

Integration of Payment Systems: Experience at International Level

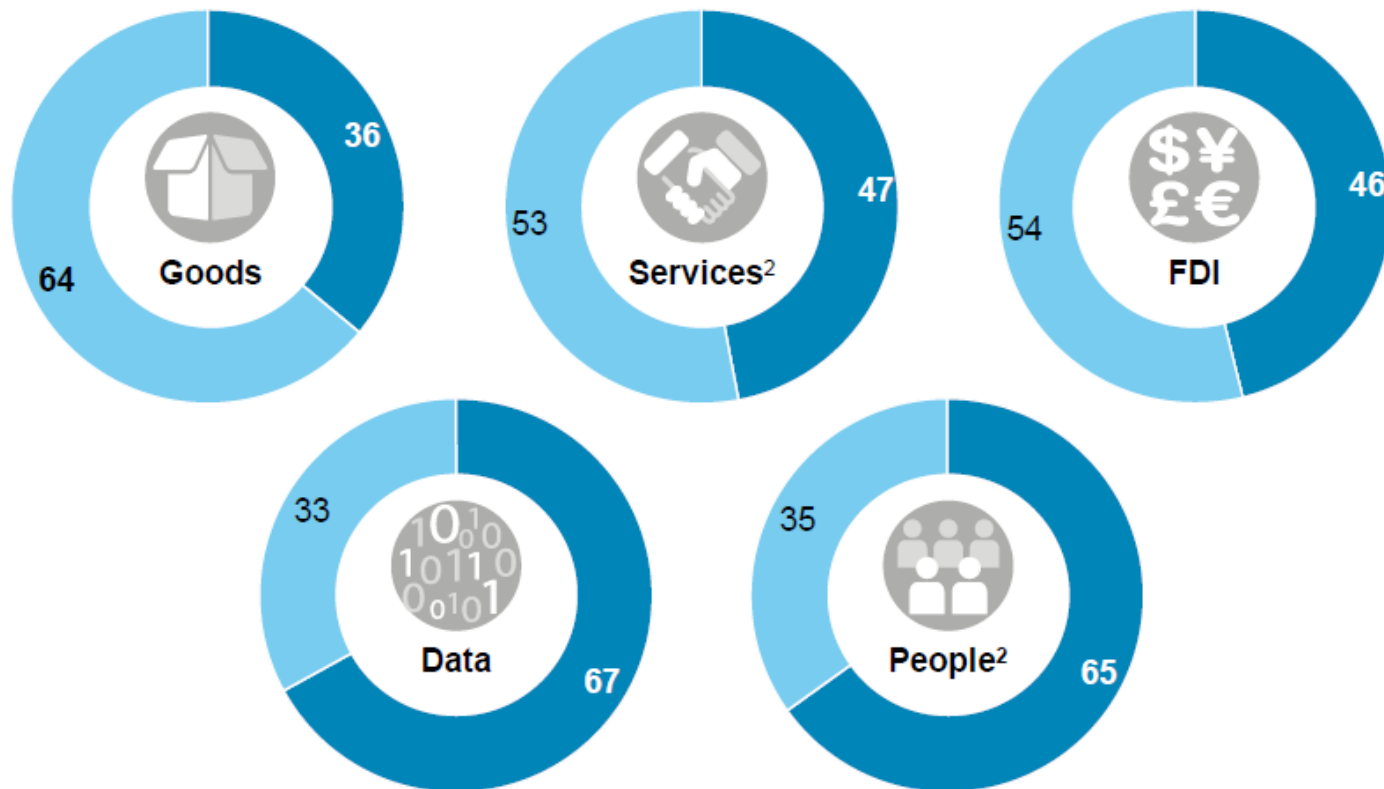
Association of African Central Banks Workshop
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Globally share of intra-regional varies by type of trade flow

While much of the world's trade in goods is long distance, roughly half or more of other global flows move within the same region

Distribution of flows between intraregional (short haul) vs. interregional (long haul), 2014¹
% of world flow

■ Short haul (intraregional)
■ Long haul (interregional)



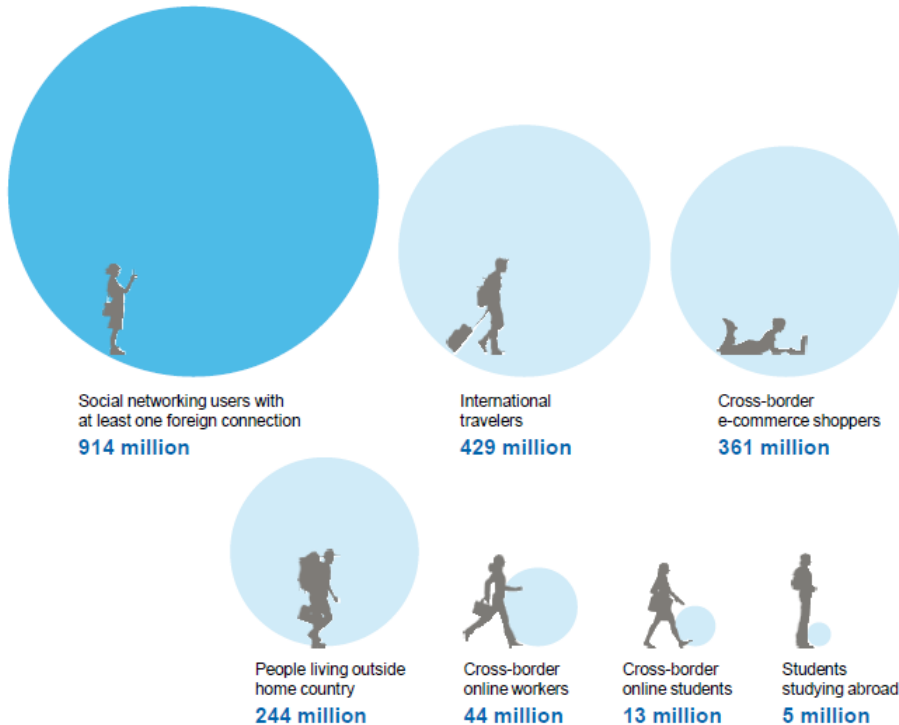
1 For goods, services, FDI, and travelers we have divided the world into 10 regions; for data flows we have used TeleGeography's six regions.

