



## Recent work of the CPMI \*

### **Regional Payments Week 2015**

*Santo Domingo, Dominican Republic, 1<sup>st</sup> December 2015*

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\* Views expressed are those of the authors and not necessarily those of the BIS or CPMI

# The Committee on Payments and Market Infrastructures

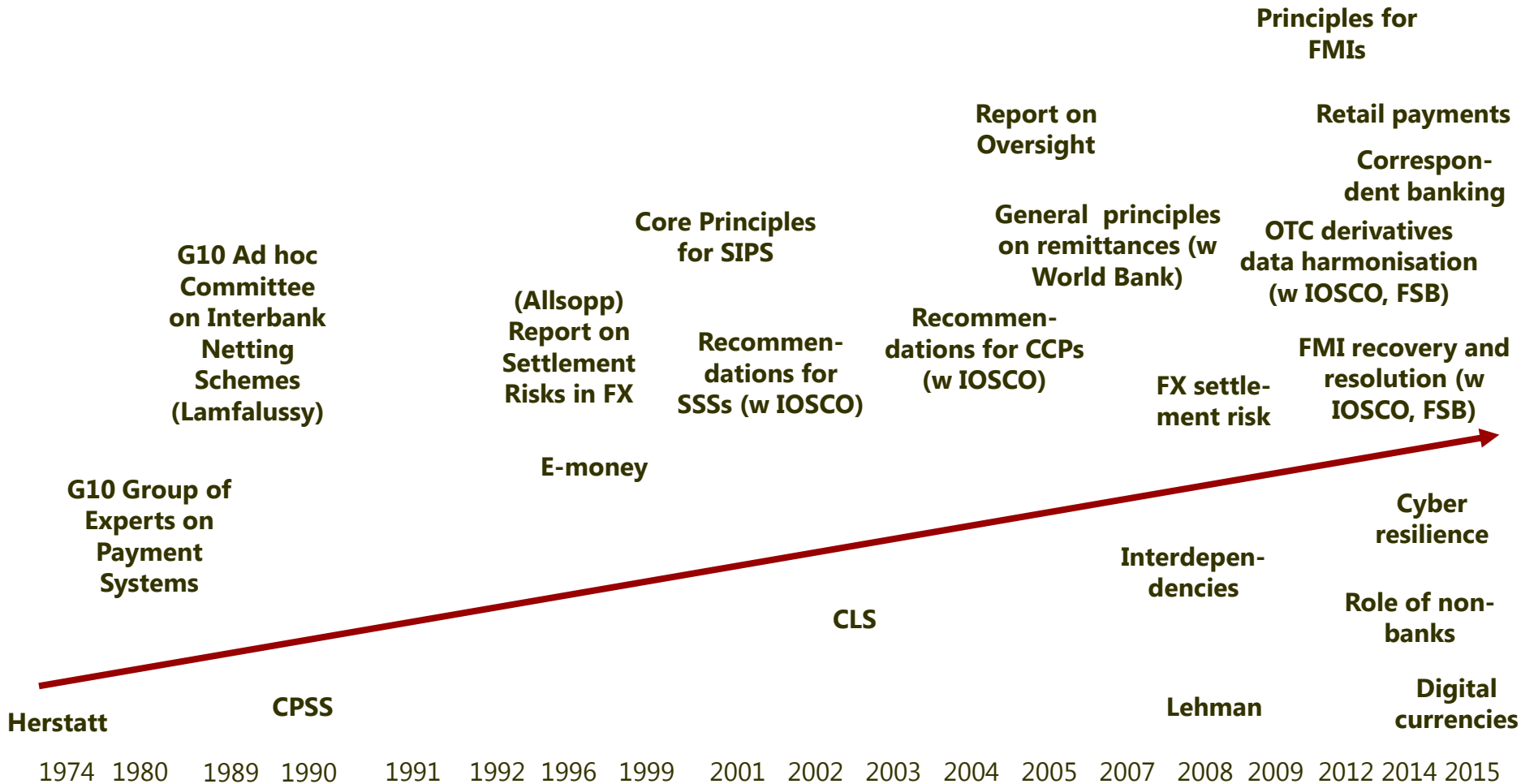
**Mandate** (revised September 2014)

