



EUROPEAN CENTRAL BANK

EUROSYSTEM

# Retail payments developments in Europe

## Enabling innovation

Lima

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Francisco Tur Hartmann, Deputy Head of Market  
Integration Division, European Central Bank

# Agenda

- 1. The Euro Retail Payments Board**
- 2. Payment initiation services**
- 3. Instant & mobile P2P payments**

# The Euro Retail Payments Board

Collaboration to foster innovation



Payments = **network** industry

Need for **cooperation** to produce & to compete

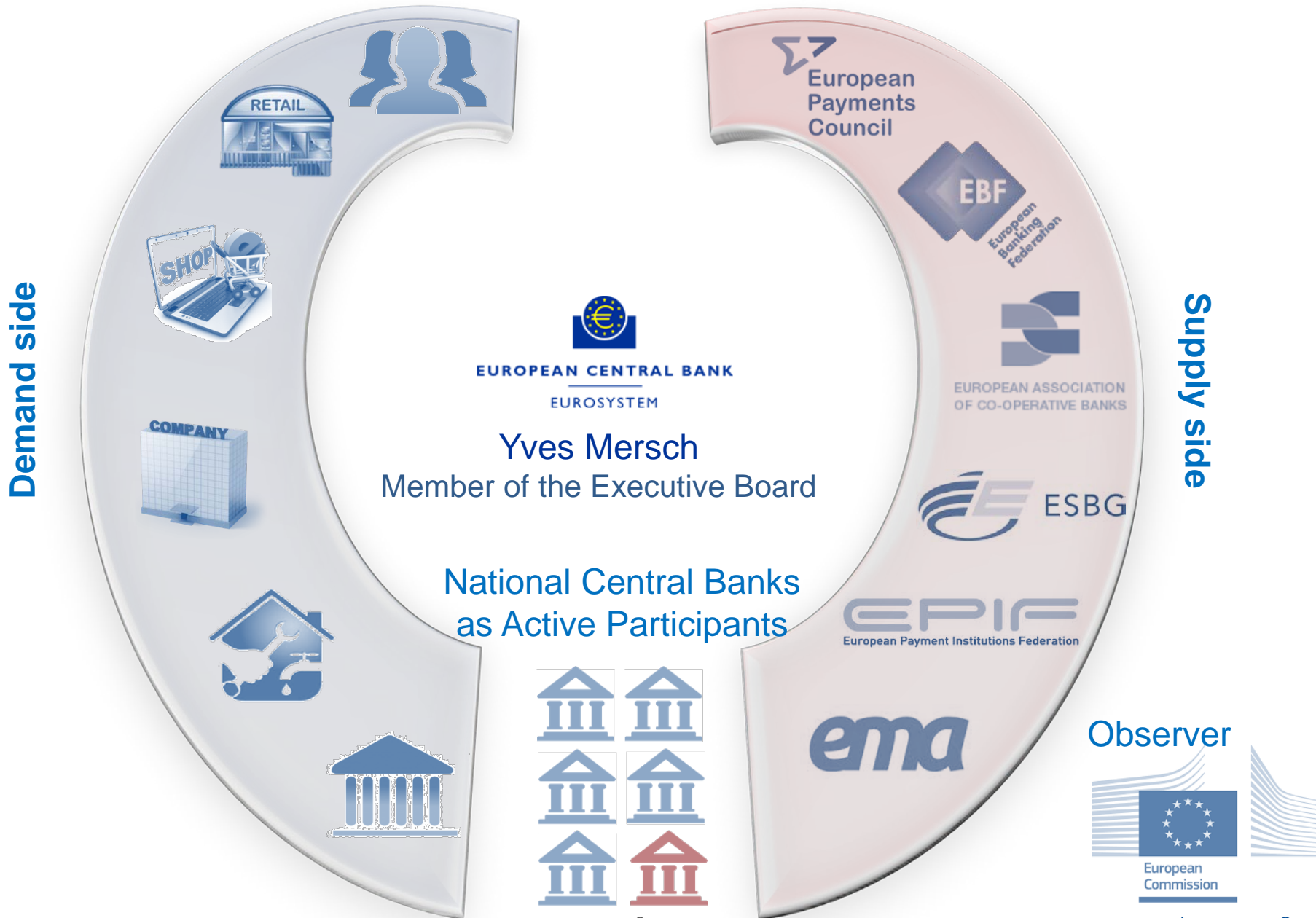
Involvement of **all** relevant stakeholders

## The ERPB was created by ECB Governing Council (2013) to:

- address retail payment issues in their broadest sense at European level by means of a European high-level dialogue between banks, other payment service providers and end-users of payment services
- contribute to and to facilitate the creation of an integrated, competitive and innovative market for euro retail payments in the EU, based on a level playing field.
- start of a new phase in the European retail payments integration process after the SEPA migration

***A cooperative approach reinforced by the Europe-wide reach of the ERPB, combined with an output-driven focus***

# 1. The Euro Retail Payments Board: **Composition**





**Lean** body

Concrete outcome at the **strategic** level

**Consensus**-based decisions

**Voluntary** commitment

Establishment of **working groups**, inviting  
/ acknowledging standing industry groups

**Transparency** [www.erpb.eu](http://www.erpb.eu)

**Since its creation the ERPB achieved progress towards integrated, innovative and competitive retail payments in euro in the EU in the following fields:**

**Post migration issues related to SCT and SDD**

**Pan-European e-mandates**

**Technical standards** for card payments

**Instant payments**

**P2P mobile payments**

**Mobile and card-based contactless proximity payments**



# Payment initiation services

Opening up the payments market

# E-commerce, payments and payment solutions?

- EU (2015): 43% of individuals have ordered/bought goods or services for private use over the Internet in the last three months



- E-commerce is the one sector of commerce growing rapidly
- Web-merchants and customers have to do with **old-fashioned retail payments**, not adapted for the internet experience and lacking convenience and security (e.g. Card-not-present payments)
- The incumbent providers might have been a bit too slow in adapting their retail payment services to the e-commerce environment
- Lack of efficient, safe and reliable **e-commerce payment solutions** at Europe-wide or worldwide scale

