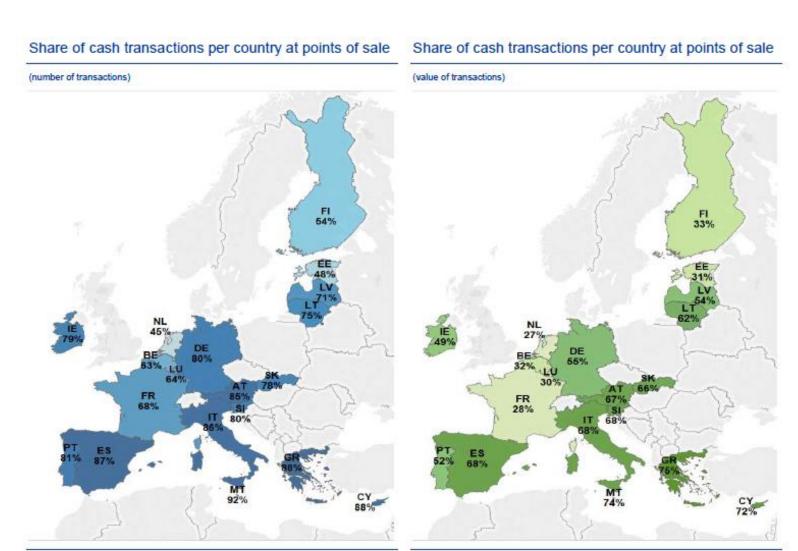




Paying in the Eurozone





Sources: ECB, Deutsche Bundesbank and De Nederlandsche Bank.

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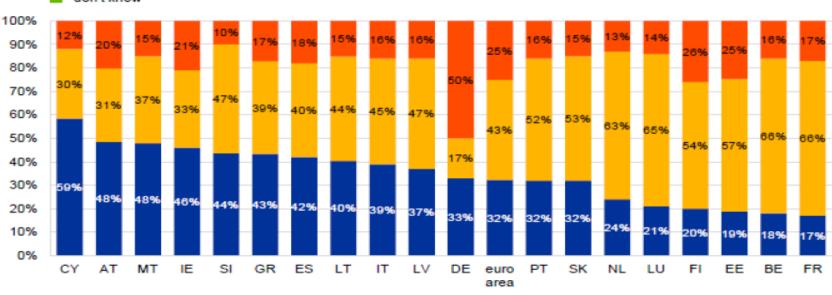
Consumers preferred payment instrument by country



Question: Assuming you were offered various payment methods in a shop, what would be your preferred payment method? (%)

(percentages; based on 42,957 respondents from the euro area)

- cash
- card or other non-cash payment methods
- you have no clear preference between cash or non-cash payment methods
- don't know



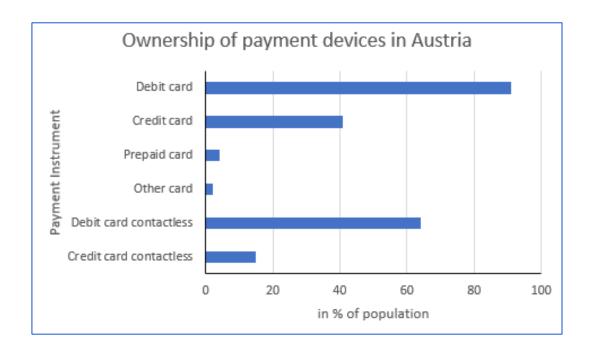


Sources: ECB, Deutsche Bundesbank and De Nederlandsche Bank.

Notes: In the German survey of 2014 the question was: "Let's assume you have the choice between various payment options when shopping. How would you pay for your purchases?", and the categories were: "Cash only", "Predominantly cashless means of payment" and "Either cash or with a cashless means of payment, depending on the shopping situation". The latter category has been allocated to "You have no clear preference between cash or non-cash payment methods".