2 Distribution of services flows for 2014 estimated based on 2011 data; 2013 bilateral traveler data used for people flows.

NOTE: Numbers may not sum due to rounding.

Digital Platforms are making it easier for MSMEs to participate in Cross-border Flows

Individuals are participating in globalization, and 914 million have cross-border social media connections



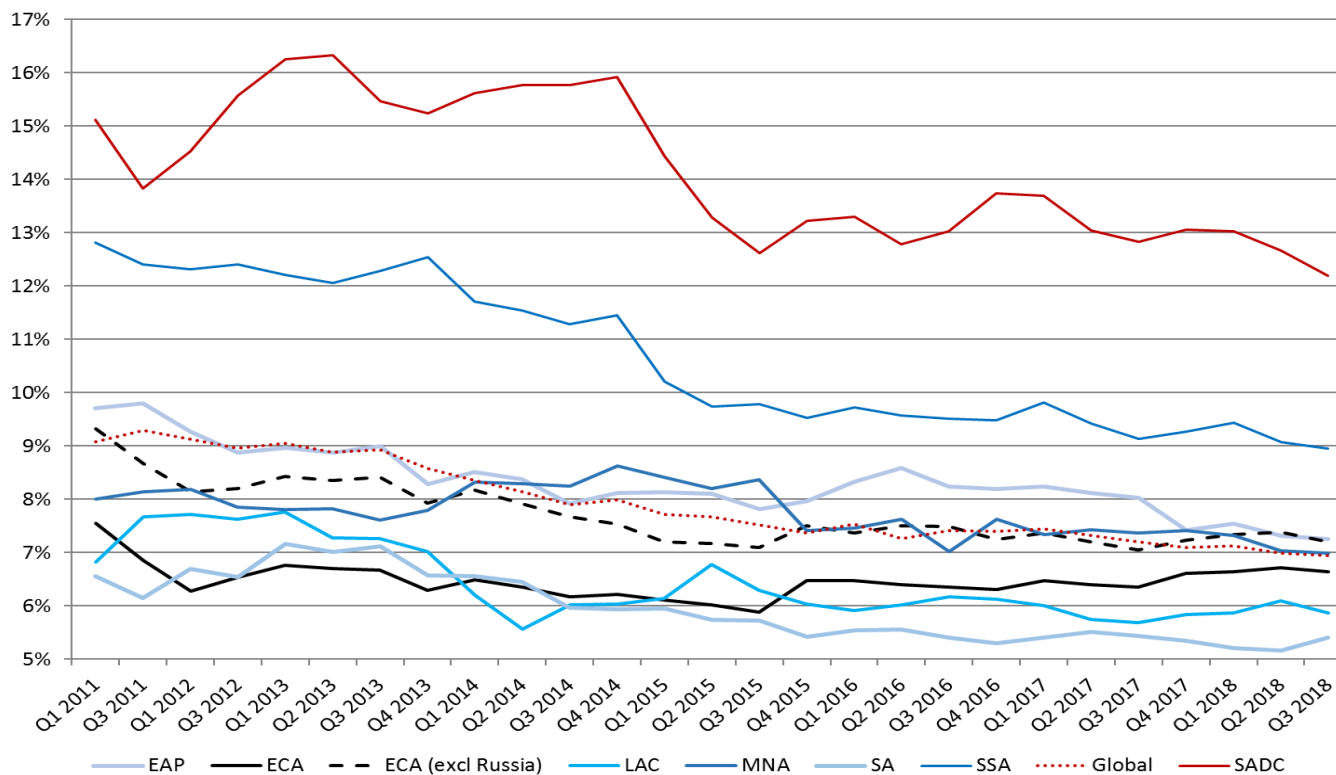
Even for trade in physical goods, over 50% of trade services is digitized

12%

of the global goods trade is e-commerce

Approximately 12 percent of the global goods trade is conducted via international e-commerce, with much of it driven by platforms such as Alibaba, Amazon, eBay, Flipkart, and Rakuten. Beyond e-commerce, digital platforms for both traditional employment and freelance assignments are beginning to create a more global labor market.⁶ Some 50 percent of the world's traded services are already digitized.⁷

