

# FAST PAYMENTS – THE INTERNATIONAL EXPERIENCE AND THE ALBANIAN CONTEXT

DECEMBER 17, 2020



**WORLD BANK GROUP**  
Finance, Competitiveness & Innovation

# World Bank Fast Payments Policy Toolkit – Global Experience



Synthesized report

- 1. Framework towards approaching an FPS implementation
- 2. Options / decisions across the course of the FPS journey
- 3. Key insights from FPS implementations
- 4. Key takeaways / recommendations

Specific topic notes

- 1. QR codes
- 2. APIs
- 3. Customer Authentication
- 4. Messaging formats
- 5. Consumer protection
- 6. Dispute handling, reversal, chargeback and refunds
- 7. Fraud risks and AML/CFT
- 8. Pricing Structure
- 9. Proxy Database
- 10. Access to retail payment systems

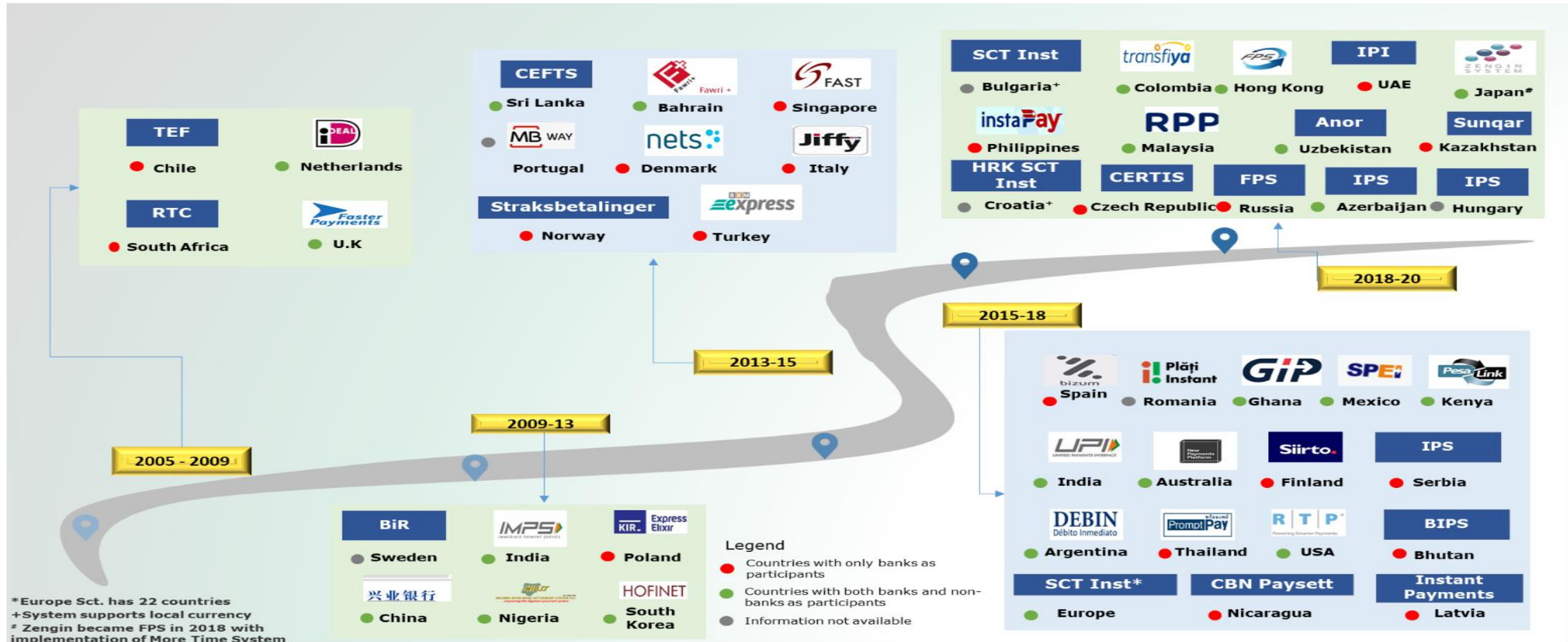
## Fast Payments – CPMI Definition



Availability 24/7/365

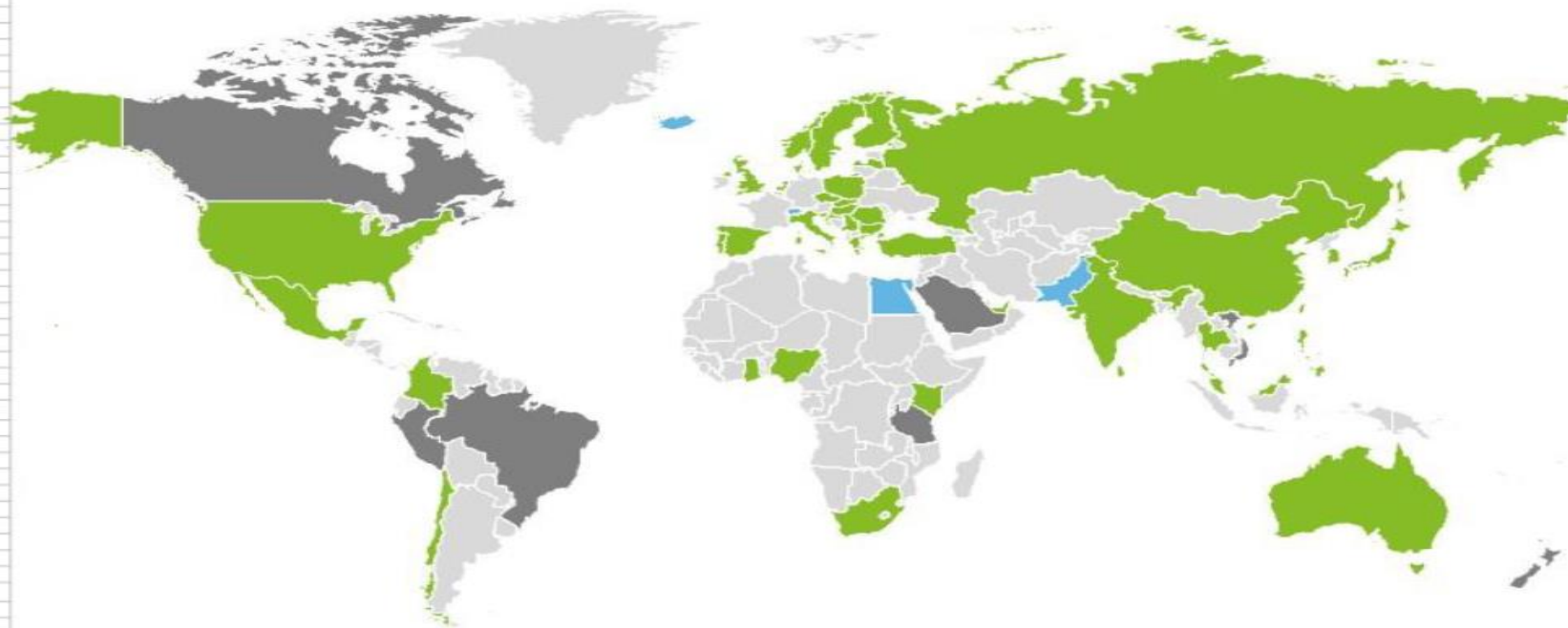
Instant crediting of the payee's account, irrespective of the transaction value, payment instrument, service provider, use case and access channel

# Fast Payment Systems – Evolution



# Fast Payment Systems – Global Snapshot

#	Region	Country	Category
1	North & Central America	Canada	Under development
2		Mexico	Live FPS
3		USA	Live FPS
4	South America	Brazil	Live FPS
5		Colombia	Live FPS