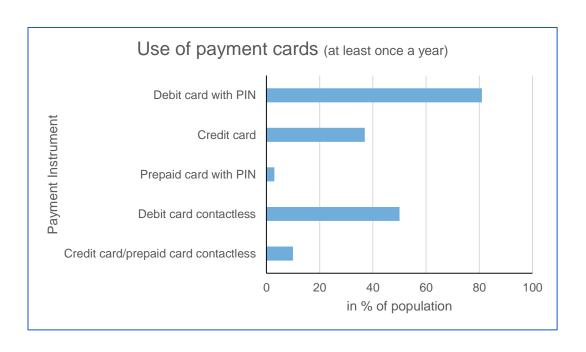
€NB

Card ownership and usage in Austria









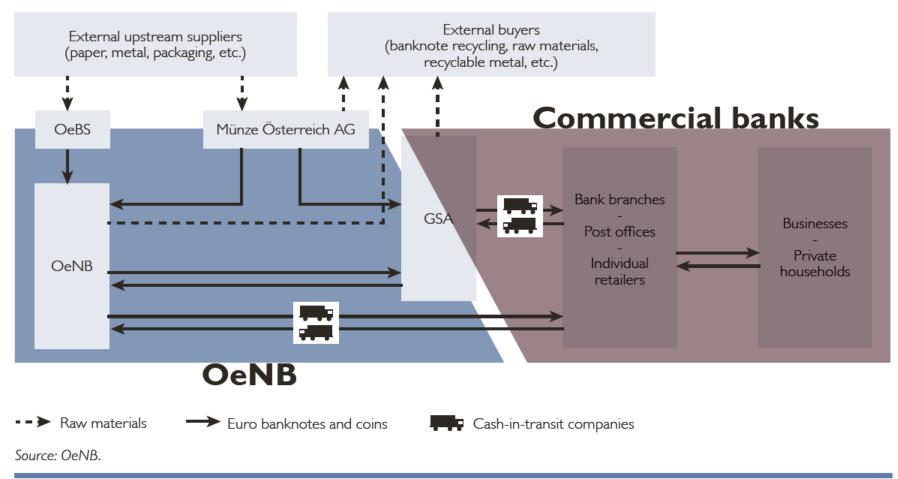
Source: OeNB Barometer 2018

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How cash logistics is organised in Austria



