. D+1)
- Free of charge for customers (in most cases in physical POS and e-commerce)
- Available 24/7/365
- Chargeback functionality
- Domestic and cross-border payments (with dynamic currency conversion)
- Methods of payment initiation: physical card, mobile phone app – tokenized card (NFC), e-commerce
- Loyalty programmes (money back programmes, other incentives)
- High reliance on international card schemes and global big tech providers

# Benefits for banks



Meeting customers' needs – increase the customer satisfaction



Opportunity to introduce new products based on instant payments – solutions in e- and m-commerce



Competitive advantage: instant payment systems are more and more popular on the market



Source of additional revenue



Building a modern and high-tech image of bank



Reduce payment costs and enable higher value services to customers

# Benefits for customers



Possibility of making immediate fund transfer anytime and anywhere



Avoid late payments penalty fees (applicable for loans, credit cards, invoices etc.)



Immediate crediting of beneficiary account



P2P instant payments as an alternative for cash (possibility of sharing a dinner bill with colleagues, lending some money to a friend)



C2B instant payments as an alternative for cash (paying your plumber for an emergency repair, faster delivery of goods, buying a used car without carrying an envelope full of cash)



# Benefits for merchants/corporates



Eliminate the risk for online merchants of not getting paid



Reduce late payments and speed up the payment of invoices



Immediate crediting of beneficiary account

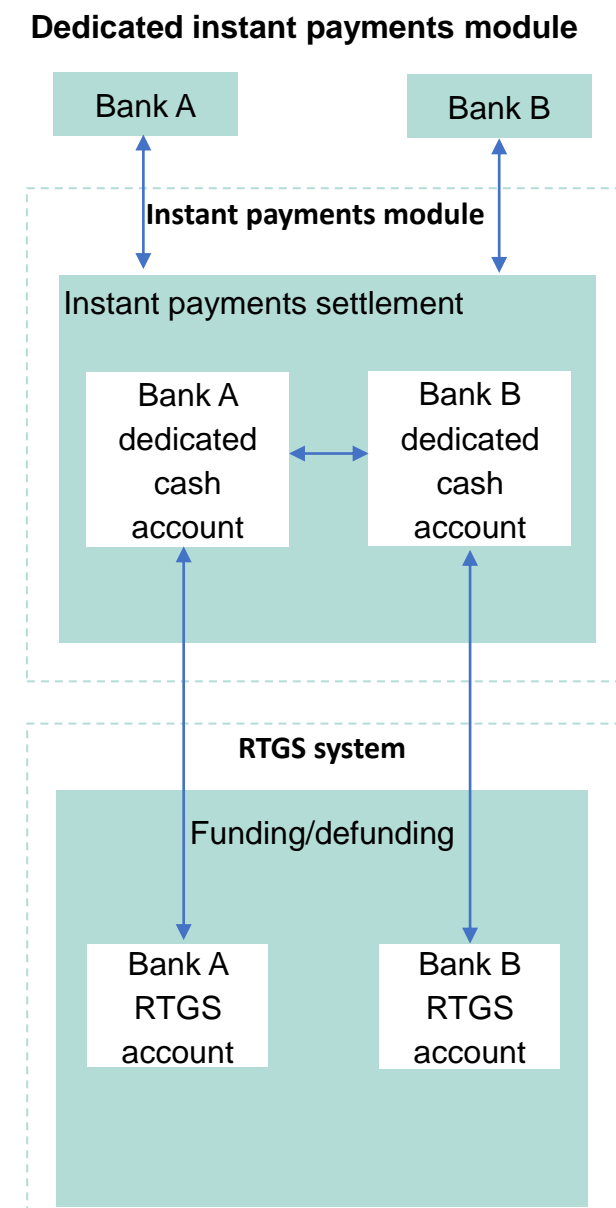
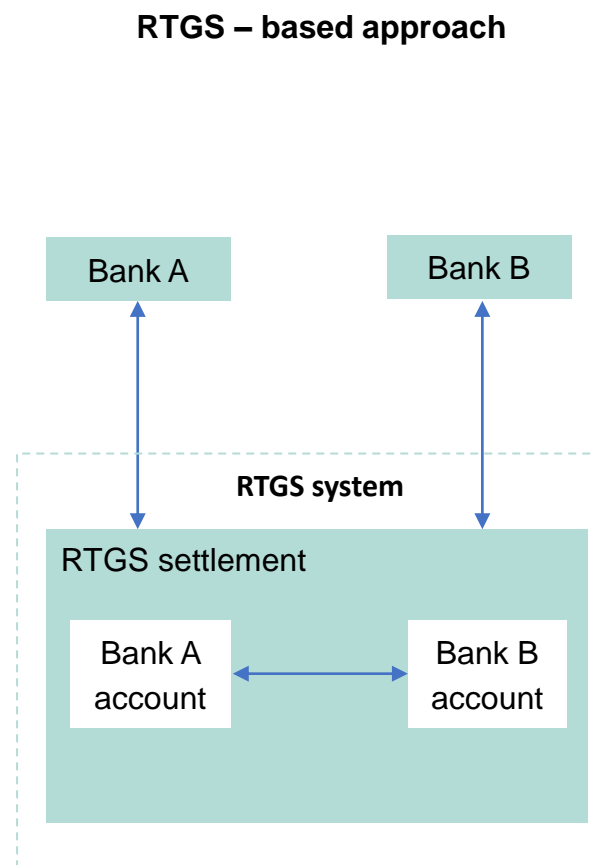
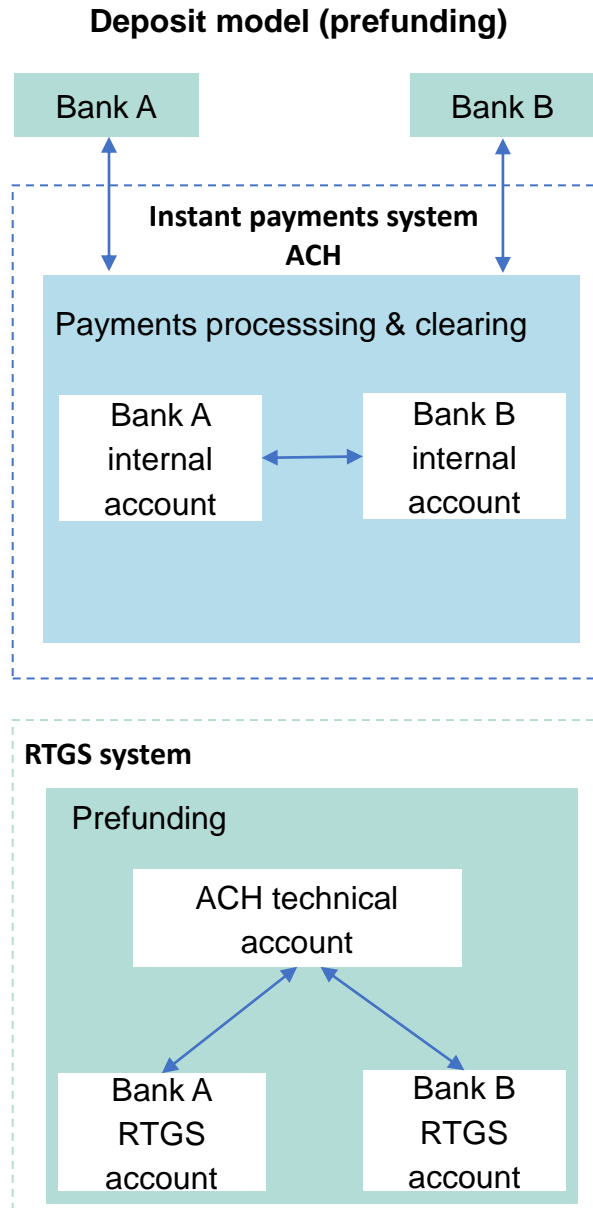