# A legal push: The revised Payment Services Directive (PSD2)

**Formalises access to payment account by third parties**

Provision of **payment initiation** and account information services requires authorisation

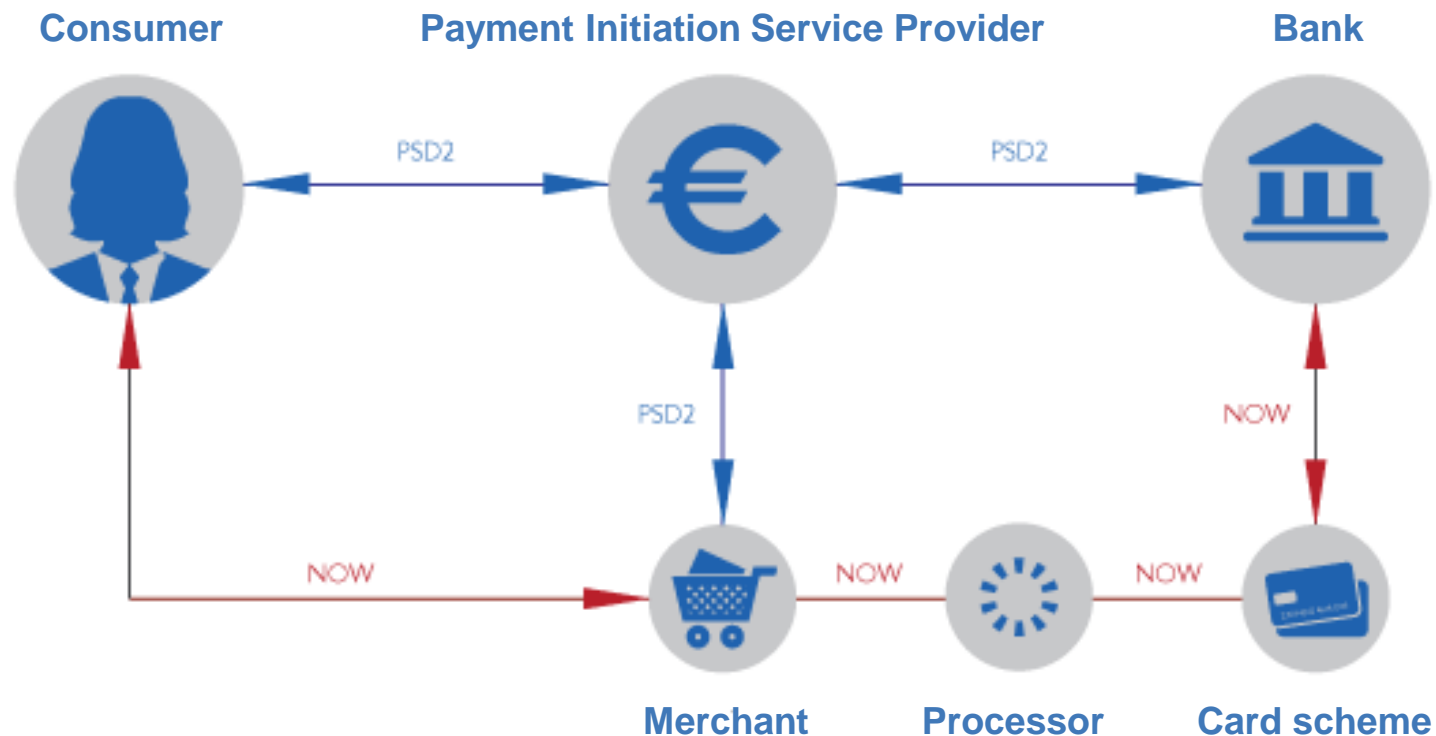


Account holding institutions can only deny access in case of no authorisation or fraud

**To be transposed in Member States national legislation by 13 January 2018**

## Payment initiation services – what is it?

- An **innovative payment solution** for e-commerce payments, based on initiating a credit transfer from your existing payment account



- Payment Services Directive 2 (PSD2) will regulate account access

- Started being offered in 2005, aimed at e-commerce merchants to let their clients initiate a payment by re-using their online banking facility with or without (!) permission of “account-servicing” banks
- ECB issued **security recommendations** (based on cooperation of overseers + supervisors) (2013)
- ECB facilitated **round-table sessions** with providers and banks to start a dialogue (2012-2013), and to be of help for the drafting of the proposal for a revised Payment Services Directive (PSD2)
- European legislation, PSD2 + EBA draft RTS\*, as of 2018:
  - consumers have the right to use “**third-party providers (TPPs)**” to initiate a payment order from their payment account if the latter is accessible online;
  - banks must execute the transaction and provide all available information;
  - banks must offer an **interface** for TPP identification, secure communication, and for relying on the authentication procedures of the bank.

EBA = European Banking Authority  
RTS = Regulatory Technical Standards

### Issue arising... we need standardisation of interfaces

- Around 3,400 Banks offer SEPA credit transfers (SCT)
- Initially, each of these Banks would offer its proprietary interface
- Each TPPs needs to do a technical project for the interaction with each of these Banks
- To limit costs, while ensuring sufficient reach, TPPs might choose to operate only with large banks (i.e. those with the most consumers)
- Moreover, TPPs might choose to operate only at national level
- PIS - although based on SCT - would not work for all Banks and/or not across borders
- ECB/Eurosystem concern: **renewed fragmentation** at TPP level (after successful integration of credit transfer into SCT)
- ECB is willing to **facilitate industry standardisation** process to harmonise individual bank interfaces in advance of the 'go-live' date

### ERPB involvement in payment initiation services

- In October 2016, relevant market representatives were approached in order to gain a thorough understanding of how the market is organised and how it may change
- Consensus on the objective of the provision at pan-European level; allowing the emergence of a well-functioning market in which multiple TPPs would compete with each other and merchants could use any one of them to reach customers throughout the EU
- In November 2016, the ERPB supported further work and mandated a **working group**, involving relevant actors beyond the ERPB membership, to define, by June 2017, a **common set of technical, operational and business requirements** for the development of an integrated market for PIS

### Further work needed

- The working group identified relevant issues and has succeeded in defining several common requirements:
  - harmonisation of the authorisation process for TPPs
  - standardisation of technical aspects of certificates for identification
  - “directory services” with up-to-date information on TPPs
  - standardisation of dispute handling process
  - harmonisation of testing
  - information sharing from TPPs to banks for fraud prevention.
- As the working group did not yet deliver on all parts of its mandate, it was invited to present its final report - taking account of the finalisation of the EBA RTS on authentication and communication – in November 2017.