To ***promote the safety and efficiency of payment, clearing, settlement and related arrangements***, thereby supporting *financial stability* and the *wider economy*

- ⇒ The CPMI is a global ***standard setting body*** in the field of payments, clearing and settlement systems and related activities
- ⇒ It also serves as a ***forum for central banks*** to *monitor and analyse developments* in large value and retail payment, clearing and settlement arrangements, schemes and instruments both within and across jurisdictions
- Establishment in 1990 as *Committee on Payments and Settlement Systems* (until 1 September 2014)
- Hosted by the Bank for International Settlements in Basel), reporting to the Governors of the Global Economy Meeting



# Evolution of CPMI activities



# Top CPMI priorities

- Evolution of oversight approach
- Implementing the Principles for Financial Markets Infrastructures (FMIs)
- Cooperative arrangements
- FMI resilience (incl. cyber resilience) and recovery
- (Retail) payment developments



# Evolution of central bank oversight

Oversight of [payment and settlement] [systems] is a central bank function whereby the objectives of safety and efficiency are promoted by monitoring existing and planned systems, assessing them against these objectives and, where necessary, inducing change

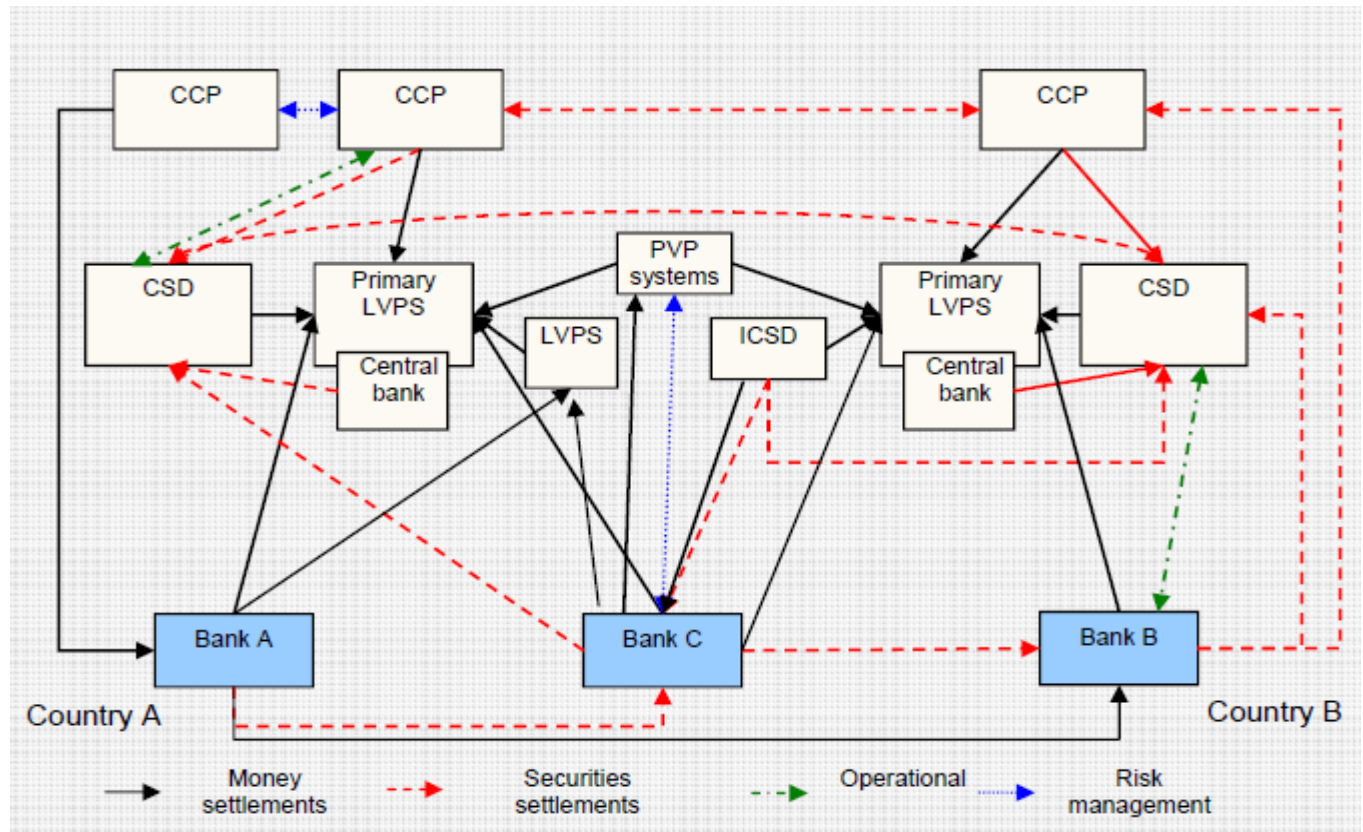
*Central bank oversight of payment and settlement systems, May 2005*