6		Chile	Live FPS
7		Peru	Under development
8-27		SEPA SCT Inst Nations*	Live FPS
28		Bulgaria	Live FPS
29		Croatia	Live FPS
30		Czech Republic	Live FPS
31		Denmark	Live FPS
32		Finland	Live FPS
33		Hungary	Live FPS
34		Iceland	Live – Not Full-Fledged
35		Italy	Live
36		Latvia	Live
37		Netherlands	Live
38	Europe	Nordic	Under development
39		Norway	Live FPS
40		Portugal	Live FPS
41		Poland	Live FPS
42		Romania	Live FPS
43		Russia	Live FPS
44		Spain	Live FPS
45		Sweden	Live FPS
46		Switzerland	Live – Not Full-Fledged
47		Serbia	Live FPS
48		Turkey	Live FPS
49		UK	Live FPS
50	Sub-Saharan Africa	Ghana	Live FPS
51		Kenya	Live FPS
52		Nigeria	Live FPS
53		South Africa	Live FPS
54		Tanzania	Under development
55	Middle East & North Africa	Bahrain	Live FPS
56		Egypt	Live – Not Full-Fledged
57		Saudi Arabia	Under development
58		UAE	Live FPS
59		China	Live FPS
60		Hong Kong	Live FPS
61		India	Live FPS
62		Japan	Live FPS
63	Asia	Kazakhstan	Live – Not Full-Fledged
64		Malaysia	Live FPS
65		Pakistan	Live – Not Full-Fledged
66		Philippines	Live FPS
67		Republic of Korea	Live FPS
68		Singapore	Live FPS
69		Sri Lanka	Live FPS
70		Taiwan	Live – Not Full-Fledged
71		Thailand	Live FPS
72		Vietnam	Under development
73	Oceania	Australia	Live FPS
74		New Zealand	Under development



