Interoperability in the Euro Area

Kuala Lumpur, 4. December 2018

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Paying in the Eurozone

Share of cash transactions per country at points of sale
(number of transactions)

Share of cash transactions per country at points of sale
(value of transactions)

Sources: ECB, Deutsche Bundesbank and De Nederlandsche Bank.
Single Euro Payments Area – SEPA: an integrated euro retail payments market

- 34 SEPA-countries
- 525 million citizens
- 4,500 payment service providers
- Single set of payment instruments in Euro
- Efficient and interoperable infrastructures for the processing of euro payments
- Common technical standards
- Harmonised legal basis
SEPA Players

- **EURO Retail Payments Board**
  - **Legal Framework**
    - European Commission
  - **Catalyst, Operator**
    - Eurosystem
  - **Business Rules, Standards**
    - European Payments Council
  - **Operator**
    - Payment Service Providers

- **Customers (Consumers, Corporates, Public authorities...)**
The world of payments is changing

Cash => Electronic

New Devices

Face-to-Face => Remote
Trends in the payment landscape

**Further digitalisation**
- Growth in e-commerce, online activity, social networks
- Demand for convenient payment solutions

**Mobile Solutions**
- Fast spreading ownership and usage of mobile devices
- M-banking, contactless, P2P solutions

**Focus on speed and user-friendliness**
- Speed at the POS: contactless, instant
- One-click-buy, biometrics, proxys

**New market participants**
- Fintech & Bigtech
- Impact of PSD2 / access to the account by third parties
TARGET Instant Payment Settlement (TIPS)

as of November 30, 2018

- Availability 24/7/365
- Real-time Settlement
- SEPA-compliance
- Finality
- Central bank money
- Accountable to minimum reserve
- Low price
TIPS – instant payments as of November 30, 2018

Reduction of risks
- Liquidity risk
- Credit risk
- Systemic risk

As alternative for
- Credit transfers
- Cash
- Debit- and credit cards

TIPS participation
- Chance for banks to strengthen their position in the payment chain
- Cooperation with payment initiation services and Fintechs

Amount limit: 15,000 €
- Higher limits to be negotiated bilaterally
Interoperability & cooperation in Austria – Example cash logistics

Cash Logistics in Austria

External upstream suppliers (paper, metal, packaging, etc.)

OeBS

External buyers (banknote recycling, raw materials, recyclable metal, etc.)

Münze Österreich AG

GSA

OeNB

Commercial banks

Bank branches
Post offices
Individual retailers

Businesses
Private households

Raw materials ➔ Euro banknotes and coins ➔ Cash-in-transit companies

Source: OeNB.
Cashless payments: Interoperability & cooperation lead to efficient products

Clearing & Settlement of credit transfers & direct debits

GSA
Clearing Service.Austria

ΟNB
Clearing Service.International

STEP2 Transactions

Clearing Service.Austria

Partners

Processing of debit card transactions & ATM network

Payment Services Austria

Standardisation

Austrian innovation (examples)

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Wrapping up

A good start for interoperability: SEPA with common laws, standards and business procedures

New kids on the block: PSD 2 opens the door for non-bank payments provider

New technologies (e.g. DLT) are evolving

Global Trend towards instant payments

The Eurosystem supports innovation if the developments are safe and efficient and open the same opportunities to everyone in Europe. The Eurosystem provides a system for instant payments => TIPS

⇒ Interoperability in interbank sphere
⇒ Interoperability between / availability of end-user solutions?
Compliant with SEPA Credit Transfer instant scheme

1. Originator participant sends instruction to TIPS
2. TIPS validates and reserves the payment (conditional settlement)
3. TIPS forwards the instruction to the beneficiary participant
4. The beneficiary participant validates the order
5. The beneficiary participant sends a positive confirmation to TIPS
6. TIPS settles the payment
7. TIPS confirms the settlement to the originator participant
8. TIPS confirms the settlement to the beneficiary participant

Source: ECB
Co-existence of payment services

Source: ECB

1 payment service provider
2 automated clearing house
3 ancillary system interface

Source: ECB
Candidates for RT adoption (AT market)

SCT instant has potential to substitute SCTs, card transactions and cash payments. But this will depend on:

- Regulatory measures
- Availability of infrastructures
- Availability of comparable payment instruments
- Costs/charges
- Changes regarding max. execution time and amount
Vision 2020 – Eurosystem market infrastructures

Central Liquidity Management
Main Cash Accounts
(open market operations, standing facilities, cash withdrawals)

RTGS (TARGET2)

TIPS

TARGET2-Securities

Common Reference Data, Data Warehouse, Shared Operational Services (e.g. billing)

Eurosystem Single Market Infrastructure Gateway
Payment in Europe – Quo Vadis?