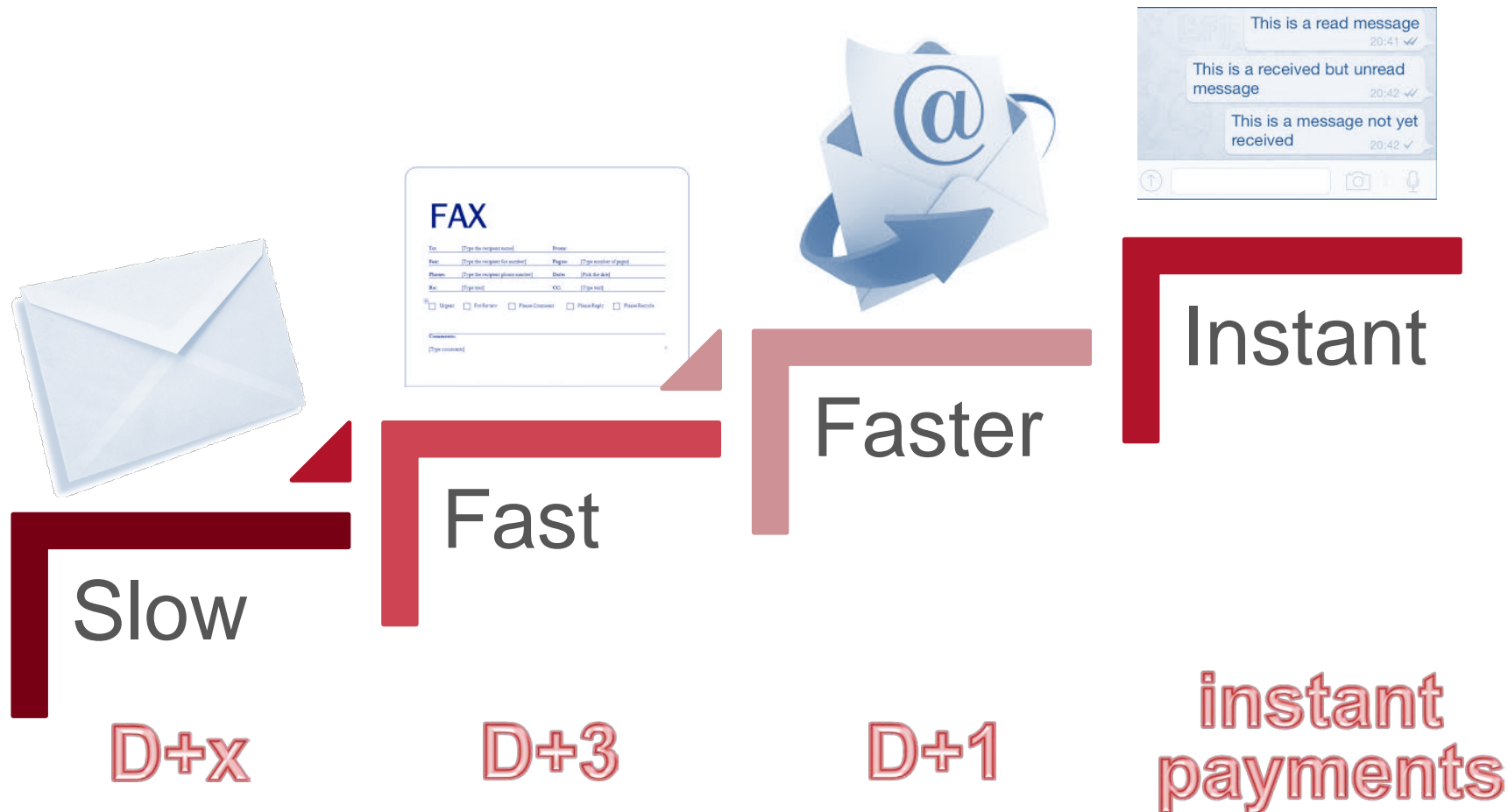


- Legislation cannot establish an efficient cross-border payment service without the market delivering the **necessary building blocks**
- Work of ERPB is unique and crucial to get to **common requirements**
- PIS impacts specifically **e-commerce transactions**, which used to be covered by banks' payment cards
- Moreover, combined with **Instant Payments**, PIS will impact physical point-of-sale transactions, which are covered by cash and by banks' payment products such as payment cards
- Technologically-advanced **banks** will respond to the new challenge by becoming **PIS-providers themselves!** Other banks might struggle to remain relevant for their customers as regards retail payments...