\* (Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Monaco, Netherland, Portugal, Slovakia, Slovenia, Spain)

Note: Some of these countries might have FPS-like system. Above assessment is based on secondary research

<span style="color: green;">●</span>	Live FPS
<span style="color: grey;">●</span>	Under development
<span style="color: blue;">●</span>	Live – Not Full-Fledged

# Drivers of Fast Payments Around the World

## New Technology Standards

- The emergence of new industry standards and technologies has made the implementation of Fast Payment Systems more feasible and enhanced interoperability.

## Expectations from Consumers and Businesses

- In an era where all types of communications and access to information is real-time, there is pressure for this concept to be applied in the field of payments. The COVID-19 pandemic has further highlighted the need.

## New Use Cases and Services

- Additional use cases and overlay services as well as utilization of APIs.

## Financial Inclusion

- Reaching unserved communities at a low cost.

## Active Role of Central Banks

- The increased involvement of central banks in the governance and operation of retail payment systems has led to more access and competition.



# Scheme Aspects – Global Experience

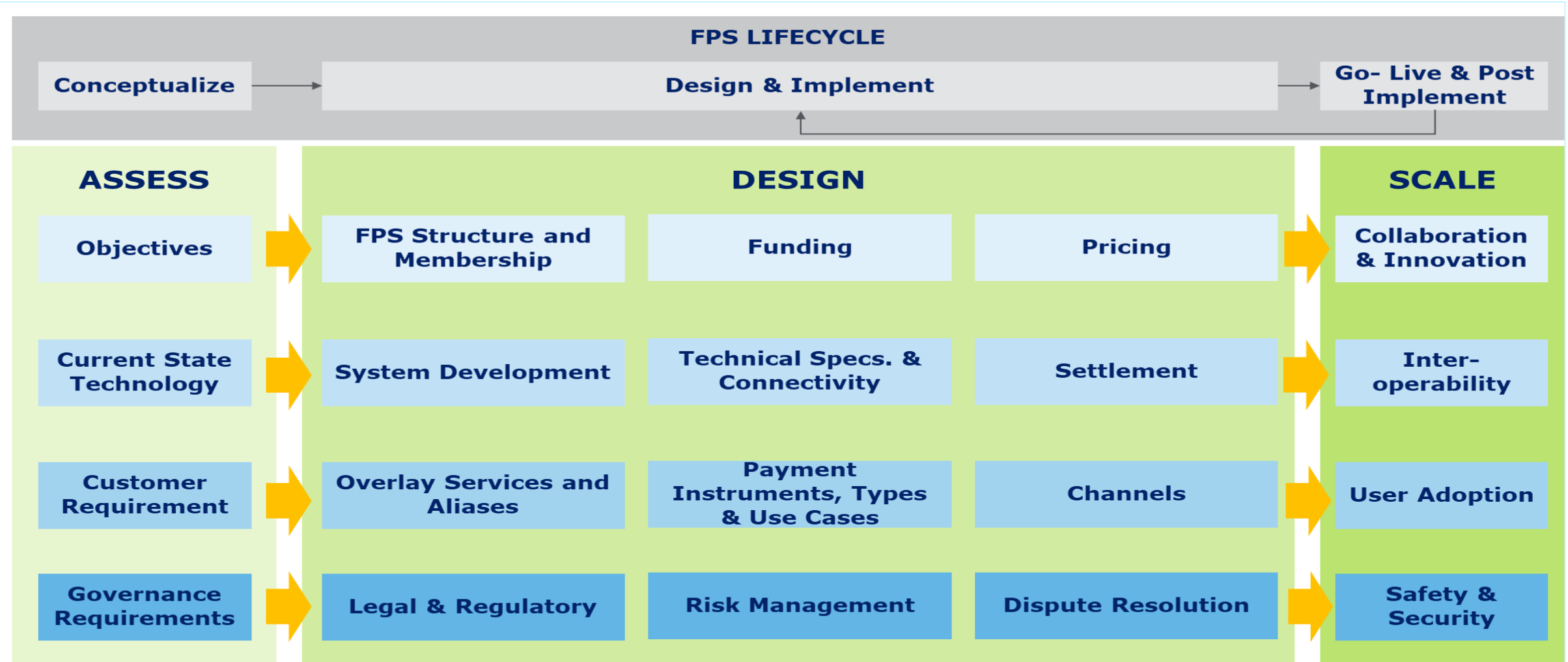
- **Ownership/operation/governance**
  - Central bank ownership and operation (e.g. Mexico)
  - Private sector ownership and operation (e.g. Spain)
  - Ownership and operation by a non-profit entity which is owned jointly by private sector players and central bank (e.g. Malaysia)
- **Access**
  - Access only to commercial banks (e.g. Spain, Singapore)
  - Access to commercial banks and other deposit taking institutions (e.g. Poland)
  - Direct access to deposit taking institutions and non-bank PSPs (e.g. Mexico, Nigeria)
  - Direct (for deposit taking institutions) and indirect (for other PSPs) access (e.g. Australia)
- **Settlement agent**
  - Central bank (in vast majority of cases)
- **PSP settlement model**
  - Deferred net settlement (majority of implementations)
  - Real time gross settlement (e.g. Hong Kong)

