Transformation of the European Payments Landscape
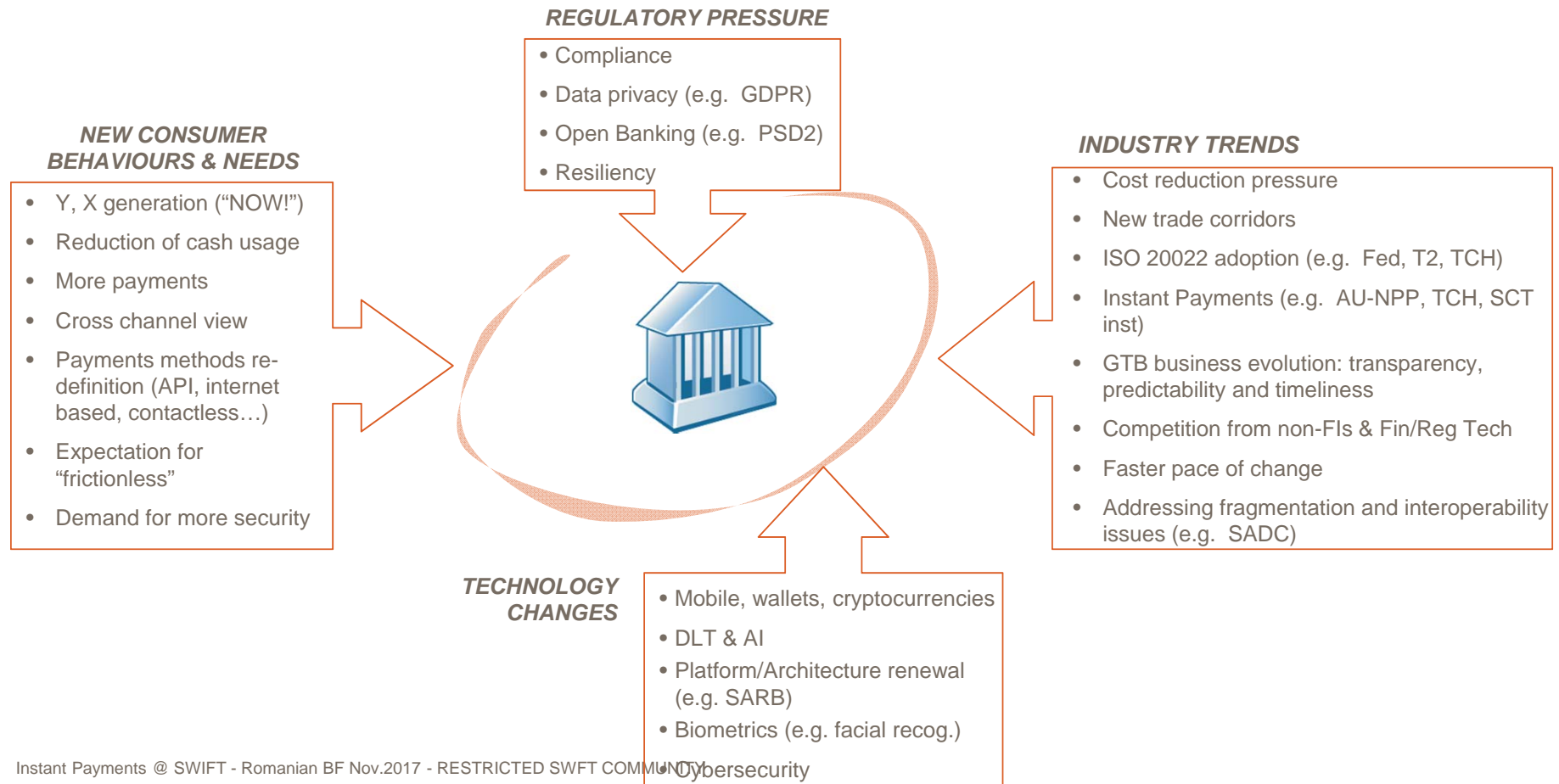
SWIFT Instant Payments Messaging