- Oversight of what? – Systems? FMIs? Arrangements? Others?
- Oversight by whom? – Central banks? Other authorities?
- Oversight what for? – Safety and efficiency
- Oversight how? – Monitoring, assessing, inducing change



# Increasing complexity

- *Interdependencies*
  - Links
  - Tiering
- *Cross-border*
  - services
  - participation
- Non-banks
- Quasi-systems



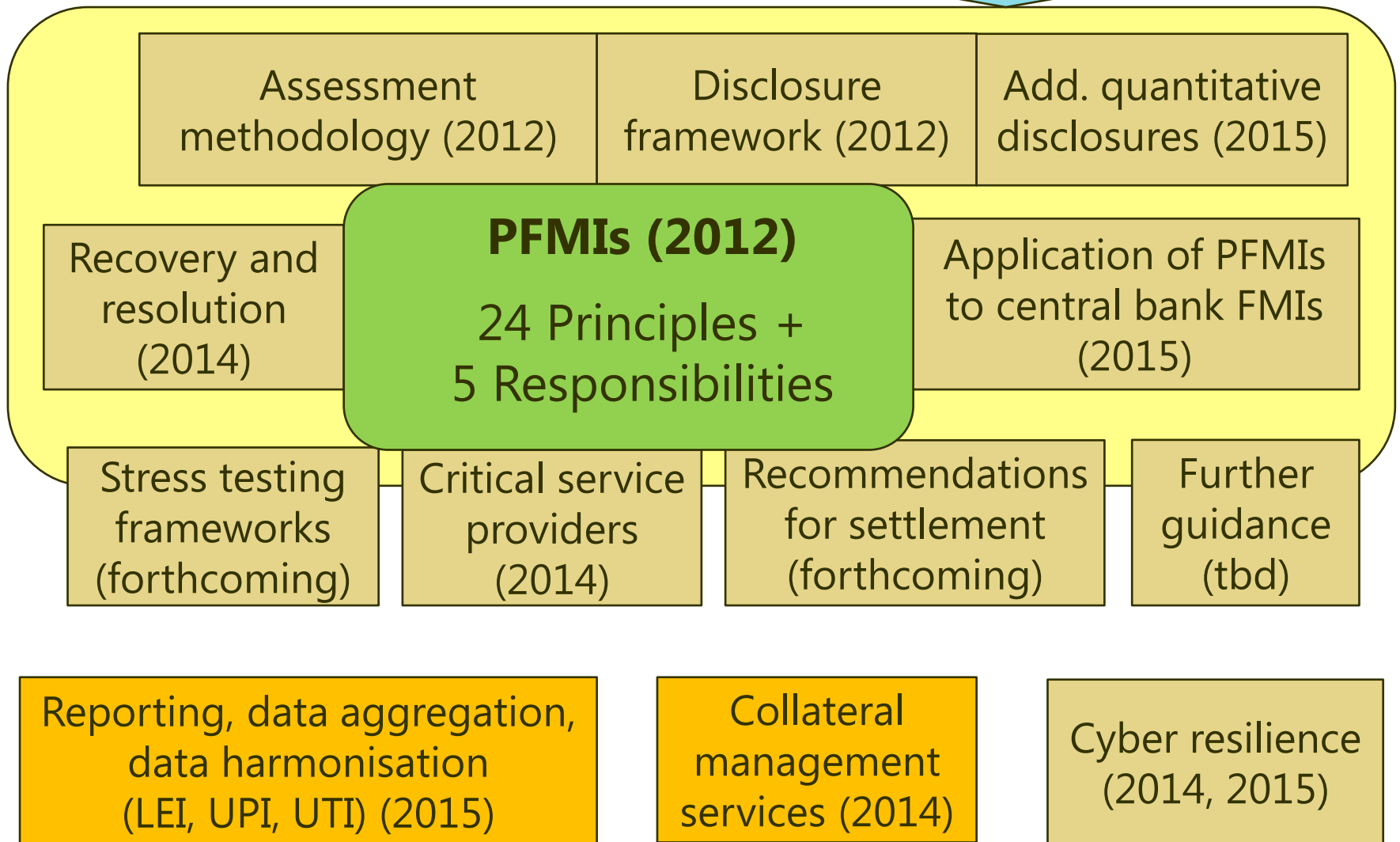
## Multiple authorities:

- Central Banks
  - Market regulators
  - Bank supervisors
  - Financial stability bodies
  - Competition authorities
  - Resolution authorities
  - ...
- ⇒ *also cross-border*



# The PFMI's "ecosystem"

Implementation  
monitoring



## Status of CPMI standards

- *Not legally binding* as such but national regulation increasingly based on them (sometimes by way of incorporation) because of:
  - Power of the arguments they contain ("*soft law*")
  - *Commitment of members* of the relevant bodies
  - Compliance of CCPs with the PFMI is a condition for banks to benefit from lower capital requirements
- Subject to *implementation monitoring* by CPMI-IOSCO (and FSB monitoring, IMF and World Bank FSAPs)
  - Implementation may be rules-based, principles-based or a combination of both
  - Focus on consistency of outcomes at the level of FMIs across jurisdictions





# PFMI implementation monitoring

- *Full, timely and consistent implementation of the PFMI*s is fundamental to ensuring the safety, soundness and efficiency of key FMIs and for supporting the resilience of the global financial system
- *CPMI and IOSCO members are committed* to adopt the principles and responsibilities in line with G20 and FSB expectations
- In April 2013, CPMI and IOSCO *started the process* of monitoring implementation of the PFMI
- Reviews are carried out in ***three stages***:
  - Level 1 - ensuring the *timely* implementation
  - Level 2 - ensuring *regulatory consistency*
  - Level 3 - ensuring consistency of *outcomes*



## Need for new or more stringent standards for FMIs?

FMIs are subject to **comprehensive international standards**, the CPMI-IOSCO *Principles for financial market infrastructures* (PFMI), issued in 2012 and subsequent complementary guidance (e.g. on *disclosures, recovery, cyber resilience*)

- **Are the standards being observed?**

- Lags in adopting and enforcing the standards
- Differences in interpreting the standards

⇒ *Time, peer pressure/monitoring and more guidance*

- **Are the standards enough? Are they effective?**

⇒ *Implementation monitoring, market-wide stock-take and analysis of the effects of the measures taken to see if systemic risk has been reduced enough*



# FMI risk management, recovery and resolution

## FMI Risk management

CPMI-IOSCO PFMI (2012)



## FMI Recovery

CPMI-IOSCO PFMI plus additional Guidance on FMI recovery (2014)



## FMI Resolution

FSB's "Key attributes of effective resolution regimes", including an FMI-specific annex (2014)

Responsibility of the FMI, overseen by the central bank etc

*Risk management* = "everyday" management of risk by the FMI, including dealing with anticipated problems

*Recovery* = the extreme end of risk management – dealing with the most extreme *financial* threats that could threaten its survival

Responsibility of the resolution authority

*Resolution* = an alternative regime to insolvency - to enable authorities to restore, restructure or wind-down an FMI without severe systemic disruption and without exposing taxpayers to loss