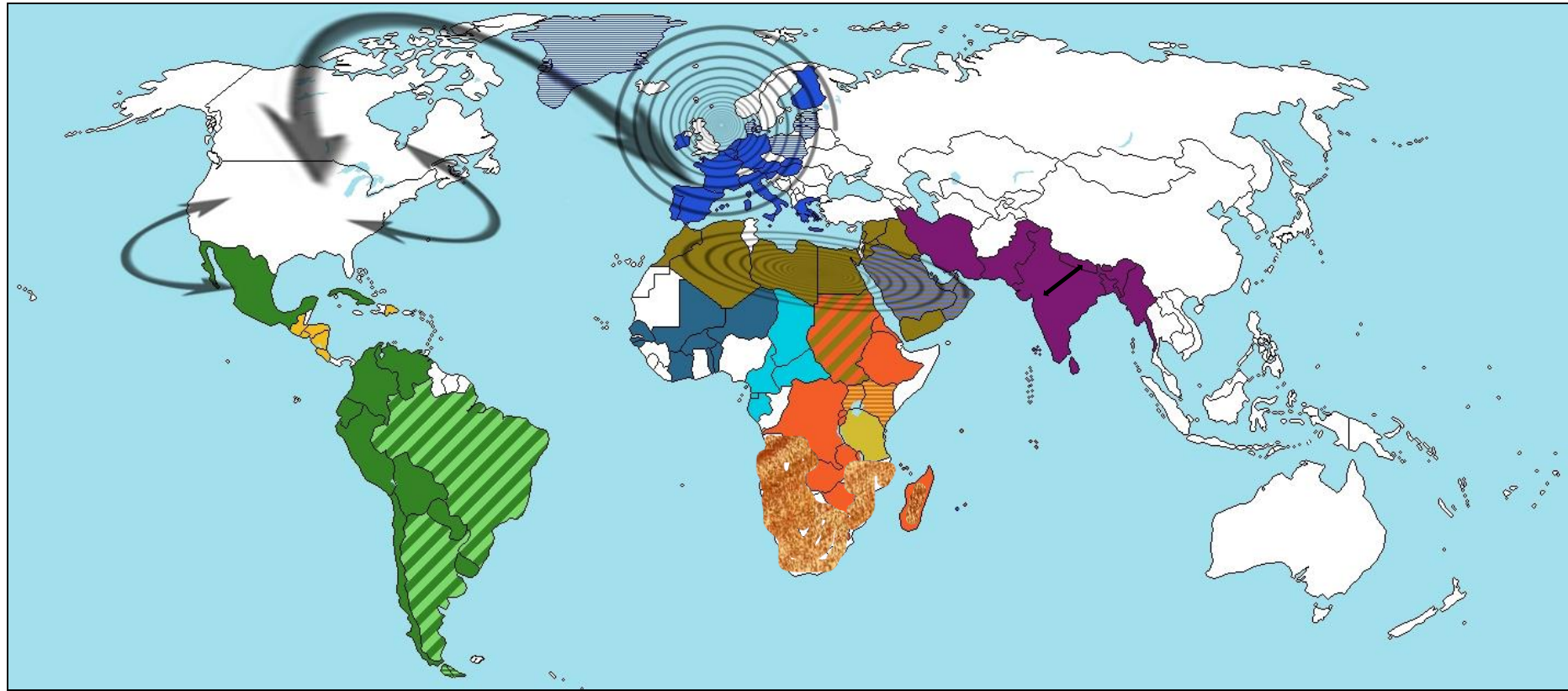
Average costs of sending US\$, by region, Q1 2011 - Q3 2018



Source: World Bank, Remittance Prices Worldwide

Payment Platforms to support regional payment needs

Payment Markets Harmonization



Monetary Unions (CB-led)

- BCEAO
- BEAC
- GCC*
- TARGET 2

Comprehensive PS Integrations (CB-led)

- AMF- Arab Regional PS*
- COMESA
- EAPS
- SECMCA*
- SADC

Comprehensive PS Integrations (Private Sect.-led)

- RAPID (open to financial institutions across Arab Region)
- SEPA (harmonization of PS standards across Europe)

Trade Related PS Integrations (CB-led)

- ALADI
- SML

Clearing Unions

- ACU

Specific PS links

- ↻ Directo a Mexico/USA-Canada/USA-Europa

Some Examples of Initiatives

■ **Payment Settlement Infrastructures**

Arab Regional Payment system ; STAR-UEMOA; BEAC;

COMESA (REPSS); EAC (EAPS); SADC (SIRESS)

TARGET 1and 2; CLS Bank; ALADI; CHATS; ECCB; GCC; SML.

■ **Payment Clearing Infrastructures**

EACHA, EURO 1; SICA-UEMOA; STEP2.

■ **Retail Payments Transaction Services**

RAPID; SEPA; Acxsys International ATM Service;

Euro Alliance of Payment Schemes (EAPS)

GCCNET; GIM-UEMOA

What are the potential benefits of regional integration?

Regional integration of financial market infrastructures is associated with many potential benefits:



Lower user-costs for individuals, businesses, and public administrations as end-users of the regional FI arrangement

Lower end-to-end transaction costs for the financial firms participating in the regional FI arrangement

Lower financial infrastructure development costs and operating costs for individual participating members through broader cost-sharing



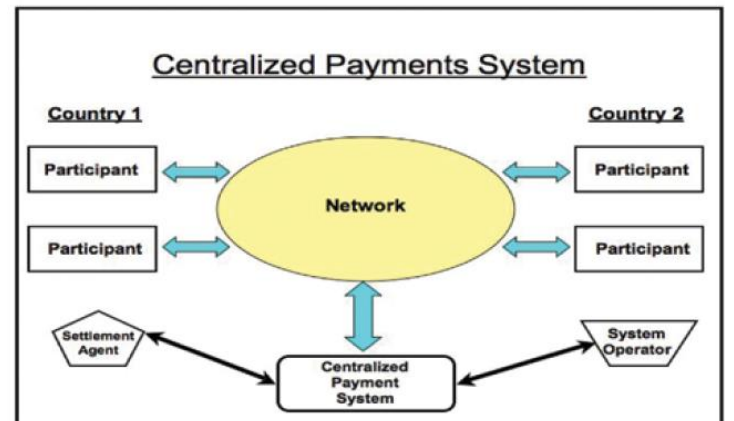
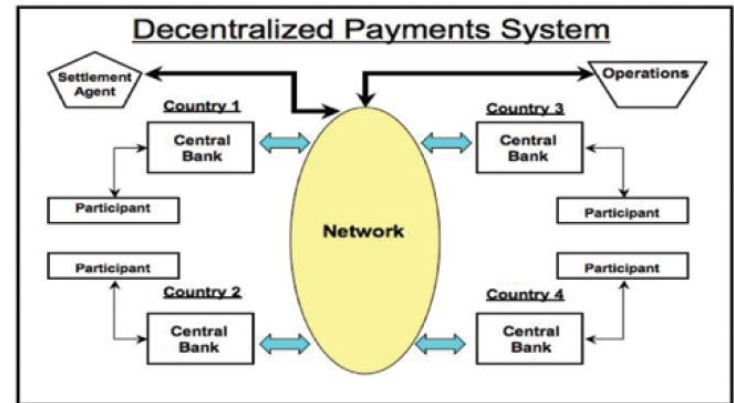
Improved cross-border access and reach to all market participants in financial services, with faster, more reliable, and simpler transaction services