November 2017
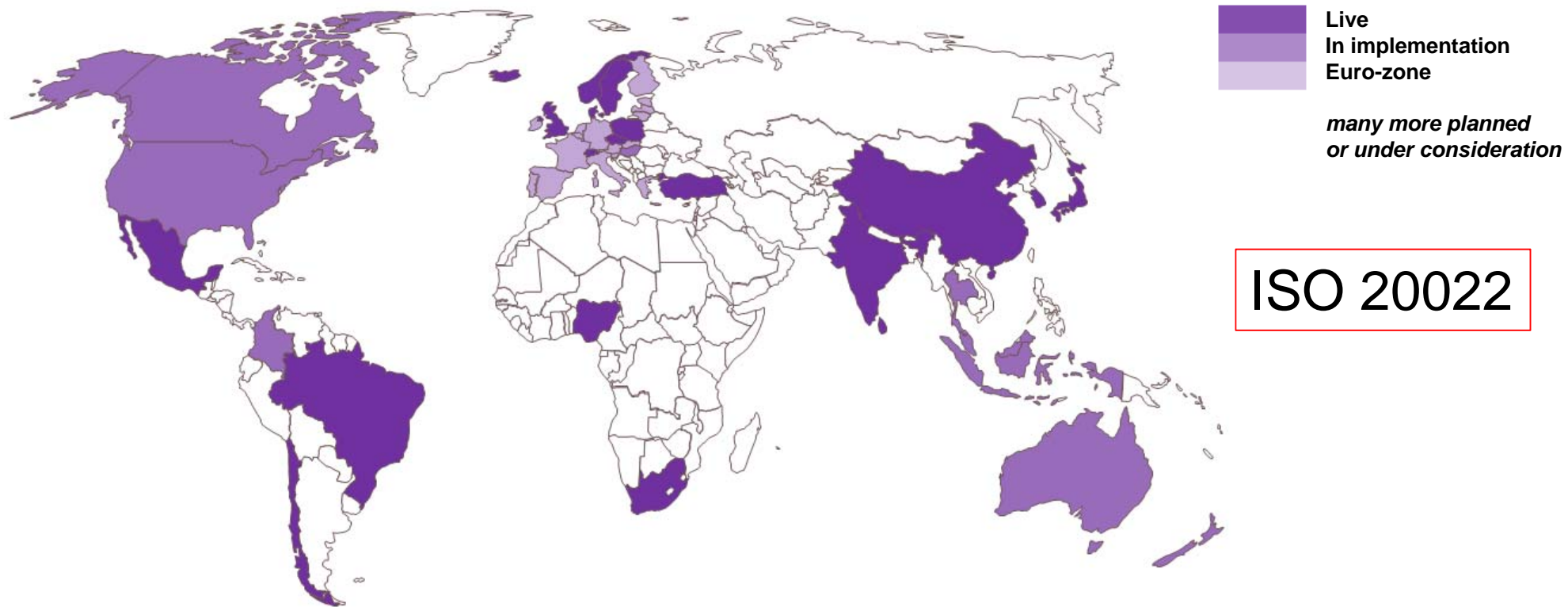
Matthieu de Heering
Head of Central and Eastern Europe
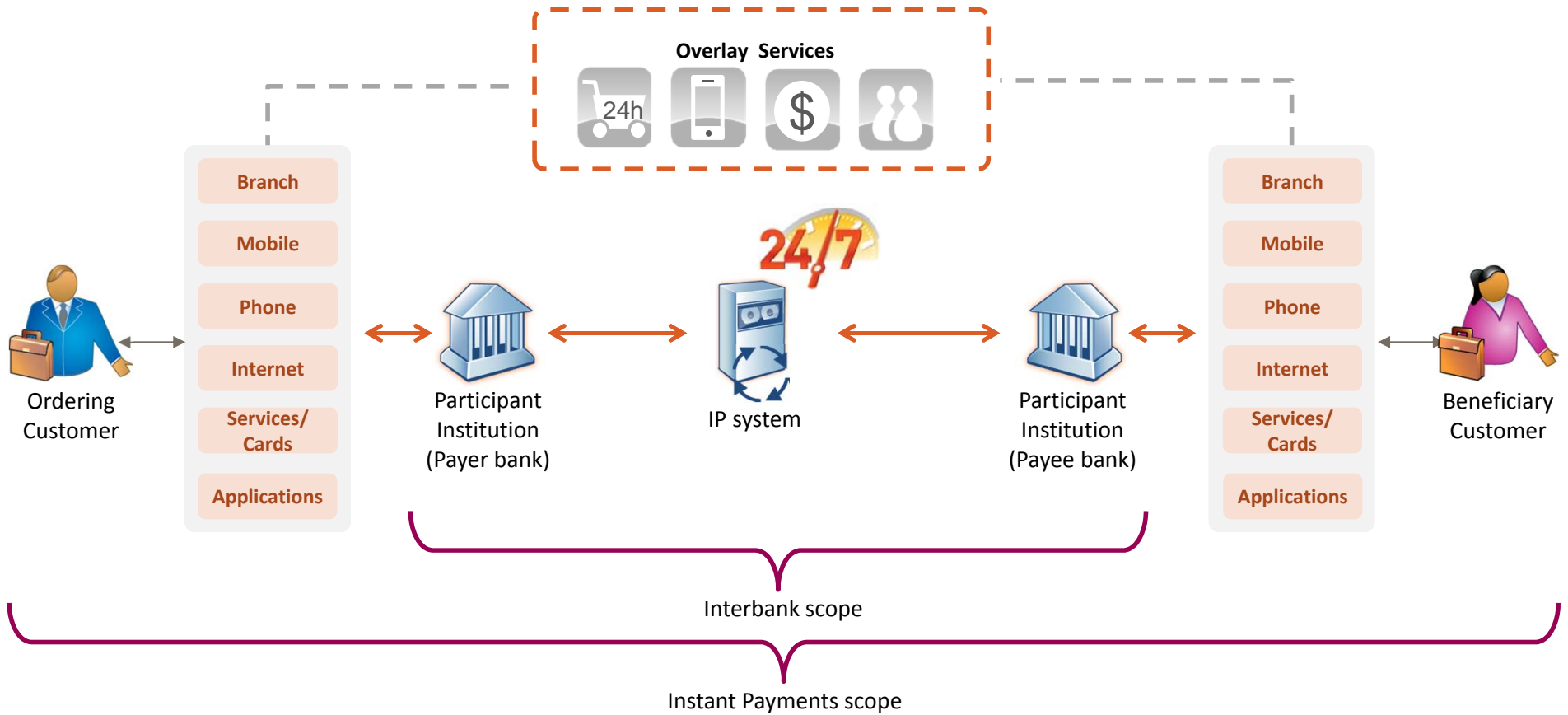EMEA - SWIFT