# Global TR aggregation and Global Identifiers

- Need to establish *centralised or other mechanisms* to produce and share *global aggregated data* that authorities need to fulfil their mandates and to monitor financial stability (work conducted by FSB jointly with CPMI and IOSCO)
  - legal constraints (secrecy and confidentiality rules)
  - technical issues (standardisation and harmonisation of data)
- Global *Legal Entity Identifier (LEI) System*
  - A global scheme for the issuance of legal entity identifiers that will *uniquely identify parties to financial transactions*
  - The *Regulatory Oversight Committee (ROC)* was established in January 2013 - CPMI is a member of the Executive Committee of the ROC
- Further work by CPMI and IOSCO on *Uniform Product and Transaction Identifiers* is on-going



## CPMI work on cyber resilience of FMIs

- In 2012 , set up of a CPMI working group to analyse cyber security issues, including representatives from IOSCO and BCBS
- **CPMI report** published in November 2014 - Key findings:
  - Diversity of goals (cyber-activism, fraud, terrorism, etc.)
  - Increasing sophistication of attacks - multiplicity of entry points
  - Disruption can entail comprehensive data/system integrity breach
  - Diversity of measures needed (IT, processes, people, communication) – focus on worst case scenarios and potential quick recovery mechanisms
- In 2014, CPMI and IOSCO set up a joint WG on cyber resilience (including BCBS and IAIS representatives) working on **further guidance**