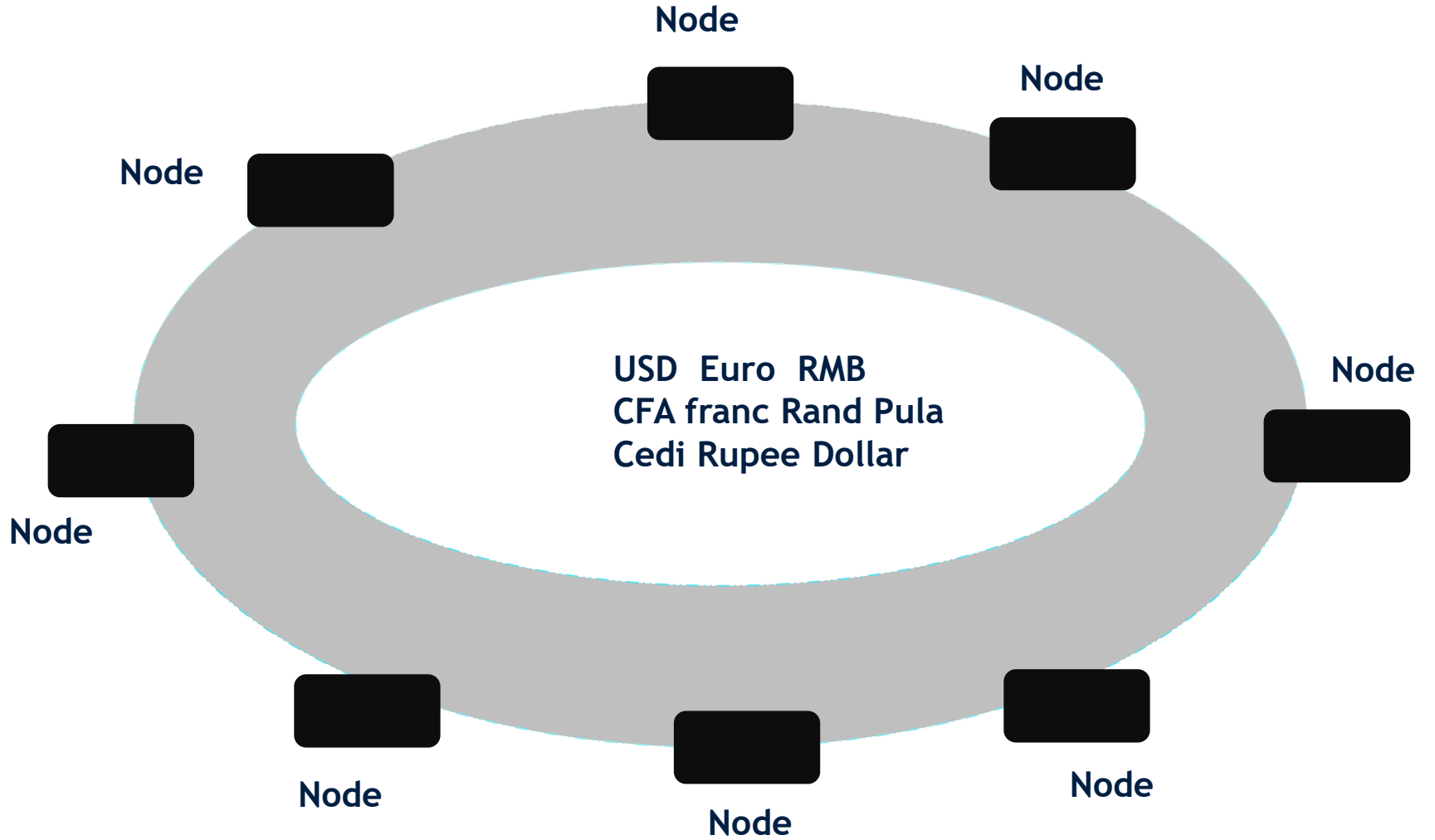
Improved risk management, greater risk reduction and stronger financial stability resulting from widespread utilization of consistent and up-to-date international policy, legal and technical standards, as well as best-practice risk-management designs and procedures

Traditional Approaches

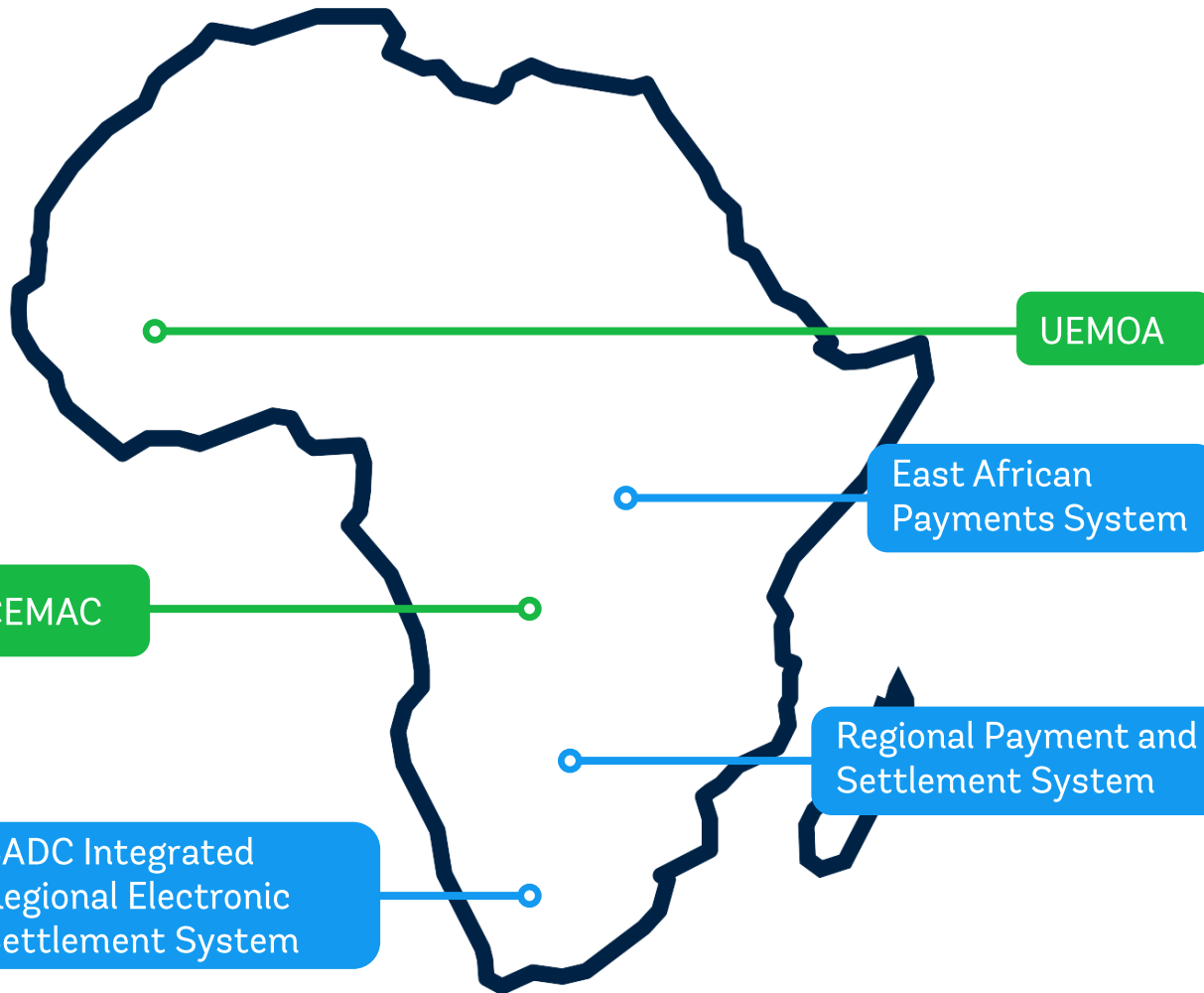
- Simple agreements among FIs to facilitate direct or indirect cross-participation among the participants in each of the FIs
- Interoperability arrangements involving technical interfaces between the separate operating platforms of the FIs involved
- Full harmonization of the operating schemes and integration of the technical platforms into a common unified system for dealing with cross-border transactions (and at times even supporting purely domestic transactions)