# Instant & P2P mobile payments

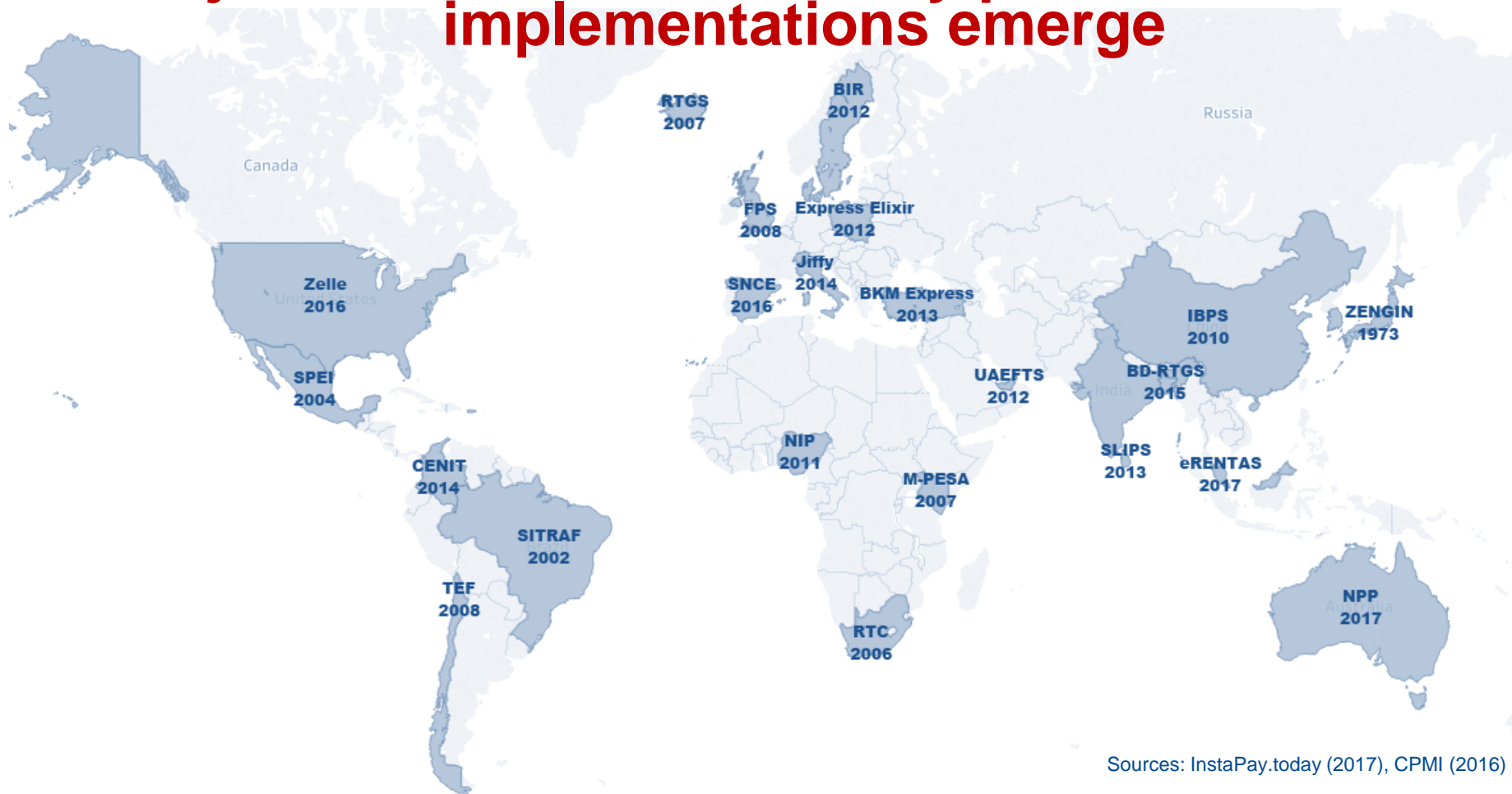
A real-time, mobile payment future

## Payments are following a universal trend



## Increasing speed in payments – a worldwide ambition

Implementations exhibit notable **differences across jurisdictions** that **will likely persist as new implementations emerge**



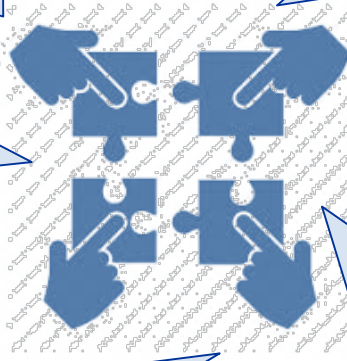
Sources: InstaPay.today (2017), CPMI (2016)

## Euro Retail Payments Board conclusions related to instant payments

Need for **at least one pan-European instant payment solution for euro** open to any PSP in the EU  
*(Dec. 2014)*

Instant payment solutions should be **developed at the pan-European level or, at least be interoperable** with those solutions based on the same payment instrument  
*(June 2015)*

Endorsement of **scheme design** proposal prepared by the European Payments Council  
*(Nov. 2015)*



Emphasized importance of effective & efficient **clearing & settlement** infrastructure for acceptance and success of instant payments  
*(June 2016)*

Supply side of the industry to increase the momentum towards implementing the SCT Inst scheme so that instant payments in euro **become available to end users at pan-European level starting from November 2017** *(June 2017)*

## Electronic **retail** payments



**24/7/365 availability**

**Payment instrument neutral  
(credit transfer, direct debit, payment card)**



**Confirmation to payer within seconds of payment initiation**

**Neutral to underlying arrangements for clearing and settlement**



**(Close to) immediate availability of funds to the payee**

**(Close to) immediate clearing between payment service providers**



*[Based on the definition agreed by the Euro Retail Payments Board in December 2014]*

## Instant SEPA Credit Transfer scheme

- Following agreement within the ERPB, the European Payments Council (EPC) has drafted a scheme rulebook for instant credit transfers with SEPA-wide reachability
- The rulebook is published on 30 November 2016 and expected to be implemented by November 2017



The money will be available on the account of the payee within ten seconds.



It will apply to credit transfers made in euro, up to an initial maximum amount of 15,000 euro.



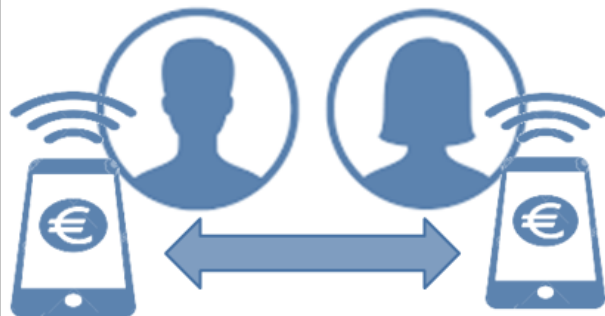
SCT Inst transactions will be available 24/7/365.



Transactions will be possible in the 34 countries which are within the scope of the current SEPA schemes.