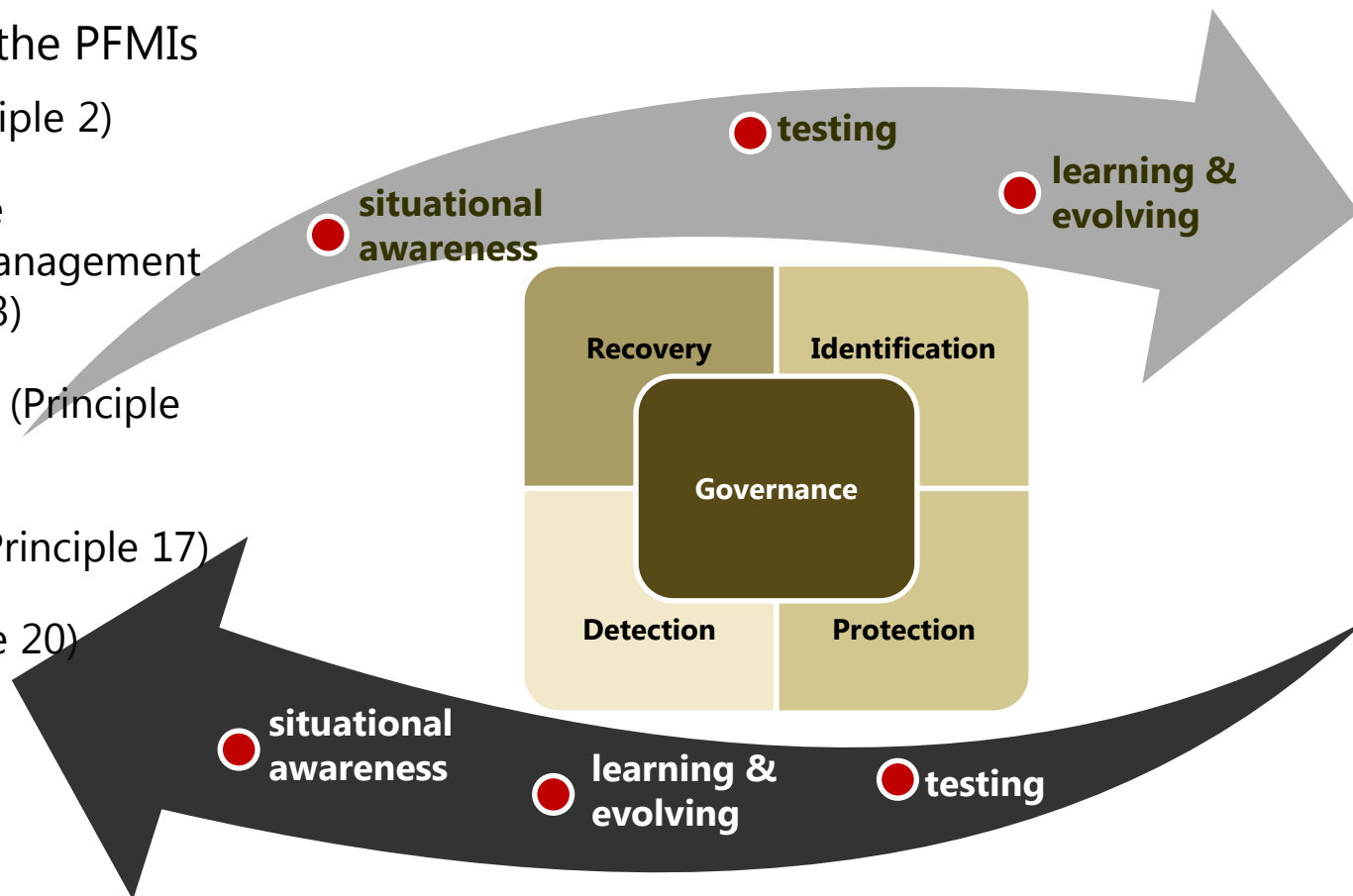


# Guidance on FMI cyber resilience

- Supplemental to the PFMI

- Governance (Principle 2)
- Framework for the comprehensive management of risks (Principle 3)
- Settlement finality (Principle 8)
- Operational risk (Principle 17)
- FMI links (Principle 20)

- Principle-based



⇒ Actions across these guidance categories can be mutually reinforcing and should be considered jointly in order to achieve resilience objectives