Potential New model – Using DLT



Examples of regional integration in Africa (1)



Regional payment systems projects are usually initiated by economic blocs (e.g. EAC, SADC, COMESA) to serve as backbone for economic integration.

- Monetary union with a common central bank
- Connections between payment systems

Examples of regional integration in Africa (2)



	EAPS (East African Payments System)	REPSS (Regional Payment and Settlement System)	SIRESS (SADC Integrated Regional Electronic Settlement System)
Affiliated regional body	EAC	COMESA	SADC
Direct participants (operational, with settlement accounts)	Central banks	Central banks	Commercial banks and central banks
Settlement banks	All participating central banks	Designated central bank (Bank of Mauritius)	Designated central bank (South African Reserve Bank)
Settlement currency	Local currencies of member countries	USD, EUR	ZAR
Settlement type	Real-time gross settlement (prefunded)	End-of-day net settlement	Real-time gross settlement (prefunded)
Transactions (volume)			
Transactions (value)			

(REPSS)

- Affiliated with the Common Market for Eastern and Southern Africa (COMESA)
- Operational in selected member countries ; Multilateral Netting System; end of day settlement
- Settlement in single currency; choice between US dollar and euro
- Bank of Mauritius acting as the settlement bank for the system; all other central banks maintain nostro accounts with BoM

- Low usage can be attributed to many factors:
 - Existing trade finance procedures favoring banks in Frankfurt and New York
 - High focus on central bank as participants, not enough incentives for commercial banks
 - Delayed participation of some major central banks

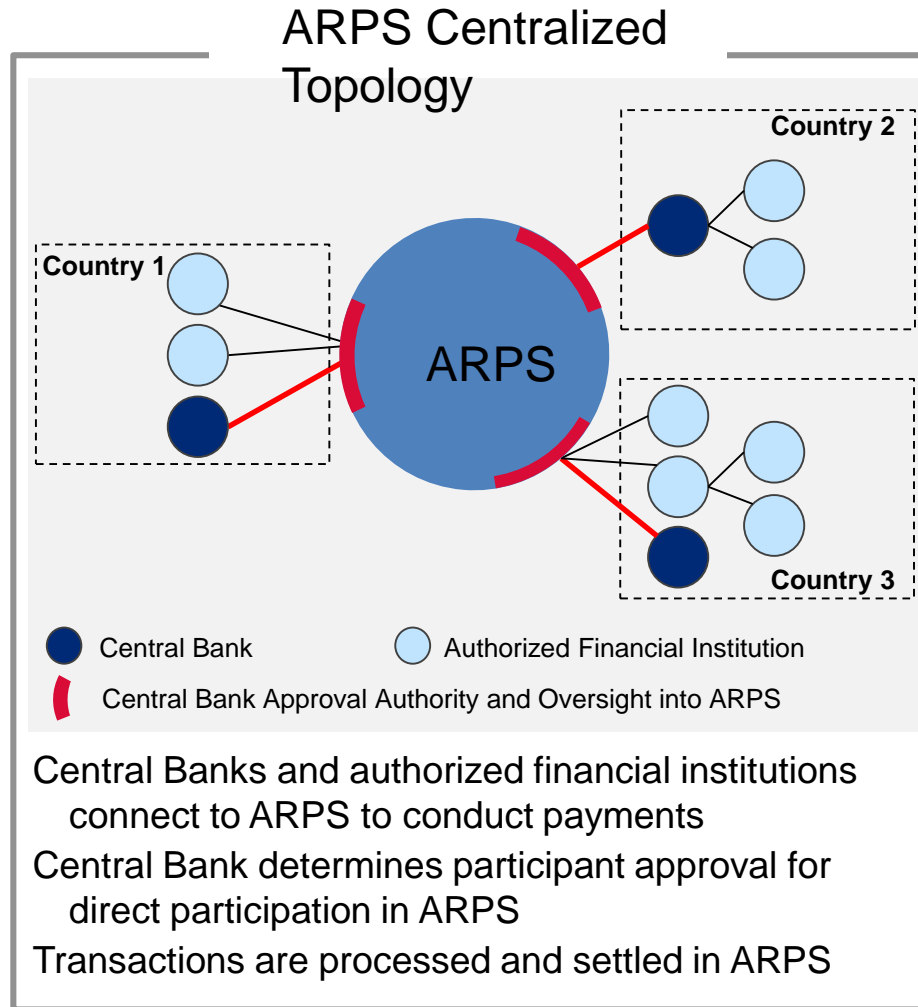
SADC Integrated Regional Electronic Settlement System (SIRESS)