Challenges for the Payments Industry
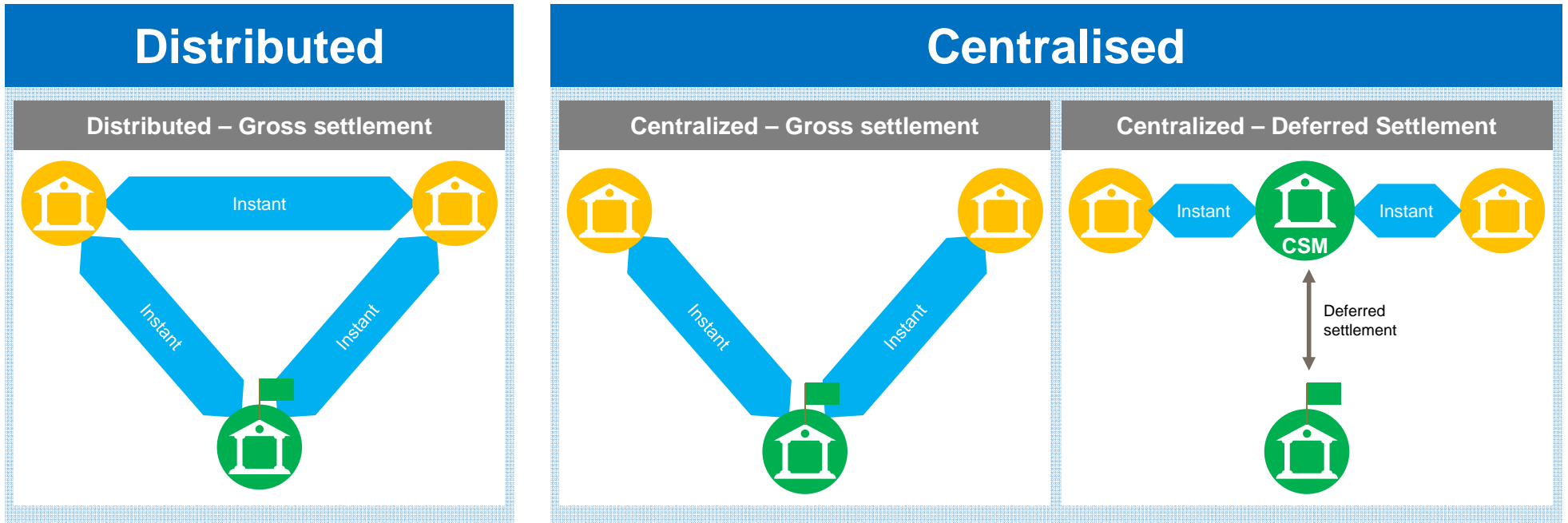## *Many disruptions coming together in a short timeframe and cost-pressured environment*

REGULATORY PRESSURE

- Compliance
- Data privacy (e.g. GDPR)
- Open Banking (e.g. PSD2)
- Resiliency

NEW CONSUMER BEHAVIOURS & NEEDS

- Y, X generation ("NOW!")
- Reduction of cash usage
- More payments
- Cross channel view
- Payments methods re-definition (API, internet based, contactless…)
- Expectation for "frictionless"
- Demand for more security

INDUSTRY TRENDS

- Cost reduction pressure
- New trade corridors
- ISO 20022 adoption (e.g. Fed, T2, TCH)
- Instant Payments (e.g. AU-NPP, TCH, SCT inst)
- GTB business evolution: transparency, predictability and timeliness
- Competition from non-FIs & Fin/Reg Tech
- Faster pace of change
- Addressing fragmentation and interoperability issues (e.g. SADC)