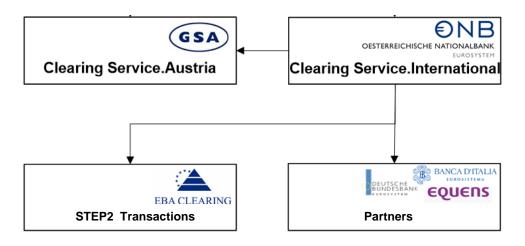
Cash Logistics in Austria





Cashless payments: Interoperability & cooperation lead to efficient products

Clearing & Settlement of credit transfers & direct debits



Processing of debit card transactions & ATM network



Standardisation







The world of payments is changing



Cash => Electronic



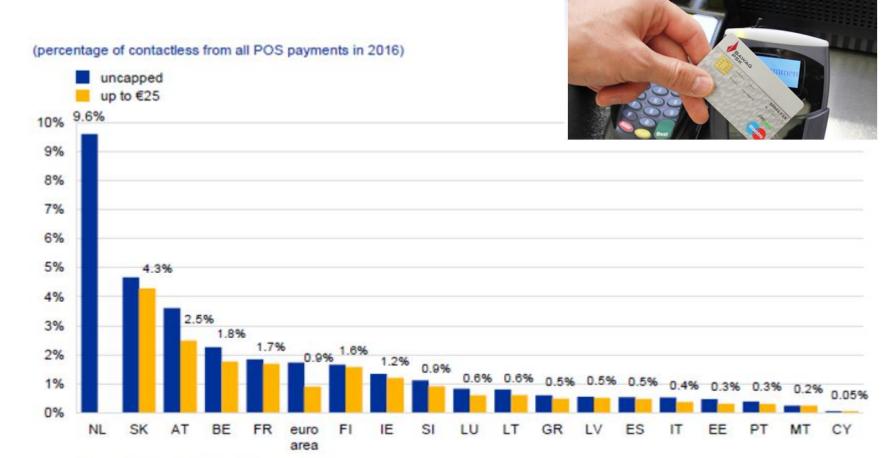
New Devices



Face-to-Face => Remote

Contactless payments in Europe





> 66 % of POS card

transactions are done contactless

NFC payments gaining

popularity in Austria

> 82 % of terminals

are equipped with

NFC functionality

Sources: ECB and De Nederlandsche Bank.

Notes: Data labels refer to contactless payments up to €25. The share of contactless payments in the Netherlands is based on official bank statistics as reported by De Nederlandsche Bank and the Dutch Payment Association (DPA) (see Jonker et.al 2016) and presents data from the whole of 2016. The rest of estimations are based on the SUCH diary survey, which was carried out up until to July 2016. Data from Austria is in line with statistics published in September 2016 by Payment Services Austria.



Trends in the area of cashless payments

Non-Cash Payments	Looking through 2020, global payments growth will increase on average by 10.9%. The number of transactions will likely increase to 725,9 billions*. It is expected that in Europe cashless transactions will rise by 6.5% per year*.
PSD2	PSD2 will influence the business models sustainably. Banks are requested to provide parts of customer data to other payment providers. In the beginning this means investments without immediate profit.
PSD2	PSD2 will improve the customer experience by the introduction of open APIs from September 2019 on. Cooperation with "non-bank businesses" will be simplified. Open Banking platforms will set new technological courses.
Fintechs / Bigtechs	With the implementation of an uniform standard for APIs more Fintechs but also Bigtechs (e.g. Apple, Amazon, Alipay) will enter the European payments market and provide their services directly to the bank customers.
Instant Payments	The roll-out of instant payments offers end-users a new digital way to conduct their payments in real time. In combination with the introduction of PSD2 and open banking new use cases will be generated and increase the customer experience.

^{*} Based on the number of 433,1 billion transaction in 2015 Source: Capgemini World Payments Report 2017 – https://worldpaymentsreport.com





In general all EU rules have been adopted in Austrian law

- Regulation on cross-border payments (1 November 2009, as of 15 December 2019)
- ➤ E-money Directive ⇒ E-Geld-Gesetz 2010 (30 April 2011)
- SEPA Regulation (1 February 2014)
- ➤ PSD2 ⇒ Zahlungsdienstegesetz 2018 (1 June 2018)
- ➤ GDPR ⇒ Datenschutzgesetz (25 May 2018)
- ➤ National specificity: law on limits for ATM-fees

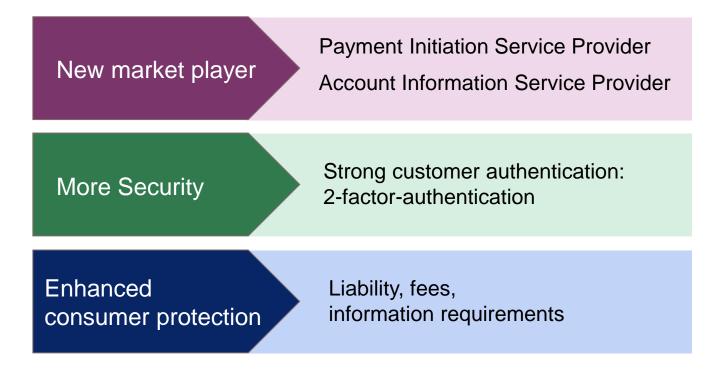


Payment Services Directive 2



- PSD2 was adopted in November 2015 and came into force on 13th January 2018
- Target: Increase transparency, competition, innovation and security in the payments services industry





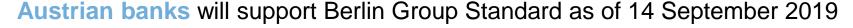
PSD2 – Access to bank accounts



Participants: PSA; SIA; DE Bankenverband; VISA; equensWorldline;

STET; Swedbank; Deutsche Bank; Finance Latvia Association

Technology: REST/JSON/ISO 20022



National features possible

Avoidance of fragmentation on technical level (interface)

Tests for banks and TPPs possible since March 2019





European payments market – Quo Vadis?