Lower costs – lower fees than Merchant Service Charge for card acceptance



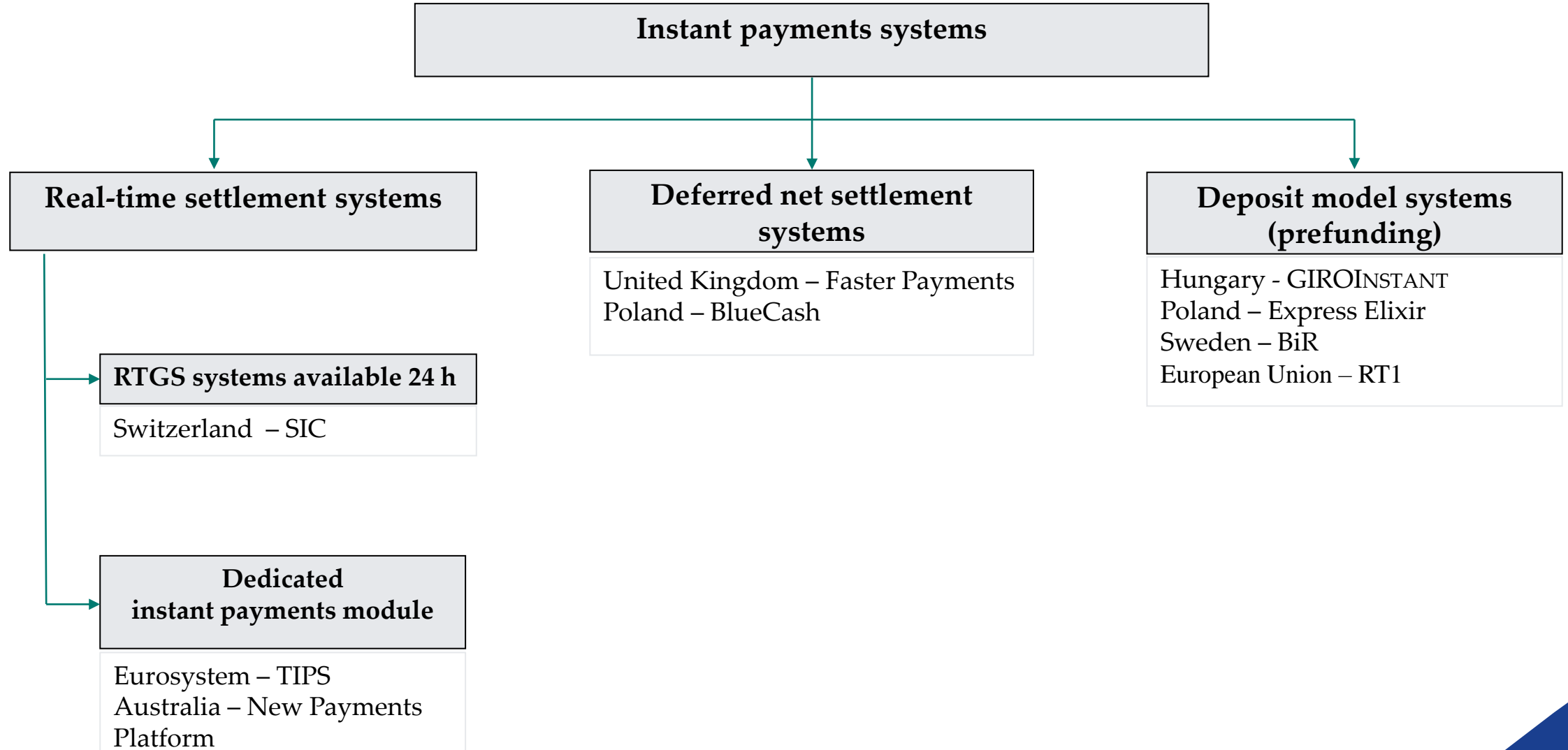
Cashflow improvement: businesses will be able to receive payments 24/7 (also during the weekend) and immediately spend and/or invest this money again

# Classification of instant payments systems



# Classification of instant payments systems

## Clearing & settlement



# Instant payments layers



## Scheme layer

- Regulated by the scheme owner
- sets-out rules, practices and standards for instant payments
- payment execution time
- message standard
  - ISO 20022, SWIFT FIN etc.
- value limits
- types of payments processed:
  - Credit transfer, POS payments, E-commerce, P2P, B2B, B2C etc.
- Overlay services
  - PROXY, R2P
- Participant reachability

## Clearing layer

- Regulated by the system operator
- rules and methods of payment processing
- Methods of payments authorisation
- participation criteria
- Fees
- Access and Connectivity

## Settlement layer

- Regulated by the system operator
- Central bank or commercial bank money
- Real time settlement
- Deferred net settlement
- Deposit model (prefunding)