- Single settlement currency system ZAR (Rand)
 - Operated by the SARB as appointed by the participating Central Banks
 - Cross border transactions only
 - SWIFT FINCopy Service
 - Market Infrastructure Close User Group
 - Settlement accounts operate on a pre-funded basis
- In March 2018 SIRESS processed 28,305 transactions valued at ZAR 107.6bn
 - Average number of transactions processed per day were 1,415 representing the average value of ZAR 5.3bn

SIP – Central America and Dominican Republic

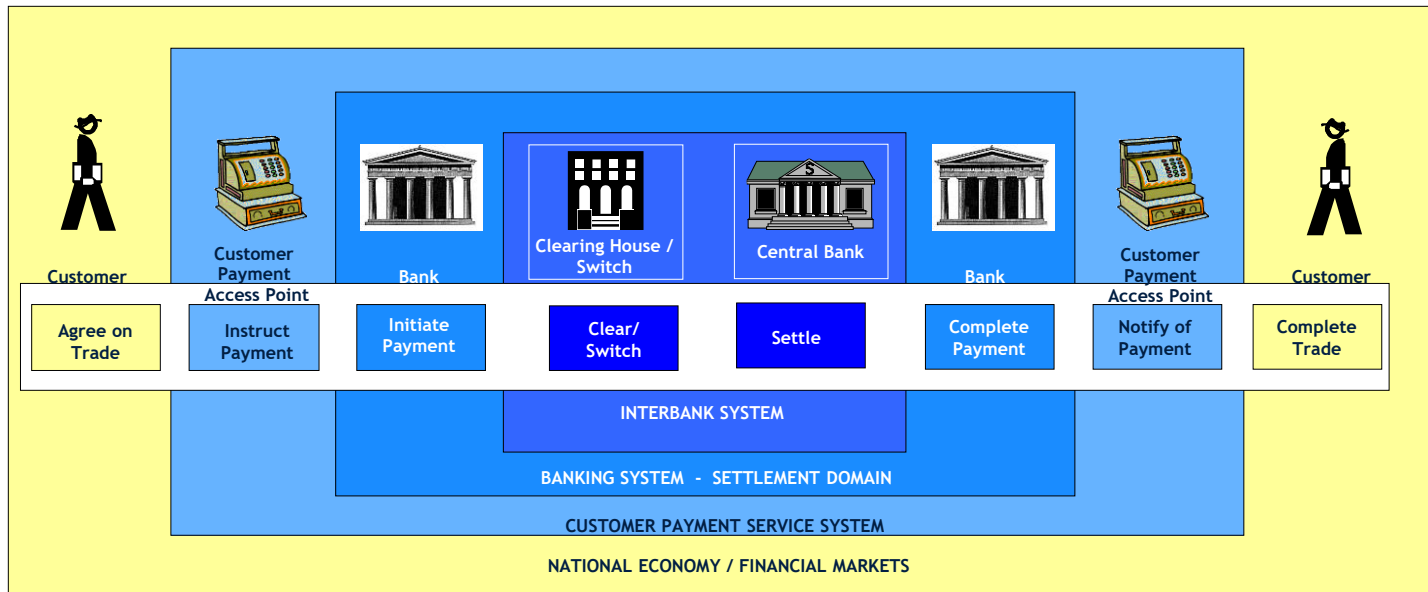
- Discussions on developing a regional payments system for Central American countries and the Dominican Republic began as early as 2002-2003
- When the decision to create this system was made by Central American authorities, few of the challenges for integration had been identified
- Challenges included a lack of a basic legal and regulatory framework in each country that would provide a robust underpinning to cross-border transactions, and a rudimentary payments infrastructure in most countries at that time (e.g. as of 2005 only Costa Rica had an RTGS system)
- The project became operational only in March 2011
- Strong personal leadership was crucial to lead the project through key stages: a regional payments treaty, standardization of accounts, linkage of domestic RTGS systems, etc.
- **Remaining challenges: so far the volumes in the integrated system, SIP, are far from what expected; commercial banks keep using their correspondent arrangements**
 - **Per transaction cost for regional payments in SIP is US\$5 vs. nearly US\$30 via correspondents. Banks only rarely offer the SIP service to their customers**

Regional Payments Platform – Arab Region

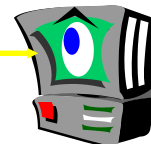


Setting the scene

The payment process



Paying Bank



Central bank



Beneficiary Bank

AREAS OF FOCUS

1. Legal and regulatory framework
2. *Large-Value Funds Transfer Systems*
3. *Retail Payment Systems*
4. *Foreign Exchange Settlement Systems*
5. *Cross-border Payments and International Remittances*
6. *Securities Settlement Systems*
7. *Payment System Oversight and Cooperation*
8. *Planned and On-going Reforms to the National Payments System*
9. *Government payments*
10. *Statistics*

Some challenges for regional integration

Challenges for Regional Payment Systems Integration

Strong business case

- a strong business case for the regional financial integration proposal is needed to cope with the natural uncertainties and skepticism about the viability of the project as a whole and for the various individual participants

Responsible view of costs

- immediate cost considerations should not create a disincentive to participate in the project

Effective leadership

- effective leadership throughout the project life cycle can make the various stakeholder groups cooperate effectively and remain committed to the project

Sufficient resources

- sufficient expertise and adequate financial and human resources need to be ensured to develop and implement the regional FI integration program and, once launched, maintain an efficient and safe operation of the new arrangement on an ongoing basis

Challenges for Regional Payment Systems Integration

Legal and regulatory framework

- Legislation pertaining to payments and settlements often is not harmonized across participating countries
- Existence of exchange controls