Source [www.europeanpaymentscouncil.eu](http://www.europeanpaymentscouncil.eu)

#### Person-to-person mobile payments



#### Payments at the physical point of sale



#### E- and m-commerce payments



#### Paying at the mobile point of interaction





## The future is mobile

- There will be 11.6 billion mobile-connected devices by 2021
- Global mobile devices and connections grew to 8.0 billion (2016)
- Smart devices represented 46 percent of the total mobile devices and connections in 2016
- Mobile network connection speeds will increase threefold by 2021
- The Middle East and Africa have the strongest mobile data traffic growth (2016)



Source Cisco

Thus most retail payment innovations are mobile focused

Mobile proxy – a key enabler to seamless P2P mobile payments

Currently in Europe the IBAN is the unique payment identifier:

- Difficult to remember
- Not easy to use
- Slow to enter when initiating a payment

**A mobile payments identifier (e.g. mobile phone number) is needed to encourage the take-up of mobile and thus instant payments**

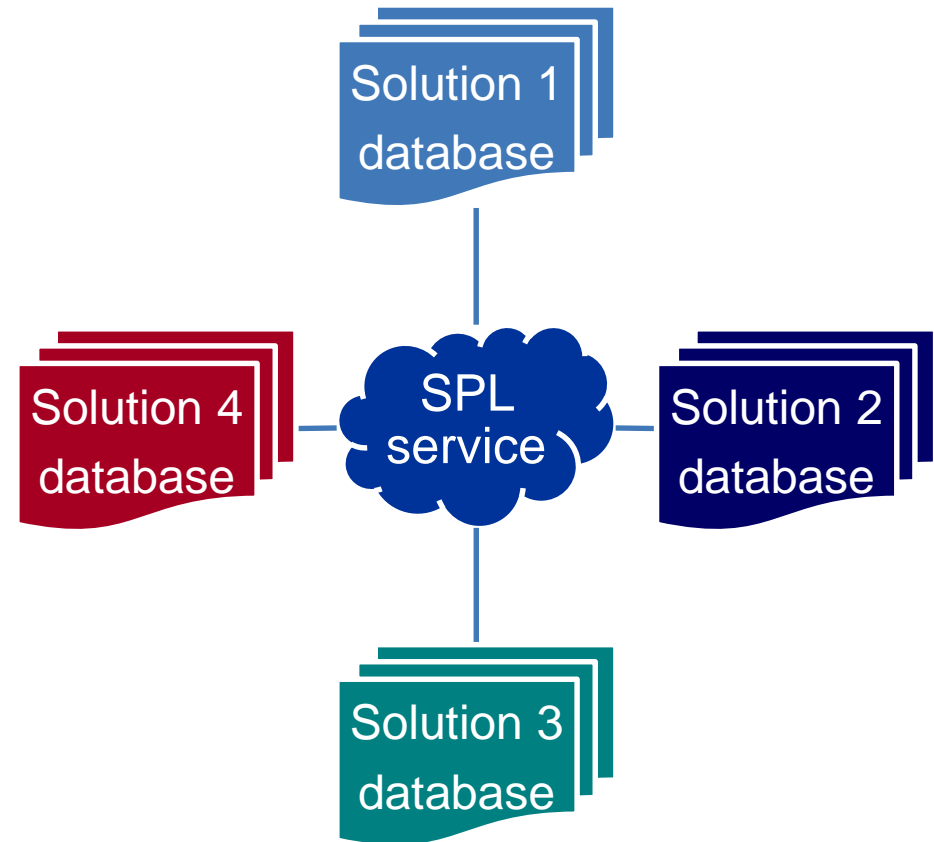
National European solutions do exist that map the mobile number to the IBAN however there is no interoperable pan-European solution

**ERPB recommendation on P2P mobile payments:**

EPC invited to facilitate cooperation between European P2P mobile solutions to ensure interoperability -> **Mobile proxy forum established**

## Objectives and focus

- Objective: interoperability between P2P mobile solutions that allow users to make payments using a **proxy** to identify the payee's account
- Key deliverable: a **standardised proxy lookup (SPL) service** for exchanging data between P2P mobile payment solutions
- Initial focus on **mobile phone numbers** as proxy + **IBAN** as account identifier