# Infrastructure and Cost Aspects – Global Experience

- **Messaging standards**
  - ISO 20022 (majority of implementations)
  - ISO 8583 (e.g. Thailand, Kenya)
  - Proprietary (e.g. Turkey, Mexico, Russia)
- **Platform**
  - New stand-alone FPS (e.g. majority of implementations)
  - Adapted existing RTGS (e.g. Mexico, Japan)
  - Adapted existing retail payment system (e.g. Chile, South Africa)
- **Payment instruments supported**
  - Push only (e.g. Kenya, ECB)
  - Push and pull (e.g. USA, UK)
- **Costs**
  - Setting up and operating the system (system owner/operator)
  - Upgrading core systems of participants and interfacing with the FPS (system participants)
  - Building overlay services, access channels, and merchant acquiring (system participants)
- Capacity for cross border payments (Nordic P27 will be the first FPS to offer cross-border payments and multi-currency settlement)
- Integration with digital ID system
- New elements (e.g. aliases), access channels (e.g. QR code), and services (e.g. request to pay)



# Fast Payment System Lifecycle



# The Need for FPS in Albania

## Market Context

- Market needs a low cost, interoperable retail payments infrastructure.
- FPS better option (vs card switch) due to cost considerations and types/number of use cases it can facilitate.
- End-user interest and trust in fast payment like service already tested through existing fintech solution in the market.

## Factors for consumer Adoption and Use Cases Suitable for the Market

- Transaction fees for end-users must be minimal to drive usage
- P2P and bill payments are of immediate need. P2B (including for e-commerce) is also needed due to lack of penetration of cards market in Albania.
- QR code is feasible in Albania (fintech solution already offers it) to drive P2B use case.

## Participation and Cost Sharing Arrangements

- A lean cost structure preferred by the PSPs where incremental costs can be absorbed in current operational environments.
- Most PSPs don't have front-end interfaces (e.g., mobile apps) to integrate with FPS. Investments needed for front-end and core banking.
- While BoA would make upfront investments for the system, PSPs as system participants would have to connect and invest in building overlay services for end users.