TECHNOLOGY CHANGES

- Mobile, wallets, cryptocurrencies
- DLT & AI
- Platform/Architecture renewal (e.g. SARB)
- Biometrics (e.g. facial recog.)
- Cybersecurity

Market context: faster payments come faster than expected

Live
In implementation
Euro-zone

*many more planned
or under consideration*

ISO 20022

Instant Payment End-to-End Chain

Supporting instant payments messaging – different models, common requirements

Distributed

Distributed – Gross settlement

New Payments Platform

Australia New Payments Platform: Q4 2017

Centralised

Centralized – Gross settlement

Centralized – Deferred Settlement

Instant

Instant

CSM

Deferred settlement

First deployment in Eurozone: Q4 2018

Key Requirements

- Low latency
- 24x7x365
- Secure & Resilient

Instant Payment in Europe

Euro Retail Payments Board

European Payments Council

SCT Inst
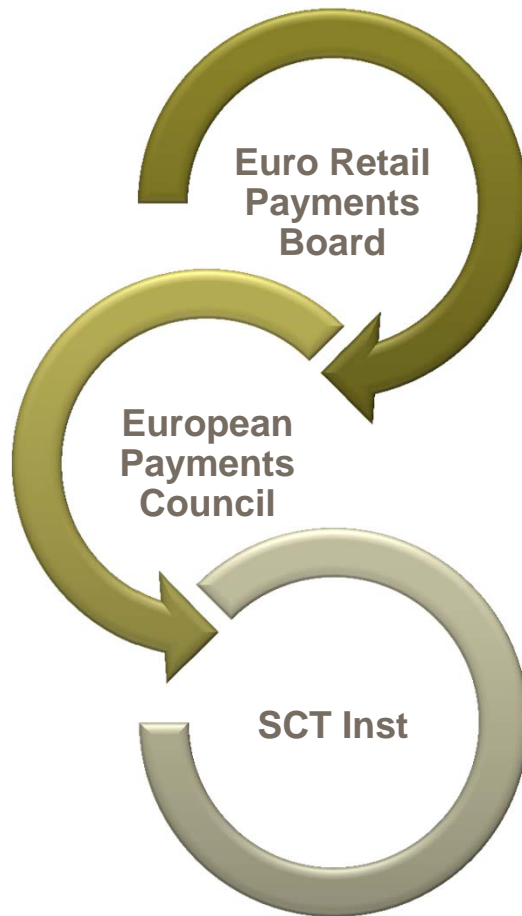
Launched by ECB in December 2013. Consisting of representatives of the Eurosystem as well as supply and demand side. Replacing the SEPA Council. Aim to foster the development of an integrated, innovative and competitive market for retail payments in Euro in the European Union.

The ERPB has invited the European Payments Council (EPC) to develop a pan-European instant payment scheme. The scheme will be based on the EPC's current SEPA credit transfer (SCT) scheme and will be called SCT inst.

Implementation Guidelines set out the Single Euro Payments Area (SEPA) rules for implementing the interbank 'instant' ISO 20022 XML message standards based on version 1.0 of the 2017 SEPA Instant Credit Transfer (SCT Inst) rulebook, taking effect 2017 November 21st at 08:00 CET

SCT Inst Retail Payment – Key characteristics

A non-time-critical payment of relatively low value. These payments are typically made outside of the financial markets and are both initiated by and made to individuals and non-financial institutions.

European Payments Council

10s

Money will be available irrevocably on the account of the payee within 10 seconds

15,000 €

Applies to credit transfers made in euro, up to a max amount of 15,000 €

24/7/365

SCT Inst transactions will be available 24/7/365

34 countries

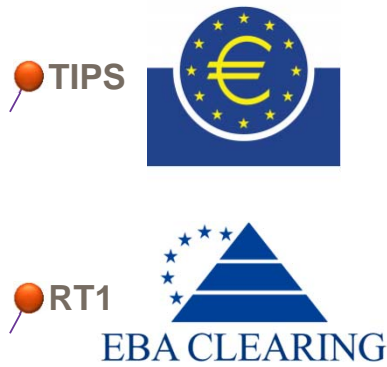Transactions will be possible in the 34 current SEPA scheme countries

Important: not a big bang implementation:
Nov 2017*: AT, ES, FI (2 major PSPs), IT and LV – btw 500 & 600 entities to join*
End 2018*: FI (most PSPs), PT (major PSPs), NL (some PSPs), SE, DE*
No date yet*: FR, DK, IE, LU*