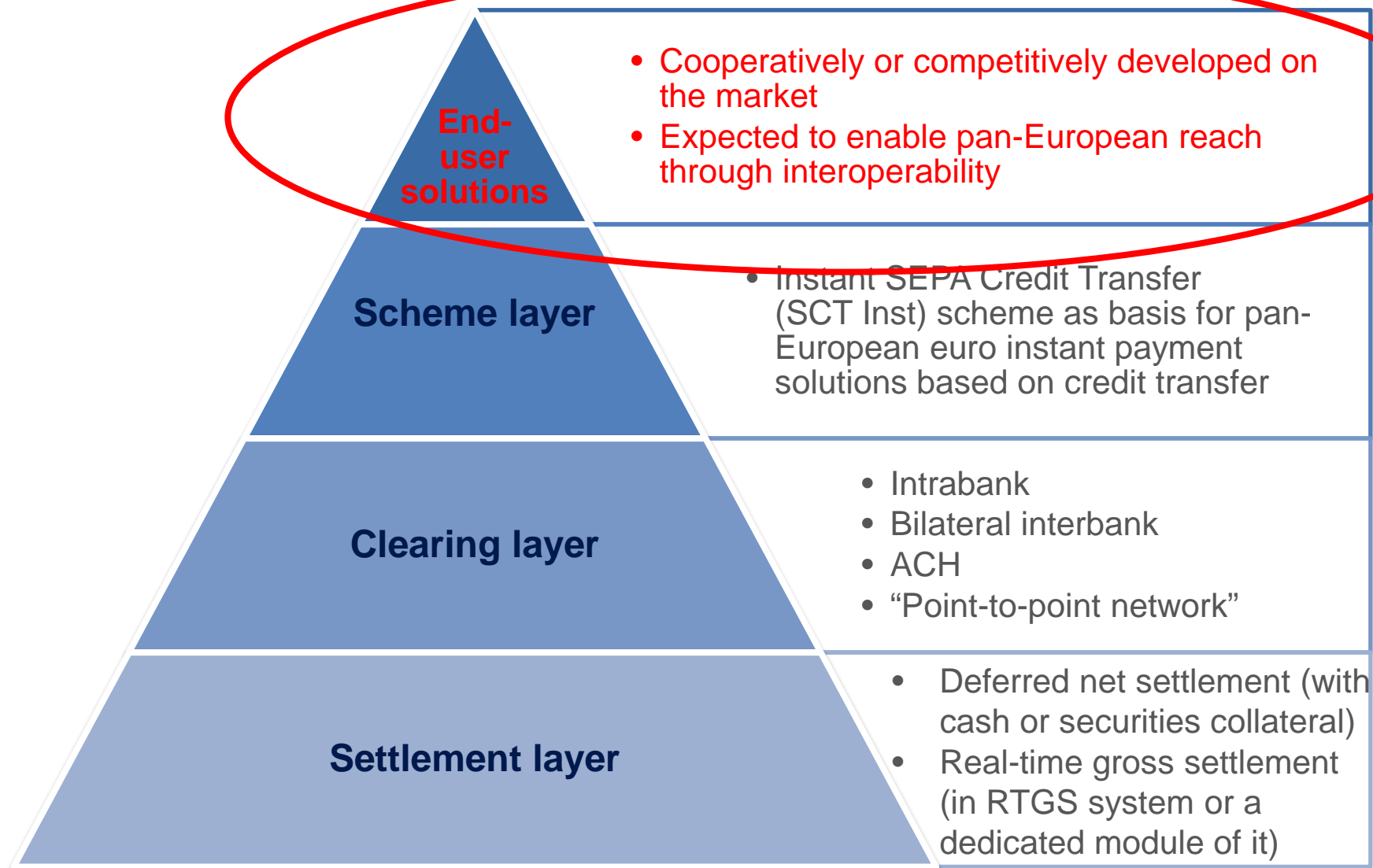


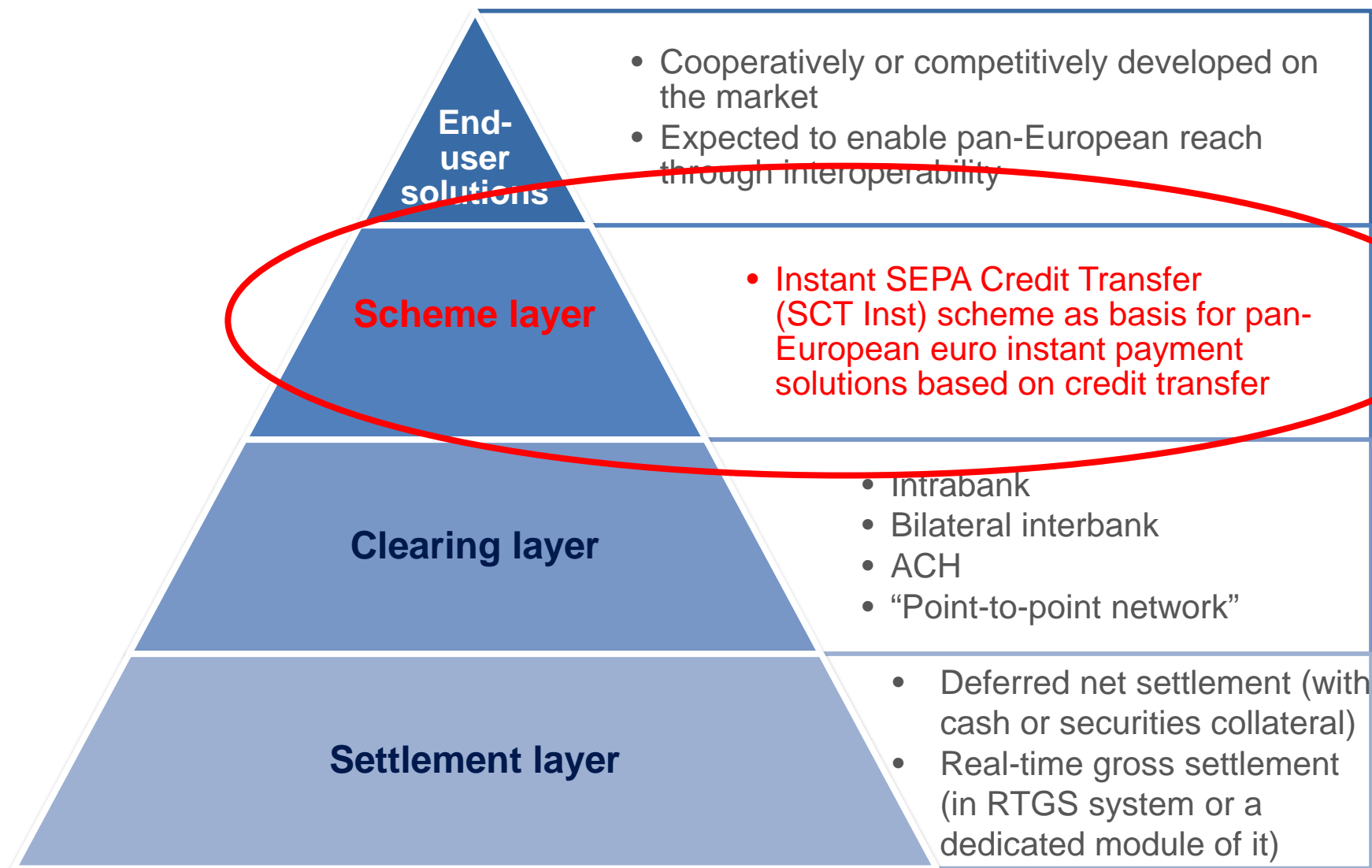
- Instant payments potentially the **“new norm”** for retail payments
  - Impact on other means of payment (e.g. cash, cards)
  - Instant payments will grow particularly strongly in e-commerce
- P2P mobile payments will be a **key driver** for instant payments in Europe
  - A standardised proxy lookup service is needed to enable cross border P2P mobile payments
- **Central banks increasingly involved** in their roles as catalysts, operators and overseers
  - Implications for other institutional functions under analysis (e.g. supervision, banknote issuance, monetary analysis)