Operational constraints

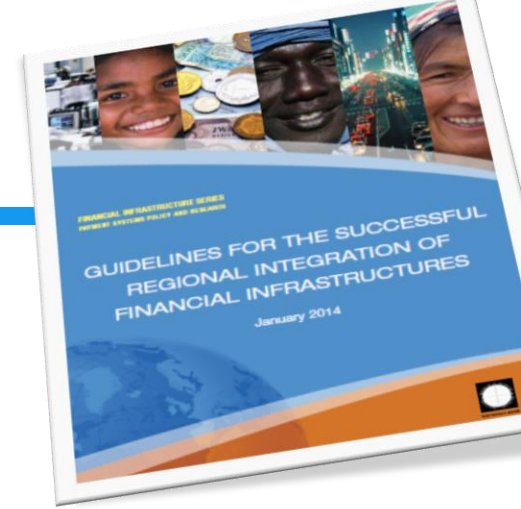
- Capacity of regional groupings and member central banks remains a challenge
- Many countries lack payments interoperability at domestic level
- Systems may lack the ability to handle higher loads or transaction volumes, e.g. when they are to be used for transmitting remittances from international migrants

Business model

- Financial constraints (at the domestic and regional level) may limit necessary investments
- Intra-regional trade volumes may be low, limiting demand for payments
- Private sector involvement may be difficult to mobilize and sustain
- The business case needs to be revisited to absorb new technologies and the needs of the economy

World Bank Group's response

World Bank Guidelines for Successful Integration of Regional Financial Infrastructures



The WB-led G25 Experts Group drafted Guidelines to provide high-level guidance to principal policy-makers and stakeholders in the development of regional or cross-regional integration of financial infrastructures. Categories of the 19 guidelines :

Enabling and institutional guidelines

Outline the set of institutional arrangements that enable a regional financial infrastructure integration proposal to move forward from its preliminary vision to an actual operational arrangement in an effective fashion.

Planning guidelines

The basis for determining if regional financial infrastructure integration is necessary and justifiable for the stakeholders in the region at that particular time. This is the “make or break” stage at which regional FI integration initiatives either move forward or are postponed.

Design guidelines and implementation guidelines

Deal with the heart of the regional financial infrastructure integration program. It is at these stages of the integration initiative that leadership, commitment, consultation and effective management become most crucial.

Sustainability guidelines

Help establish a strategic direction and sound business culture for the regional FI arrangement that, together with the continuous oversight from public sector authorities, will help ensure that it will continue to evolve and develop to meet future stakeholder needs and legal and regulatory requirements and policy standards affecting its operations, and do so in a transparent and credible fashion.

Guidelines for Successful Integration of Regional Financial Infrastructures

Enabling and institutional guidelines

1. Vision, purpose and scope definition;
2. Locate vision within national policies to ensure political support.
3. Set up regional fora for cooperation & coordination, and ensure buy-in of all stakeholders;
4. Establish effective leadership from reps of public and private sectors

Planning guidelines

5. Devise governance and planning frameworks; effective project team.
6. Stock-taking of economic and financial profile, institutional environment, overall financial infrastructure.
7. Identify gaps; do SWOT Analysis
8. Set plan to address the gaps in reasonable time.
9. Develop strong business case, including identifying financier

Design guidelines and implementation guidelines

10. Devise broadly acceptable feasible model for FI integration.
11. Outline model comprehensively-architecture, operating schemes, regulatory aspects, technical design etc.
12. Specify business framework: organisation, management, governance,etc.
13. Establish effective cooperative public governance, regulatory and oversight mechanism.
(see Responsibility E of the CPSS-IOSCO Principles.)

Guidelines for Successful Integration of Regional Financial Infrastructures

Implementation guidelines

14. Establish project management procedures and processes under a designated project manager who needs to be supported (sufficient human and financial resources).
15. Set up effective communication function to inform all stakeholders and the general public throughout the implementation process.

Sustainability guidelines

16. Regularize consultative arrangements among key public and private stakeholders.
17. Regularize regulatory and oversight arrangements of public sector authorities to ensure compliance.
18. Maintain sound and committed organizational governance and senior managerial leadership for the regional arrangement.
19. Institute a regular programme of self evaluation and reporting.

TECHNOLOGY IS CHANGING THE PATH OF DEVELOPMENT



In 2016, the global Digital Economy was worth \$11.5 trillion, 15.5% of the world's GDP.



It is expected to reach 25% of the world's GDP in less than a decade.



Today, of the world's 10 largest companies by market capitalization, six are technology companies.



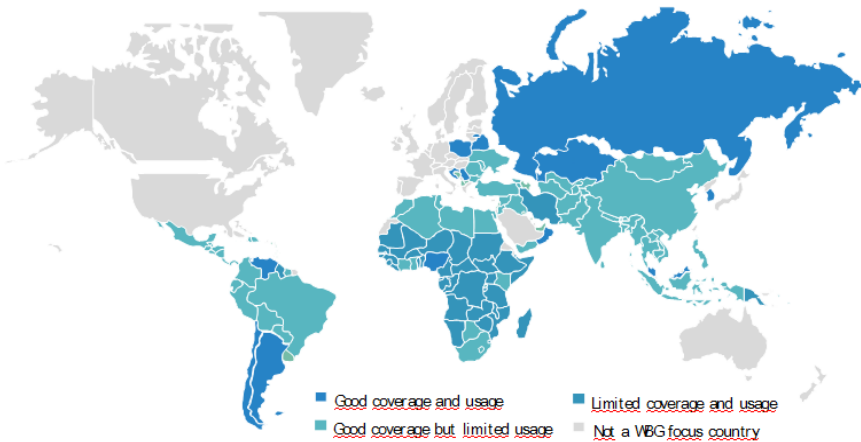
The “digital economy [...] is the single most important driver of innovation, competitiveness and growth, and it holds huge potential for [...] entrepreneurs.” (EC, 2015)



For the next decade, 11 million youth in Africa will enter the job market each year. They must be equipped with the right skills to access new job opportunities.



90% of all digital data has been created in the last 2 years.