Cards market is dominated by American and Asian schemes: A European card scheme has not been evolved yet...













Most and most popular innovative payment methods have been developed and are run by American and Asian companies.







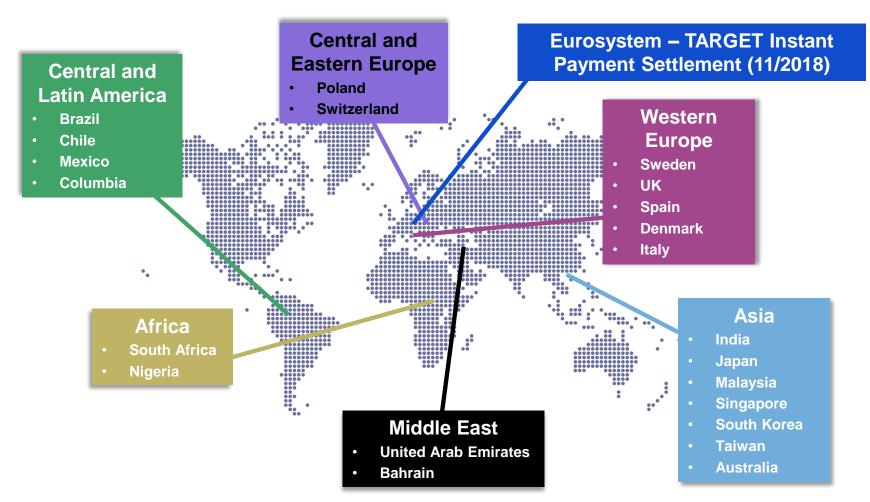


SAMSUNG POLY

- Loss of control about European payments and data
- Eurosystem could lose the information about payment flows
- Impact on stability and oversight



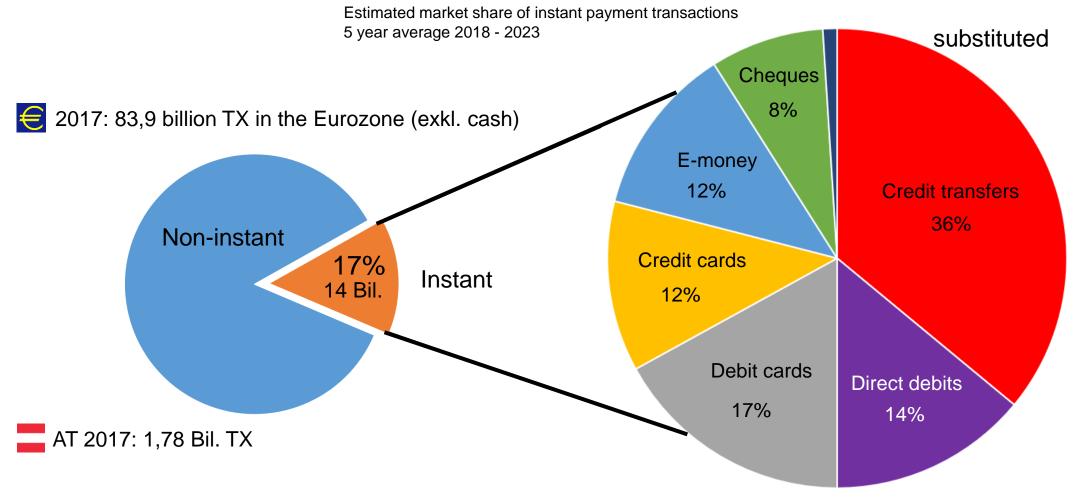
Worldwide Instant Payments Initiatives



Share Instant Payment in the number of cashless payments (Eurosystem; estimated development until 2023)