## Potential FPS Implementation Options for Albania

*Upgrade the RTGS – Albanian Interbank Payments System*

*Upgrade the ACH – Albanian Electronic Clearing House*

*Implement a New Stand-Alone FPS*

*Outsource FPS Operations to Local or Regional FinTech*

# Potential FPS Implementation Options for Albania – High Level Assessment

	Description	Pros	Cons
<b>Option 1: Upgrade RTGS</b>	Upgrade the current RTGS to offer an FPS module for fast payments. BoA would use and upgrade existing data center to meet the needs of 24x7 FPS functionality.	<ul style="list-style-type: none"> <li>• Immediate visibility of data and PSP activities for BoA.</li> <li>• Ease of implementation for PSPs due to established connectivity.</li> <li>• Shorter ramp up time for PSPs to offer new services to end customers.</li> <li>• Low integration cost for introducing value add services (e.g. fraud monitoring).</li> </ul>	<ul style="list-style-type: none"> <li>• Clearing function of RTGS to be available 24/7 (beyond the current operational hours), adding to the cost and operational complexities of the existing system</li> <li>• Data center will require upgrade in capacity.</li> <li>• Additional operational/organization capacity at BoA to manage payment systems oversight, operations and IT.</li> </ul>
<b>Option 2: Upgrade ACH</b>	Upgrade the current ACH to offer an FPS module for fast payments. BoA would use and upgrade existing data center to meet the needs of 24x7 FPS functionality.	<ul style="list-style-type: none"> <li>• Immediate visibility of data and PSP activities for BoA</li> <li>• Ease of implementation for PSPs due to established connectivity.</li> <li>• Shorter ramp up time for PSPs to offer new services</li> <li>• Low integration cost for introducing value add services (e.g., fraud monitoring).</li> <li>• Some PSPs have demonstrated interest in solution.</li> </ul>	<ul style="list-style-type: none"> <li>• Clearing function of ACH to be available 24/7 (beyond the current operational hours), adding to the cost and operational complexities of the existing system.</li> <li>• Data center will require a major upgrade in capacity.</li> <li>• Additional operational/organization capacity at BoA to manage payment systems oversight, operations and IT.</li> </ul>
<b>Option 3: Implement a New Stand-Alone FPS</b>	Procure a new FPS system that uses the RTGS data center. Ownership could be of BoA with potential private sector involvement.	<ul style="list-style-type: none"> <li>• Standalone FPS can be fully customized and developed to meet the needs of the market.</li> </ul>	<ul style="list-style-type: none"> <li>• High impact on costs and operational capacity of BoA and PSPs. BoA will have to plan a sizeable investment (upfront + ongoing) to run the system.</li> <li>• The data center will require an upgrade and will have an impact on capacity for running the system 24x7.</li> <li>• Will require significant investments from the private sector.</li> <li>• Additional operational/organization capacity at BoA to manage payment systems oversight, operations and IT.</li> </ul>
<b>Option 4: Outsource FPS Operations to Local/Regional FinTech</b>	Use a local/regional fintech solution and scale it up to connect all PSPs. BoA would be the owner/operator of the scheme and operations outsourced to fintech.	<ul style="list-style-type: none"> <li>• Most cost-effective solution for BoA and the market.</li> <li>• A local fintech already offers FPS like functionality on it's existing platforms.</li> <li>• Some banks already use the platform.</li> <li>• Shorter implementation timeframe for BoA and PSPs.</li> </ul>	<ul style="list-style-type: none"> <li>• Some larger PSPs uncertain about the use of fintech solution and believe they can do it themselves.</li> <li>• Scalability of solution to meet the needs of all 17 PSPs can be a challenge and would have to be managed well by BoA through Service Level Agreements (SLAs).</li> <li>• BoA will have to develop governance rules to manage participation of PSPs in scheme.</li> </ul>

# Cost and Capacity Implications for PSPs (i.e. System Participants)

<i>Option</i> <i>Category</i>	<b>Option 1 (RTGS Upgrade)</b>	<b>Option 2 (ACH Upgrade)</b>	<b>Option 3 (New FPS)</b>	<b>Option 4 (Outsource to FinTech)</b>
<b>Organizational Capacity</b>	<u>Low-Medium Impact</u> – Modest incremental organizational investments needed for developing FPS functionality.	<u>Low-Medium Impact</u> Modest incremental organizational investments needed for developing FPS functionality.	<u>Medium – High Impact</u> – a lot of unknowns for PSPs. Incremental costs could be easily absorbed in current cost structure or significant investments may be needed.	<u>Low-Medium Impact</u> – Most PSPs will need to establish connectivity. They can leverage existing APIs of fintech to develop FPS functionality.
<b>Operational Impact (including core banking/front end interfaces)</b>	<u>Low-Medium Impact</u> – PSPs have pre-established connectivity and minimal impact on core banking systems. Medium impact on operationalizing front-end interfaces.	<u>Low-Medium Impact</u> – PSPs have pre-established connectivity and minimal impact on core banking systems. Medium impact on operationalizing front-end interfaces.	<u>High Impact</u> – PSPs would need considerable investments to connect, certify and operationalize core banking systems. Efforts would also be needed for developing front-end apps/interfaces.	<u>Low-Medium Impact</u> – Medium impact on core banking systems. Low impact on operationalizing front-end interfaces.
<b>Ease of Implementation and Customer Onboarding</b>	<u>Medium Impact</u> – Initial use cases (P2P/P2G) should be easy. P2B would take time as a QR Code solution will have to be developed.	<u>Medium Impact</u> – Initial use cases (P2P/P2G) should be easy. P2B will take time as a QR Code solution will have to be developed.	<u>Medium Impact</u> – Initial use cases (P2P/P2G) should be easy. P2B will take time as a QR Code solution will have to be developed.	<u>Very Low Impact</u> – shortest time to market for this solution and customer familiarity of existing P2P solution.

**Thank You!**