# Live instant payments solution



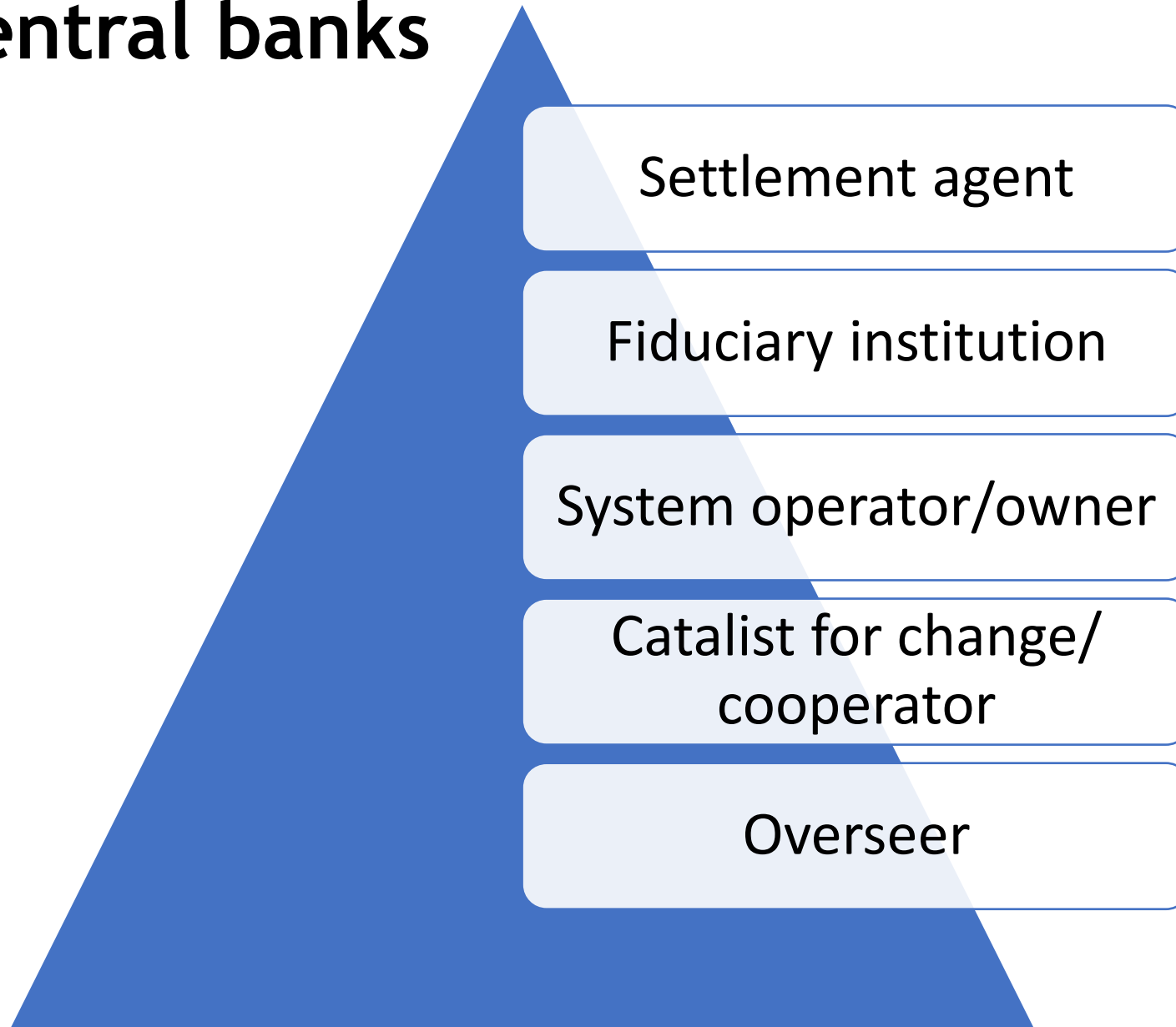
| Africa       | Asia         | Australia | Europe                    | North & South America |
|--------------|--------------|-----------|---------------------------|-----------------------|
| Ghana        | Saudi Arabia | Australia | Hungary                   | USA                   |
| Nigeria      | Bahrain      |           | Poland                    | Mexico                |
| South Africa | Singapore    |           | Eurosystem (19 countries) | Peru                  |
| Kenya        | Malaysia     |           | Sweden                    | Brazil                |
|              | Sri Lanka    |           | Denmark                   | Chile                 |
|              | India        |           | Norway                    |                       |
|              | Vietnam      |           | Iceland                   |                       |
|              | Thailand     |           | United Kingdom            |                       |
|              | Philippines  |           | Switzerland               |                       |
|              | Taiwan       |           | Bulgaria                  |                       |
|              | Hong Kong    |           | Turkey                    |                       |
|              | Japan        |           | Romania                   |                       |
|              | South Korea  |           | Czech Republic            |                       |
|              | China        |           |                           |                       |

# Instant payments solution under development or in plans



| Under development | In plans |
|-------------------|----------|
| Canada            | Ukraine  |
| Peru              | Colombia |
| Indonesia         |          |
| New Zeland        |          |
|                   |          |

# Role of central banks





# Role of central banks



## Settlement agent

- performing final settlements of payments cleared by ACHs

## Fiduciary institution

- maintaining technical escrow account in RTGS system for the needs of processing instant payments (prefunding model)
- guarantee the integrity of funds deposited on such an account in case of bankruptcy of the entity operating the system and their use only for the needs of payments clearing in a system

## System operator/owner

- operating RTGS system
- operating instant payments system or dedicated instant payments module

## Catalist for change/cooperator

- involved in the process of setting-up instant payments systems
- cooperation with institutions developing instant payments systems
- conducting analyzes on instant payments
- Organising public consultations

## Overseer

- performing oversight of instant payment systems
- performing an assessment of the instant payments systems in terms of their compliance with national regulations and international standards, e.g. PFMI
- authorised to issue approvals for the operation of instant payments systems and to introduce amendments to payment systems



# Advisor



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