TARGET Instant Payment Settlement (TIPS)

since November 30, 2018

Eurosystem solution







- ✓ Availability 24/7/365
- ✓ Real-time Settlement
- ✓ SEPA-compliance
- ✓ Finality
- ✓ Central bank money
- ✓ Accountable to minimum reserve
- ✓ Low price

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TARGET Instant Payment System (TIPS)





Innovations in Austria – Example



- **bluecode** is a product of Secure Payment Technologies
- ✓ Austrian Start-up (with Swiss investors) founded in 2011
- ✓ Could be used at physical POS, online shops, apps and vending machines (omni-channel)
- ✓ Value Added Services possible
- ✓ Currently used instrument: SDD
- ✓ Blue Code instant: pilot planned in summer 2019, go-live September 2019



Innovations in Austria – Example



Local Pilot AUT 2014





1 Merchant 1 Bank

Blue Code starts with a local pilot started with one bank and one merchant ...

National RolloutScheme AUT & GER 2015-2016 2017





Within one year Blue Code is accepted at 85% of all food retailers in Austria. 18'000 POS.



Blue Code becomes the official and exclusive mobile payment provider at the Oktoberfest.

Several new

- Issuer Contracts
- Acquirer Contracts
- App Integrations

Scheme EU 2018-



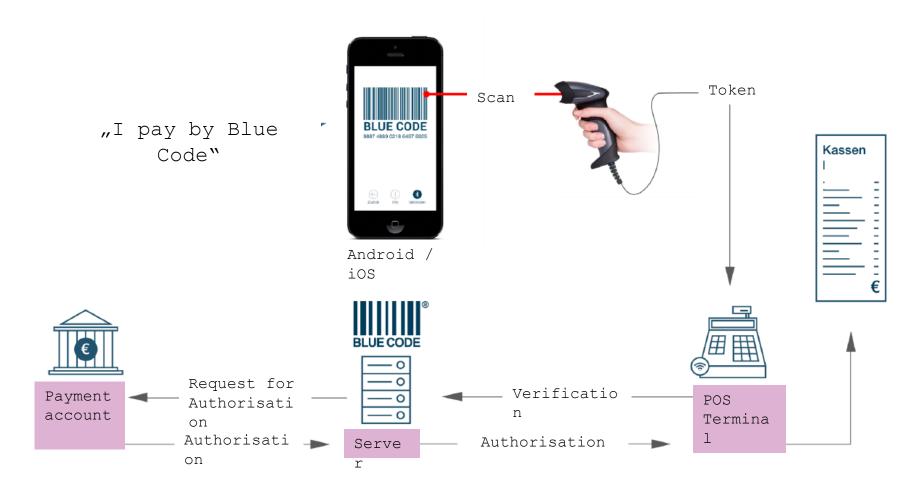




Source: Blue Code, ECB Conference – May 6/7, 2019







Summary





Payment behavior is changing - but slowly



European laws, technical standards and common business procedures make payments more efficient



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



New technologies (e.g. DLT) are evolving



Global Trend towards instant payments. Important factors are interoperability of POI solutions and convenience



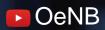
The Eurosystem supports innovation if the developments are safe and efficient and open the same opportunities to everyone in Europe.

Thank you for your attention

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Payment behavior in Austria



Cash versus noncash payment shares in 2011 and 2016

%	Value share		Volume share		
	2016 20	2011	20	16 2	2011
	%				
Cash		64.9	73.2	81.8	85.9
Debit card		17.3	15.6	10.9	9.5
Credit card		6.1	5.6	2.7	1.9
NFC contactless		8.0		1.2	
Direct debit payments/transfers		8.2	4.2	1.7	1.5
Internet/mobile		1.9	0.2	0.8	0.2
Other		0.9	1.2	0.9	1.0

Source: OeNB payment survey 2011 & 2016



Payment instrument share by transaction value