- Card market is dominated by American Schemes

- Most of real-time payment solutions are provided by American companies

⇒ Europe could lose control over European payments & data
⇒ Eurosystem could lose insight in transaction flows
⇒ Impact on stability and oversight
Payment landscape is changing…

• Single Euro Payments Area – SEPA: an integrated euro retail payments market
• Payment Service Directive (PSD 2) opens the door for non-bank payments provider (Payment Initiation Service Providers – PIS and Account Information Service Providers - AIS)
• Payment innovations mainly in the customer-to-merchant / bank sphere (e.g. instant payments, contactless payments)
• New technologies (e.g. Digital Ledger Technology (DLT), Blockchain) are evolving
• The Eurosystem supports innovation if the developments are safe and efficient and open the same opportunities to everyone in Europe.
• Global Trend towards instant payments
• The Eurosystem provides a system for instant payments => TIPS
Retail Payment System: Clearing Service Austria (CS.A)

• Live operations since November 2011

• Owned and operated by Geldservice Austria (joint venture of OeNB with the majority of Austrian commercial banks)

• Efficient infrastructure solution that requires minimum liquidity for the processing of interbank payments within Austria

• Reduction of banks’ liquidity needs by recurrent multilateral netting of interbank balances ⇒ decrease in liquidity costs

• Settlement of the banks’ clearing positions in central bank money thus eliminating possible default risks regarding bilateral correspondent bank account positions

• About 50 Mio. transactions per month (on average 2,4 Mio. TX per day)

• Approximately 100% reachability in Austria
Retail Payment System: Clearing Service International (CS.I)

• Go-live on December 6th, 2013

• Operated by Geldservice Austria and owned by OeNB

• Processing of cross-border transactions:
  • SEPA Credit Transfers and SEPA Direct Debit Transfers via EBA Clearing STEP2 as well as
  • SEPA Credit Transfers via bilateral cooperations e.g. Deutsche Bundesbank, Banca d’Italia / Nexi, Equens (DE/NL)

• Settlement day schedules of CS.I and CS.A are fully aligned to meet operational requirements and to enhance liquidity management of the Austrian banking community
Very efficient cash circuit

- 78% of banknotes in circulation in Austria run through OeNB/GSA-processing and 22% through cash recycler.

- 1/3 of total lodgements are deposited at the OeNB by non-GSA shareholders. Only a small amount is processed by the OeNB itself. All the rest is forwarded to GSA for processing.

- 2/3 of total lodgements are deposited directly via GSA

- Service for more than 10,000 locations
- Coordination of 80,000 CIT-Stopps per month
## TIPS for consumers, businesses, governments, PSPs

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<thead>
<tr>
<th>for consumers</th>
<th>for businesses / governments</th>
<th>for payment service providers</th>
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<tr>
<td>− Make and receive payments 24/7/365 with immediate transfer of funds</td>
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<td>− Leverage for new business opportunities (e.g. through value-added product offerings to consumers, corporates and merchants)</td>
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<td>− Optimise cash usage with increased flexibility and convenience</td>
<td>− Improve cash flow and process of payment reconciliation</td>
<td>− Strengthen the relationship with current customers</td>
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<td>− Enable immediate person-2-person mobile payments</td>
<td>− Increase efficiency of e-invoicing and e-billing</td>
<td>− Promote new customer acquisition and subsequent retention</td>
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<td>− Provide for emergency payments at any time</td>
<td>− Optimise working capital management and minimise need for external financing</td>
<td>− Provide a competitive advantage in the market place</td>
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<td>− Facilitate future innovative payment products via smart devices</td>
<td>− Reduce late payments and speed up the payment of invoices</td>
<td>− Future-proof core infrastructure</td>
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<td>− Improve e-commerce, with goods/services released against concomitant payment, thus decreasing the financial risk</td>
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<td>− Speed up check-out processes at a physical point-of-sale</td>
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<td>− Increase efficiency of and integrate tax, social insurance or other government-related payments</td>
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TIPS timeline

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<thead>
<tr>
<th>2016</th>
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<th>2018</th>
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<tr>
<td>Q4</td>
<td>Q1</td>
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<td>Q3</td>
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**Investigation phase** — **Realisation phase**

**2017**
- User Detailed Functional Specification (UDFS)
- User Handbook (UHB)
- Connectivity Guide (CG)
- Network Service Provider Sponsoring
- Development of TIPS Application
- Eurosystem Acceptance Testing
- User Training sessions
- Pilot Testing
- Go-live

**2018**

Source: ECB
Thank you for your attention

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