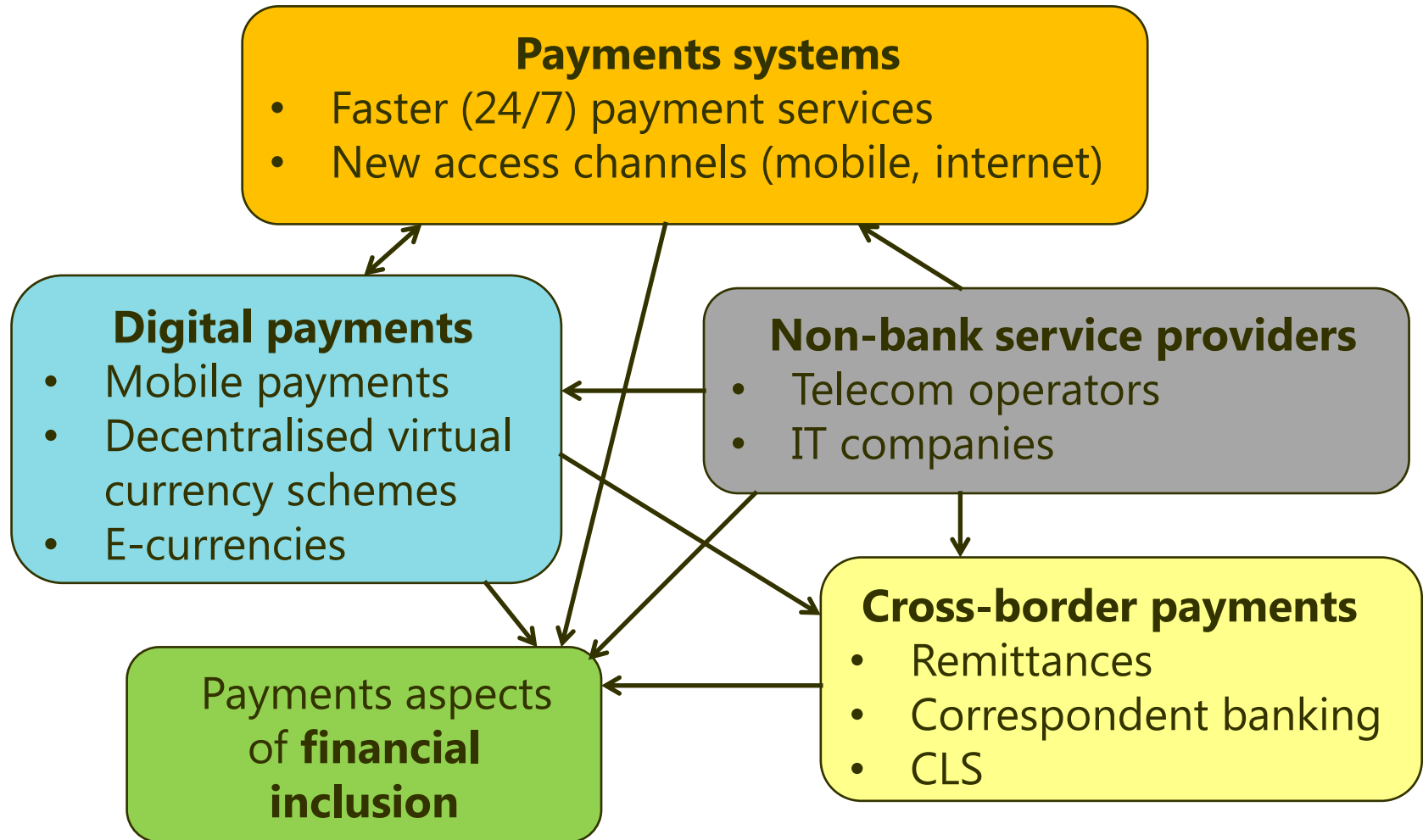


# Key findings for FMI cyber resilience

- **Board and senior management** attention is critical to a successful cyber resilience strategy
  - The ability to **resume operations quickly and safely** after a successful cyber attack is paramount
  - FMIs should make use of good quality **threat intelligence and rigorous testing**
  - Cyber resilience requires a process of **continuous improvements**
  - Cyber resilience cannot be achieved by an FMI alone; it is a **collective endeavour** of the whole 'eco-system'
- ⇒ **Data integrity** - growing awareness that it needs to be addressed by FMIs and the industry as a whole - Thus, cyber resilience should **not a point of competition** among FMIs
- ⇒ FMIs and overseers are convinced that more needs to be done in terms of **cooperation and information sharing** – the financial system is as strong as its weakest link in a world of **interconnectedness and interdependencies**



# Disruptive Innovations





# New CPMI Working Group on Retail Payments

- **Mandate**

- Look at recent developments in the field of retail payments,
- Identify those that have the highest potential to affect the wider payment ecosystem, and
- Analyse potential implications and emerging risks, with a particular emphasis on the implications for central bank functions and policies

- Areas of interest identified:

- **Fast and continuously available retail payment services** (inc. an interplay of these services with mobile/internet payments)
- **Digital currencies**
- **Cross-border retail payments**



# Fast payments

- Concept of “fast payments” may not be as clear as it sounds
- Speed and continuous service availability are key features, but there are other features that are usually implicit, but necessary



# Fast payments

- Increasingly gaining the **attention of central banks** as they are quickly changing the retail payments landscape and bringing about operational and financial issues that need to be managed
  - Dramatically enhancing the *speed and availability of retail payments*
  - Central banks are *backing or leading initiatives* for the implementation or even providing *operational support* (eg enhancing RTGS systems)
- Potential areas for further **analysis**:
  - *Definition and classification* of fast payments
  - *Drivers and barriers* to the development of fast payments
  - Implications of fast payments for *efficiency and risk*, and
  - Issues particularly relevant to *central banks*



## Digital currencies

- The emergence of digital currencies was noted in previous CPMI reports
- **Analytical report** published in November 2016 to obtain a more in-depth *understanding of developments* in this field and to analyse *implications from a central bank perspective*
- There are two key features of digital currencies:
  - the **assets** themselves, which are typically not a liability of any entity nor backed by a public authority. Currently, such schemes are *not widely used or accepted* and their *likely impact is limited*
  - the technology used, in particular the use of **distributed ledgers**, which allows transactions in the absence of trust between the parties and without the need for intermediaries
    - ⇒ This *underlying technology* may have the potential to improve the efficiency of payment and other infrastructure services



## Digital currencies

- Potential implications of *interest to central banks* arising from the innovations:
  - Many of the **risks** that are relevant for e-money and other electronic payment instruments are also relevant for digital currencies
  - The development of **distributed ledger technology** is an innovation with potentially broad applications:
    - wider use of distributed ledgers by new entrants or incumbents could have implications extending beyond payments
    - could have an impact on the holding and transfer of securities or on the registration of shares, bonds, derivatives trades and other assets
  - Potential **impact** on central bank monetary policy, money supply, service provision, ...