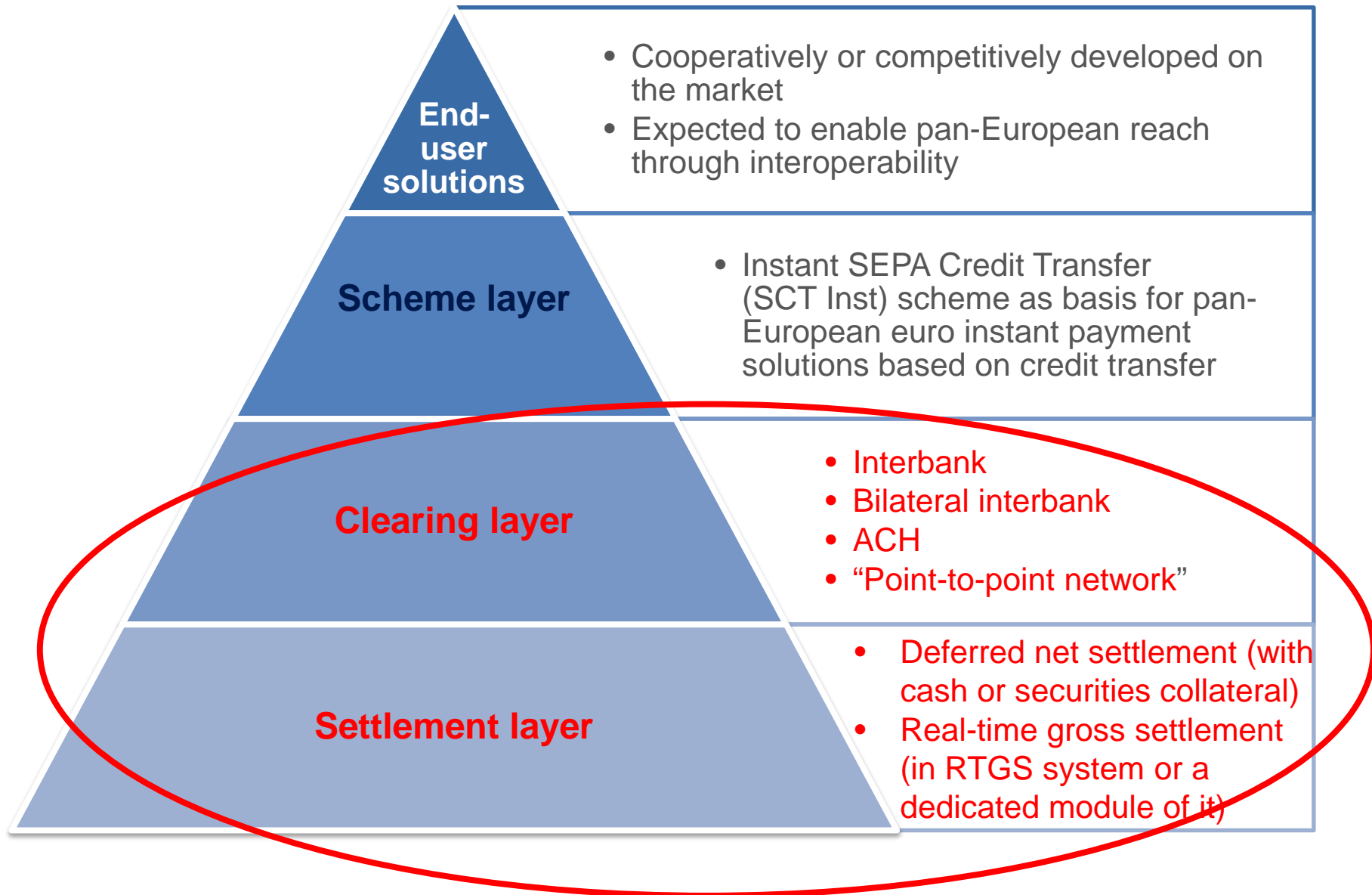
- Involvement of all relevant stakeholders is key in getting efficient retail payments (ERP)
- Instant payments potentially the “new norm” for retail payments
  - Impact on other means of payment (e.g. cash, cards)
  - Instant Payments will grow particularly strongly in e-commerce
- PSD2 facilitates access of new players to payment accounts: A successful implementation of PSD2 needs further harmonisation work.