https://www.europeanpaymentscouncil.eu/

Instant Payment Initiatives in Europe

- 🔴 SCT Inst scheme
- 🔵 Other schemes

European Automated Clearing House Association

TIPS

RT1

Vocalink

NETS

BIR

NETS

LV ACH

LT ACH

Equens

KIR

STET

STET

HU ACH

ICBPI

Iberpay

SIBS

EACHA
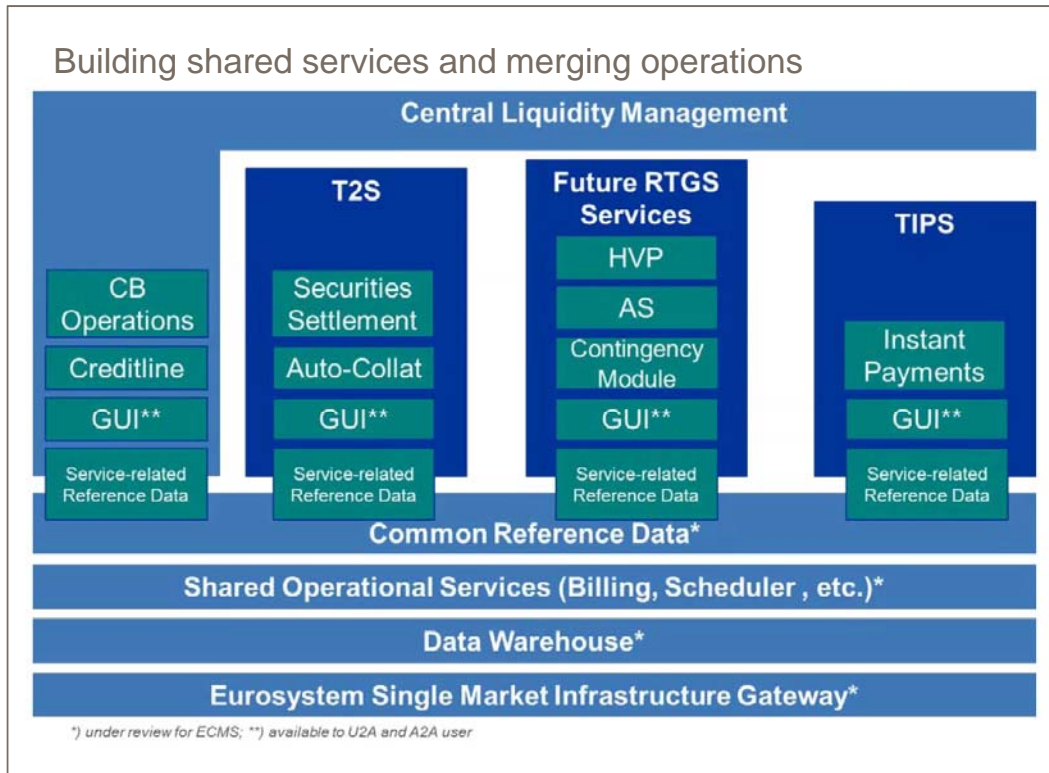European Automated Clearing House Association

Different liquidity models, different ambitions

The Eurosystem consolidates access to their Market Infrastructure services

Eurosystem vision by 2020

Building shared services and merging operations

Central Liquidity Management

T2S	Future RTGS Services	TIPS

CB Operations	Securities Settlement	HVP	Instant Payments
Creditline	Auto-Collat	AS	
GUI**	GUI**	Contingency Module	GUI**
Service-related Reference Data	Service-related Reference Data	GUI**	Service-related Reference Data
		Service-related Reference Data	

Common Reference Data*

Shared Operational Services (Billing, Scheduler , etc.)*

Data Warehouse*

Eurosystem Single Market Infrastructure Gateway*

*) under review for ECMS; **) available to U2A and A2A user

Timeline

Some ACHs IP initiatives going live (e.g. EBA, STET)

TIPS testing & Go-Live
2017

Future RTGS Services ESMIG implementation
2018

T2S renewed tender *2019*

SWIFT Instant design principles

Enable re-use

SWIFT customers should be able to re-use of SWIFT assets as much as possible

Multi-CSM Connectivity

Participants should be able to connect to multiple services (CSM, value-added services) through a single connection