# Cross-border payments

- Although there have been *new developments in cross-border payments*, there are concerns that the market as a whole is not well understood and significant barriers remain to further meet market demands
  - **Need to better understand** the landscape as well as the specific role of central banks and associated issues and challenges
- Potential areas for further **analysis**:
  - Furthering understanding on the cross-border payments landscape and the solutions currently available
  - Furthering understanding of *risk and efficiency* issues of concern to central banks and financial institutions, and
  - Examining the *role of central banks in cross border payments*



## Correspondent banking

- CPMI working group to analyse the issue of correspondent banking from a **central bank's perspective** with a **focus on payment system implications**
- A **consultative report** was published in October 2015
- The report provides some basic definitions (incl. main types of correspondent banking arrangements), summarises recent developments and touches upon the underlying drivers
- The report puts forward **recommendations** concerning the development, promotion and use of four **technical measures**
  - if implemented in the payment process, these could reduce some of the **costs** associated with regulatory compliance
  - however, in isolation, these technical measures will not resolve all issues connected with correspondent banking activities, and
  - the technical measures will not as such help the banks without access to correspondent banking services to gain such access



# Correspondent banking

## Four technical recommendations:

- Use of *know-your-customer (KYC) utilities*  
(templates and procedures to identify the most appropriate data fields to compile a data set which)
- Increased use of the *Legal Entity Identifier (LEI)*, where possible  
(including promoting BIC to LEI mapping facilities)
- Use of *information-sharing initiatives* as an information source by default  
(where they exist and data privacy laws permitting; need for additional clarity on due diligence recommendations for upstream banks (“KYCC”))
- *Improvements in payment messages*  
(determination whether the Serial method using MT 103 or the Cover method using MT 103 and MT 202 COV is preferable)





# Financial inclusion

- CPMI and World Bank *Joint task force on payments aspects of financial inclusion* (PAFI)
- **Consultative report** issued in September 2015
  - Examining demand and supply side factors affecting financial inclusion in the context of payment systems and services
  - Ideally, all individuals and businesses should have access to and be able to use at least one transaction account operated by a regulated payment service provider, to:
    - (i) perform most, if not all, of their payment needs
    - (ii) safely store some value; and
    - (iii) serve as a gateway to other financial services



# Financial inclusion

- Seven **guiding principles** designed to assist countries that want to advance financial inclusion in their markets through payments
  - (i) *commitment* from public and private sector organisations
  - (ii) a *robust legal and regulatory framework* underpinning financial inclusion
  - (iii) safe, efficient and widely reachable financial and ICT *infrastructures*
  - (iv) *transaction accounts* and payment product offerings that effectively meet a broad range of transaction needs
  - (v) *availability* of a broad network of access points and interoperable access channels
  - (vi) effective *financial literacy* efforts; and
  - (vii) the *leveraging of large-volume and recurrent payment streams*, including remittances, to advance financial inclusion objectives



# Outlook for the payments area

- Reaction of the incumbents (such as banks and traditional ACHs) on innovations and new competitors ("**second round**" effects)
  - Impact of **digital innovations** (especially technical aspects)
  - Promotion of **cyber resilience**
  - Leveraging by relevant public bodies on **payments aspects of financial inclusion**
  - Global **standardisation** (by standard-setters and industry bodies)
  - Initiatives to enhance (**cross-border**) **interoperability**
- ⇒ **Oversight frameworks** to be adapted to the evolving landscape
- ⇒ Need for **cooperation and coordination** of central banks and other authorities (at the national and international level)