Source: GSMA Intelligence (2017), World Bank – World Development Indicator (2017)

Africa's Digital Evolution Has Been Impressive, But Gradual Evolution Is No Longer Sufficient

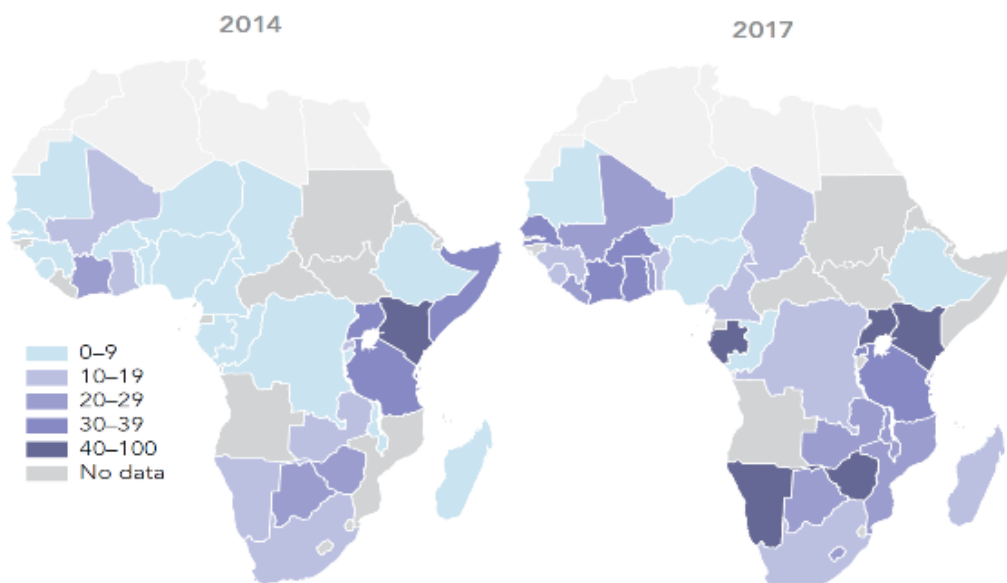
Over last 5 years, entrepreneurship ecosystem, through incubators, accelerators and tech hubs, has grown 10-fold in Africa.

SS Africa has the highest % of mobile money use in any region, showing that there are opportunities for leapfrogging with new financial technology.

North Africa Egypt and Djibouti have strong international connectivity links.

DE4A :Digital Financial Services Foundation

Adults with a mobile money account (%)



Source: Global Index database.

Note: Data are displayed only for economies in Sub-Saharan Africa.

Digital financial services – covering payments, savings, credit, insurance, securities, etc. – are delivered via digital/electronic means, including through **mobile phones, internet-enabled devices, and cards.**

The entry point for digital financial services is often through digital payments – but just **34% of adults** in Sub-Saharan Africa have made or received a digital payment in the past year.

Half of unbanked adults in SSA (160 million) own a mobile phone, so there is significant potential growth.

Lack of market competition, low-cost delivery channels, appropriate identification, financial infrastructure all constrain digital financial services

FinTech innovations and services (such as digital payments, digital credit through ecommerce, P2P lending, mobile payments, and tailored products offered through APIs) are **transforming the business model** for reaching the un/under served and can drive progress towards the goal of **Universal Financial Access by 2020.**

THE DIGITAL MOONSHOT: HIGH-LEVEL TARGETS



DIGITAL INFRASTRUCTURE

Universal Internet network coverage

Affordable Internet for All at less than 2% of GNI per capita

Interim Milestone
Doubling broadband connectivity by 2021



DIGITAL SKILLS

All 15 year old students with basic 'digital skills' competencies

100,000 graduates in advanced digital skills programs annually



DIGITAL PLATFORMS

Doubling of Online Services Index rating for all Governments

All individuals are able to prove their identity digitally

At least 50% of the population regularly uses the Internet to access Government or Commercial services



DIGITAL FINANCIAL SERVICES

Universal Access to Digital Financial Services

Africa-wide payments infrastructure/platform in place



DIGITAL ENTREPRENEURSHIP

Tripling the number of new digitally-enabled businesses created annually

Financing for Venture Capital to reach .25% of GDP

RESPONSIBILITIES OF CENTRAL BANKS, MARKET REGULATORS AND OTHER RELEVANT AUTHORITIES, CPSS-IOSCO PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURES

<p>Responsibility A: Regulation, supervision, and oversight of FMIs</p>	<p>FMIs should be subject to appropriate and effective regulation, supervision, and oversight by a central bank, market regulator, or other relevant authority</p>
<p>Responsibility B: Regulatory, supervisory, and oversight powers and resources</p>	<p>Central banks, market regulators, and other relevant authorities should have the powers and resources to carry out effectively their responsibilities in regulating, supervising, and overseeing FMIs</p>
<p>Responsibility C: Disclosure of policies with respect to FMIs</p>	<p>Central banks, market regulators, and other relevant authorities should clearly define and disclose their regulatory, supervisory, and oversight policies with respect to FMIs</p>
<p>Responsibility D: Application of the principles for FMIs</p>	<p>Central banks, market regulators, and other relevant authorities should adopt the CPSS-IOSCO Principles for financial market infrastructures and apply them consistently</p>
<p>Responsibility E: Cooperation with other authorities</p>	<p>Central banks, market regulators, and other relevant authorities should cooperate with each other, both domestically and internationally, as appropriate, in promoting the safety and efficiency of FMIs</p>

Some issues for deliberation

Preparatory Work

- Harmonization
- Economic Analysis
- Strong Ownership
- Clearing and Settlement Model
- Oversight

Sequencing

- Scope – leave room for innovations in services
- Retail – Large Value – Securities markets

Building Support

- Building commitment of participants

THANK YOU!

Payment Systems Development Group
The World Bank

[*www.worldbank.org/paymentsystems*](http://www.worldbank.org/paymentsystems)

[*hnatarajan@worldbank.org*](mailto:hnatarajan@worldbank.org)
[*azanza@worldbank.org*](mailto:azanza@worldbank.org)