Meet EU Instant Payments requirements

Support the various messaging needs for instant payments and be future proof for T2/T2S/TIPS consolidation (incl. ESMIG) and beyond (interface strategy)
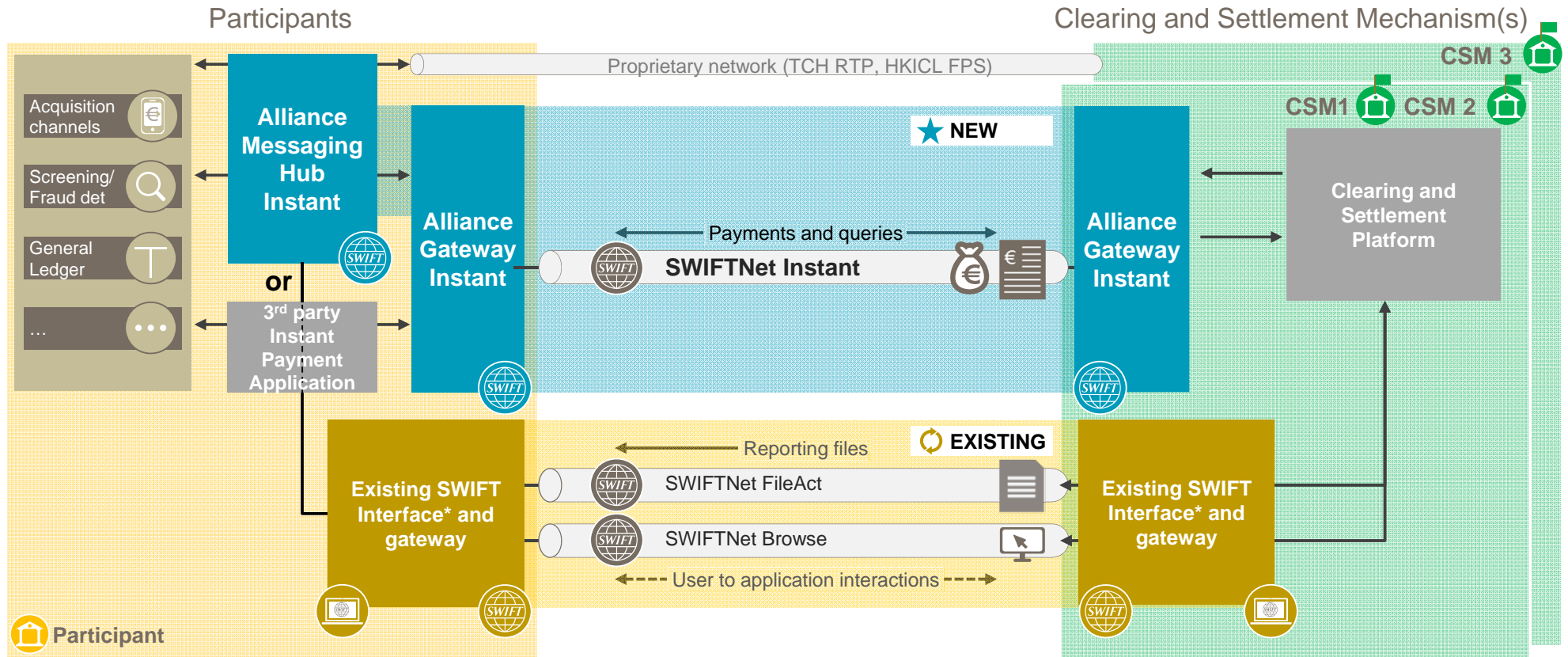
Future proof

Support future footprint evolution, infrastructure changes, aligned with SWIFT product portfolio

SWIFT solution for instant payments

Participants

Clearing and Settlement Mechanism(s)

CSM 3

CSM1 CSM 2

Proprietary network (TCH RTP, HKICL FPS)

Acquisition channels

Screening/ Fraud det

General Ledger

...

Alliance Messaging Hub Instant

or

3rd party Instant Payment Application

Alliance Gateway Instant

⭐ **NEW**

Payments and queries

SWIFTNet Instant

Alliance Gateway Instant

Clearing and Settlement Platform

Existing SWIFT Interface* and gateway

↻ **EXISTING**

Reporting files

SWIFTNet FileAct

SWIFTNet Browse

←---- User to application interactions ----→

Existing SWIFT Interface* and gateway

🏠 **Participant**

Introduces a **new** instant messaging protocol
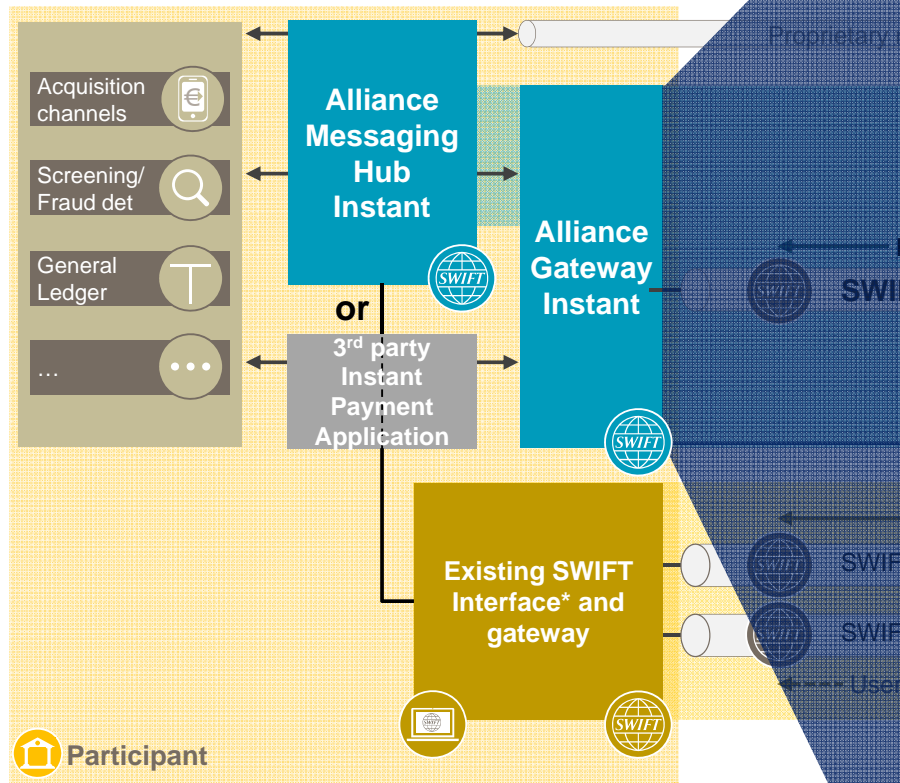(SWIFTNet **Instant**)