Thank you

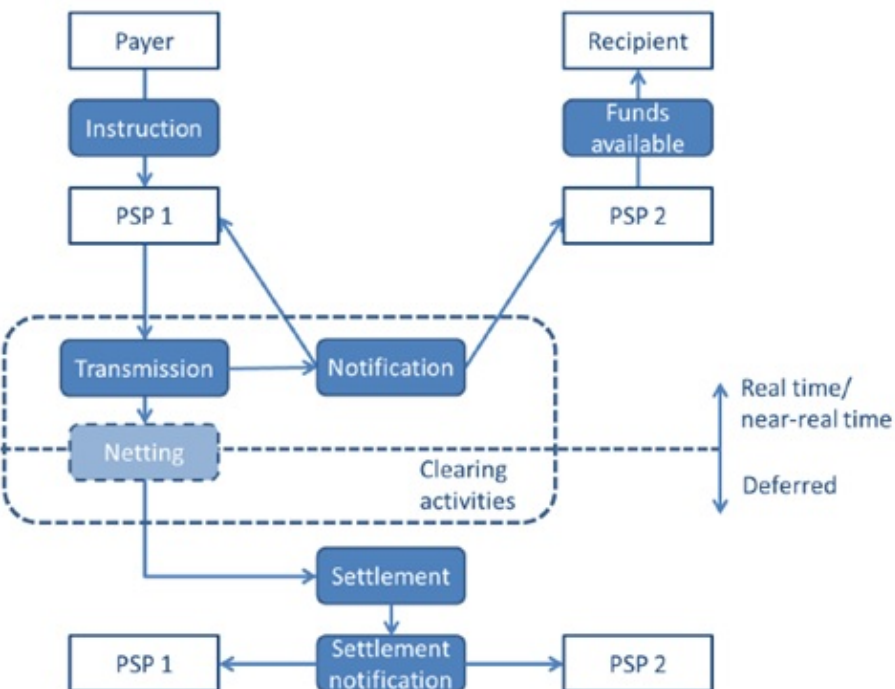




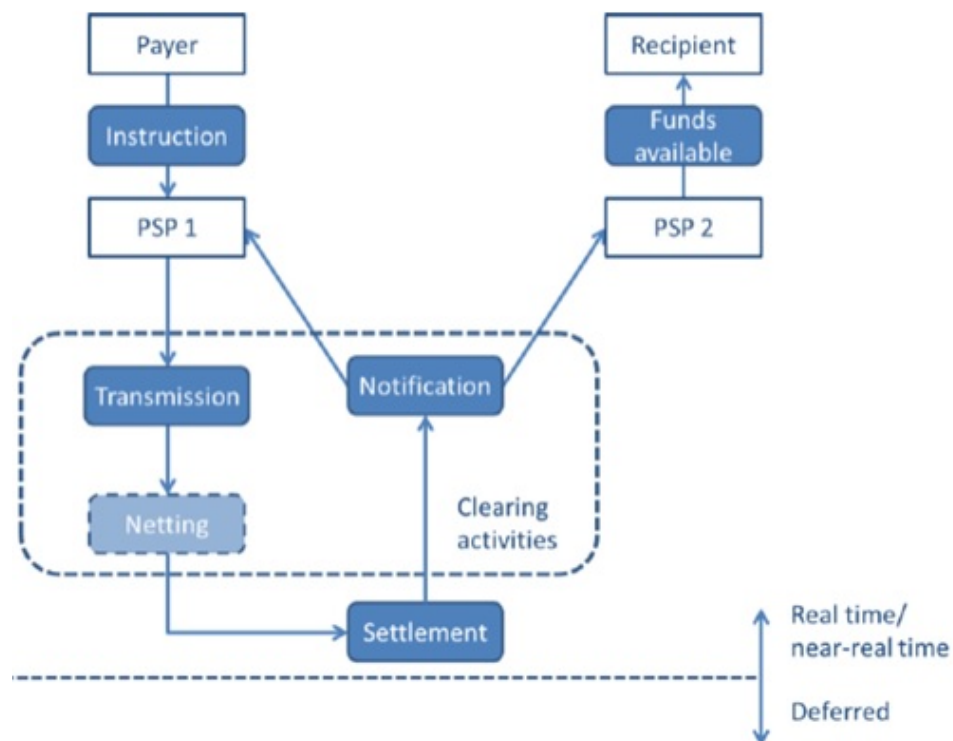




### Model 1 – Deferred settlement



### Model 2 – Real-time settlement



Source: CPMI Fast Payments Report (Nov 2016)

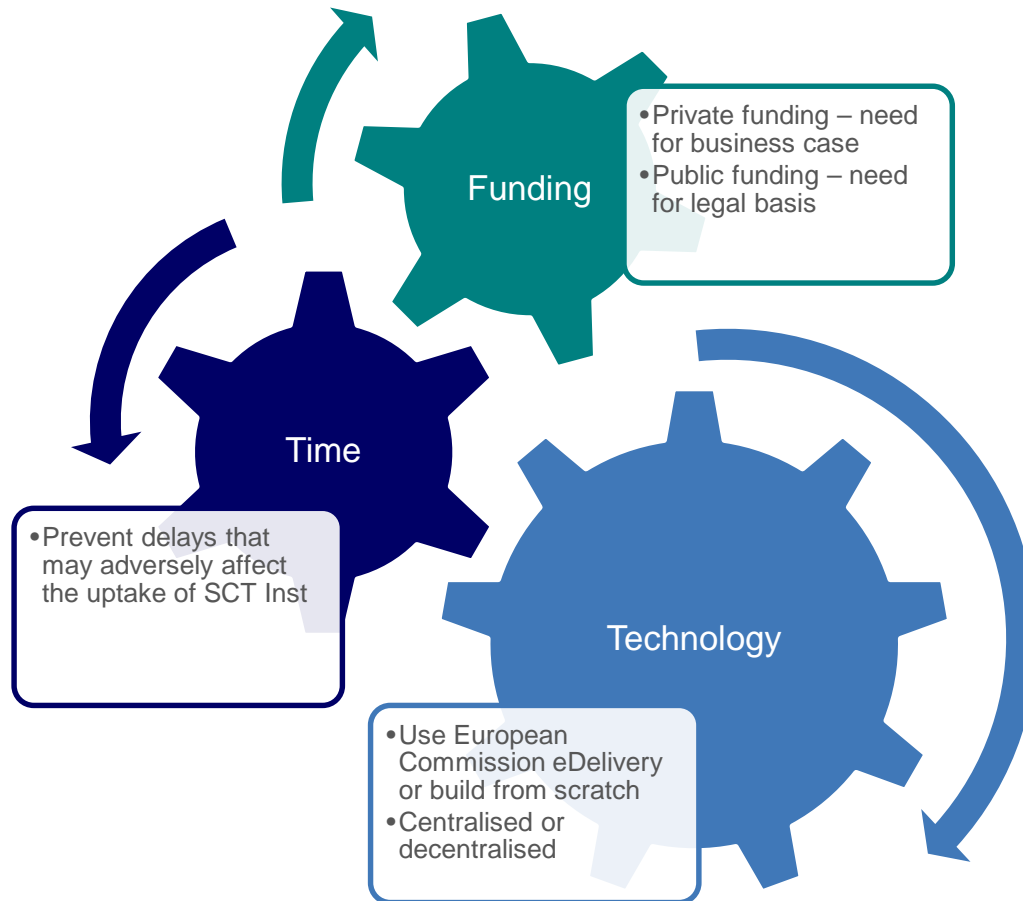
## Mobile proxy forum (MPF) established

- Membership is open to parties with a **vested interest** in pan-European P2P mobile payments
- **Steering Committee** with currently 38 members and two observers (European Commission, ECB)
- Currently three **working groups**: technical, legal, market implementation
- EPC provides the secretariat and publishes agendas and minutes on its website (**transparency**)

## Current status

- Rules for the SPL service have been published (April 2017)
- Possible technical architectures for the SPL service are being investigated
- Legal analysis focusing on data protection and privacy regulations as well as aspects of competition law
- Market implementation WG preparing a request for information to potential vendors

## Key challenges



# Technology

## Centralised vs decentralised

- The MPF has always focused on a solution with a **central hub**
- This approach was confirmed by the Steering Committee in December 2016
- But: some MPF members still want to consider a **decentralised approach**

## Technical architecture

- Two main **options**:
  - European Commissions Connecting Europe Facility (CEF) eDelivery solution to securely exchange data and documents
  - Building the SPL service from scratch, based on the agreed rules