Re-uses the existing SWIFTNet **connectivity** and **security** infrastructure

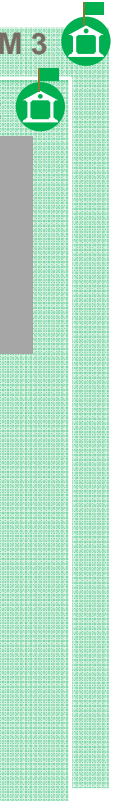**Re-uses** SWIFTNet **FileAct** and **Browse**

*existing infrastructure (if AMH this infrastructure can also form the basis of the orchestration hub)
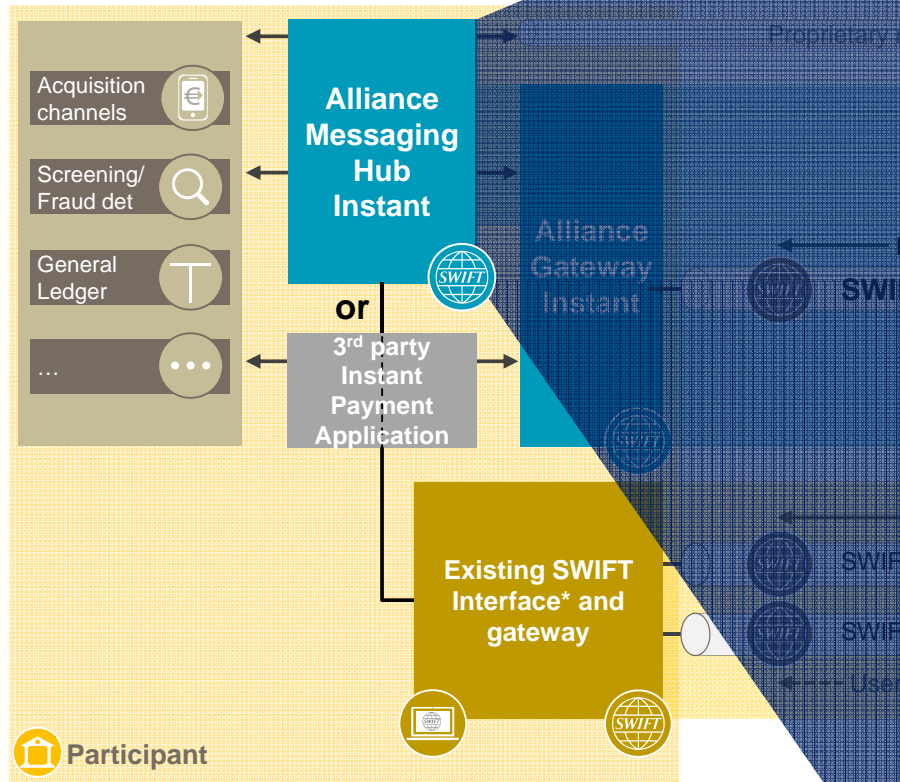
Alliance Gateway Instant features

SWIFT's new real-time, 24x7 Alliance Gateway Instant

Multi BIC routing
Support for direct, indirect participation models and overlay routing

Zero downtime, 24/7 availability
Active/active, load balancing, low latency

Multi back-office support
Segregation of business messages and security

Alliance Gateway Instant (AGI)

Multi CSM
A single gateway to support the flows from multiple CSMs

Monitoring
Integration with monitoring applications

Rolling upgrade
Ensuring easy ways to upgrade one instance while other can continue to process volume

Non-repudiation
Signing, authorization

Highly secure
Implements solution to authenticate the back-office

Alliance Messaging Hub Instant Features

- Acquisition channels
- Screening/Fraud det
- General Ledger
- ...

Alliance Messaging Hub Instant

or

3rd party Instant Payment Application

Existing SWIFT Interface* and gateway

🏠 **Participant**

SWIFT's real-time, 24x7 Payment Orchestration Platform

Embedded Payment Choreography
Supports transaction flow management across business lines and channels (incl. "on us" transaction support)

Reconciliation
Provides a toolset to reconcile your instant payments around the clock.

Multi-CSM Multi-format
Supports any CSM format, can translate to & from formats required by customer applications. Maps messages as per CSM practices

Time out management
Supports multiple time outs and alarms if sub processes take to long

Alliance Messaging Hub Instant

Technical flow support
Duplicate checks, retry protocols, external service invocation

Single source of multi-CSM, multi-network reference data
Store & continuously update CSM Reference data (directory & routing information)

Stand-in module
Handling downtimes of adjacent systems

Zero downtime 24/7 availability
Active/active, load balancing, horizontal and vertical scalability

Timeline for SWIFTNet Instant messaging solution

2017 | **2018**

sibos | **Q4** | **Q1** | **Q2** | **Q3** | **Q4**

New Payments Platform

Go-live
End Nov. 2017

Public Launch
February 2018
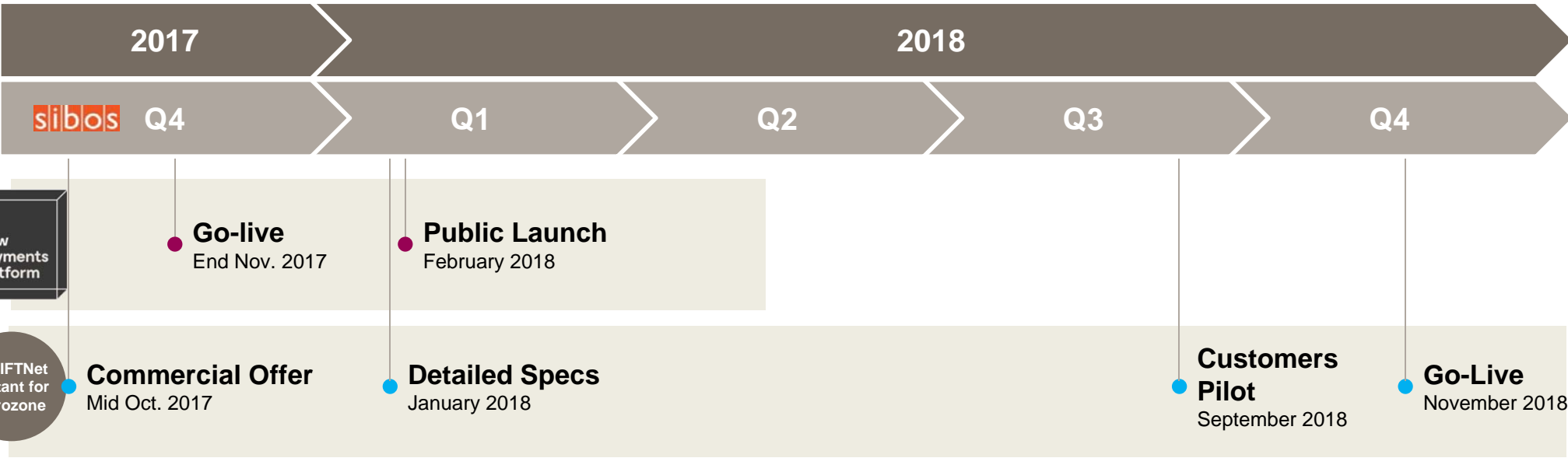
SWIFTNet Instant for eurozone

Commercial Offer
Mid Oct. 2017

Detailed Specs
January 2018

Customers Pilot
September 2018

Go-Live
November 2018

Instant Payment Pricing

Alliance Gateway Instant (and AMH Inst*) – Configuration Examples

Pricing Principles

Facilitate ramp-up
- The price is driven by:
    - **Traffic usage,** allowing for "start small – pay less"
    - **Resiliency level** , (i.e. number of installed instances) allowing for a progressive configuration scale-up as volumes grow
- **No** one-time fees
- **No** additional charge for connecting to more than one CSM

Cater for predictability
- The price is structured according to pre-determined price *bricks* (defined according to the average daily volume), i.e. no fee/payment introducing uncertainties

Reward usage
- Decreasing unit price as volumes grow

Configuration example

		PROD		TEST
		Primary Site	Secondary Site	Test Environment
Entry Level				
• Resiliency with Single Point of Failure		AGI	AGI	AGI
± 5.000 pmt/day	45K €/y			

*Optional

Approach for Instant Payments adoption

When SWIFT can assist you and how

Strategic Analysis & Business Case	Impact Assessment & Gap Analysis	Solution Design	Implementation & Set-Up
New Payments Landscape Assessment	New Payments Architecture Assessment	Solution Design (future state platform)	Messaging Platform Implementation and Configuration services
ISO 20022 Impact Assessment	Payments Operations Review	Operational Excellence Review	Integration Services
Tailored Training	Business Flows and Standards Analysis (incl. transformation, market practices & implementation rules)	SWIFT Infrastructure Security Review	Testing Services

Business & Standards services

Technical services

Mix of business & technical services