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## **Payments challenges in an integrating world – the Polish perspective**

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**Vice President of the Management Board**

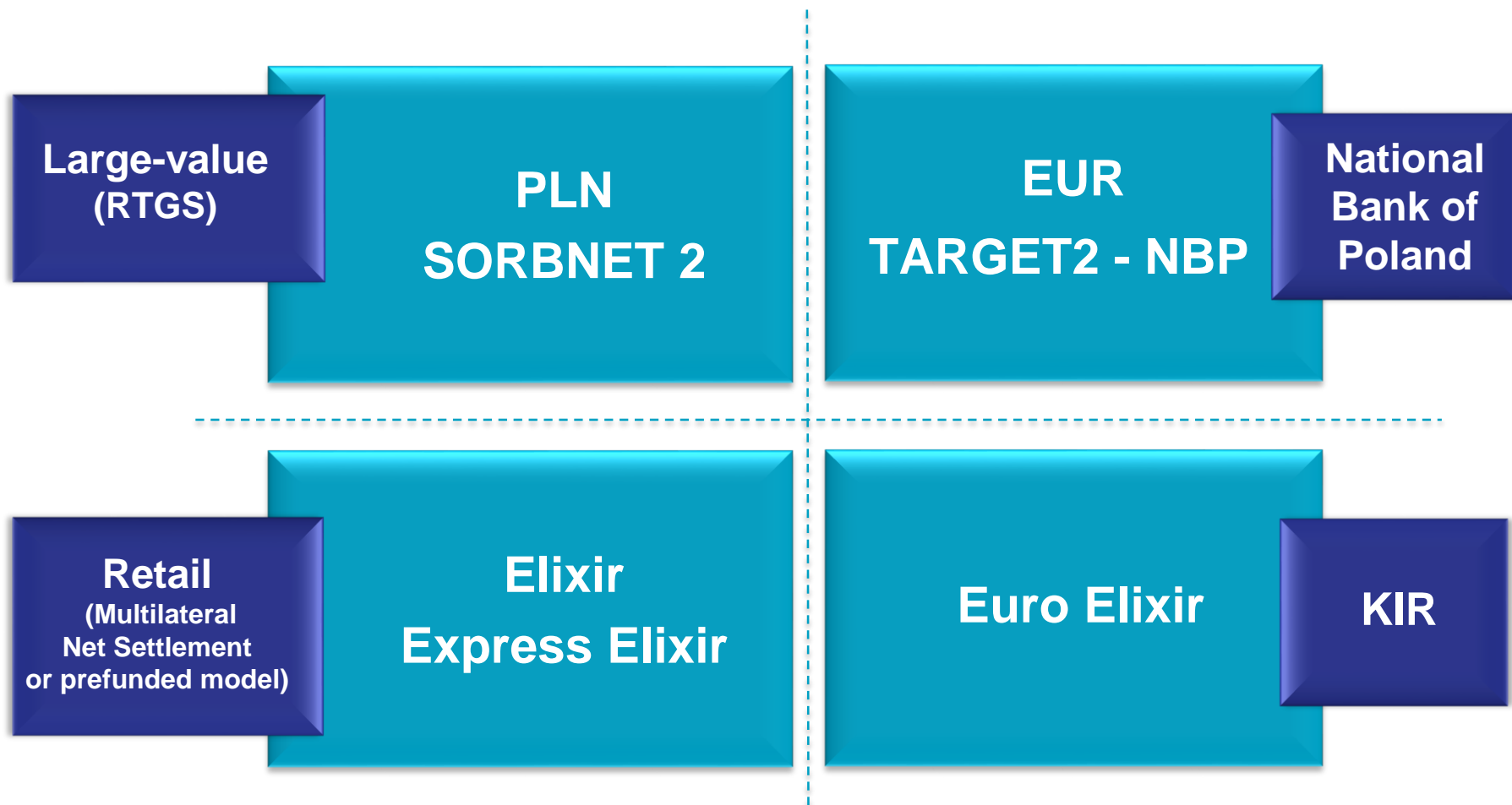
**Krajowa Izba Rozliczeniowa S.A.**

Ohrid, 6th June 2018

- KIR is the key enterprise in the Polish banking sector infrastructure, owned by the National Bank of Poland, commercial banks and the Polish Bank Association
- We have over 25 years of expertise in development of payment services and electronic information exchange
- We are the technological hub for shared services, provided with guaranteed quality and highest security standard
- Our ambition is to drive the digital acceleration by introducing automated services in both private and public sector

- Innovation/digital transformation
- Consolidation (also between card and ACH operators)
- Growing operational involvement of central banks
- Strong regulatory pressure
- New players (fintech) and business environment (PSD 2)
- Potential challenges from the GAFA





Elixir, launched in 1994, is the first Polish electronic system for interbank settlements operating in zloty.

With three sessions a day, Elixir enables fund transfers within several hours only

Elixir is classified by NBP as the Systematically Important Payment System – SIPS.  
It is essential to the functioning of the Polish banking sector.

Euro Elixir enables processing of national and cross-border payments within the same day (D)

- The system is fully compliant with the EU standards. It operates within the integrated infrastructure of the single payments area - SEPA
- SEPA SCT service
- SEPA SDD implementation in progress

The efficient and reliable transaction clearing while keeping highest security standards is enhanced by the cooperation with foreign settlement institutions (i.e.EACHA)

- Express Elixir works around the clock, 365 days a year.
- Average transaction execution time: less than 3 seconds.
- No credit risk: deposit (pre-funded) model utilizing escrow account held by KIR in NBP.
- High single transaction value limit (100 000 PLN - approx. 24 000 EUR for standard transfers, up to 250 000 PLN for tax payments), no volume limit (B2B advantage).
- Available payment types: CT and mobile P2P.

**Express Elixir was launched in June 2012, as the first system of this kind in Poland and second in Europe.**



**MP2P transfer type went live as of September, 1<sup>st</sup>, 2015**

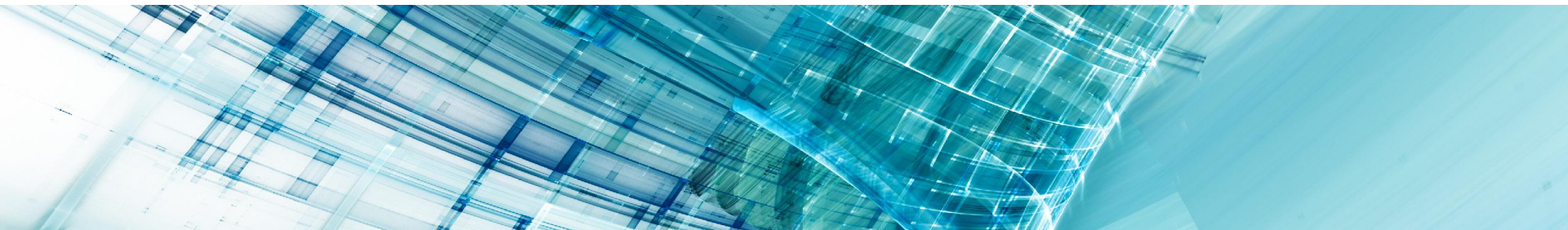
- External proxy (alias) database used for phone number -> bank account number conversion.
- Alias database (a part of BLIK system) operated by PSP company.
- MP2P processing and settlement in real-time in the Express Elixir System with own payment code.
- MP2P and RTTR (Real-Time Transfers) services independence: serving RTTR only / MP2P only or both transfer types at each bank's discretion.



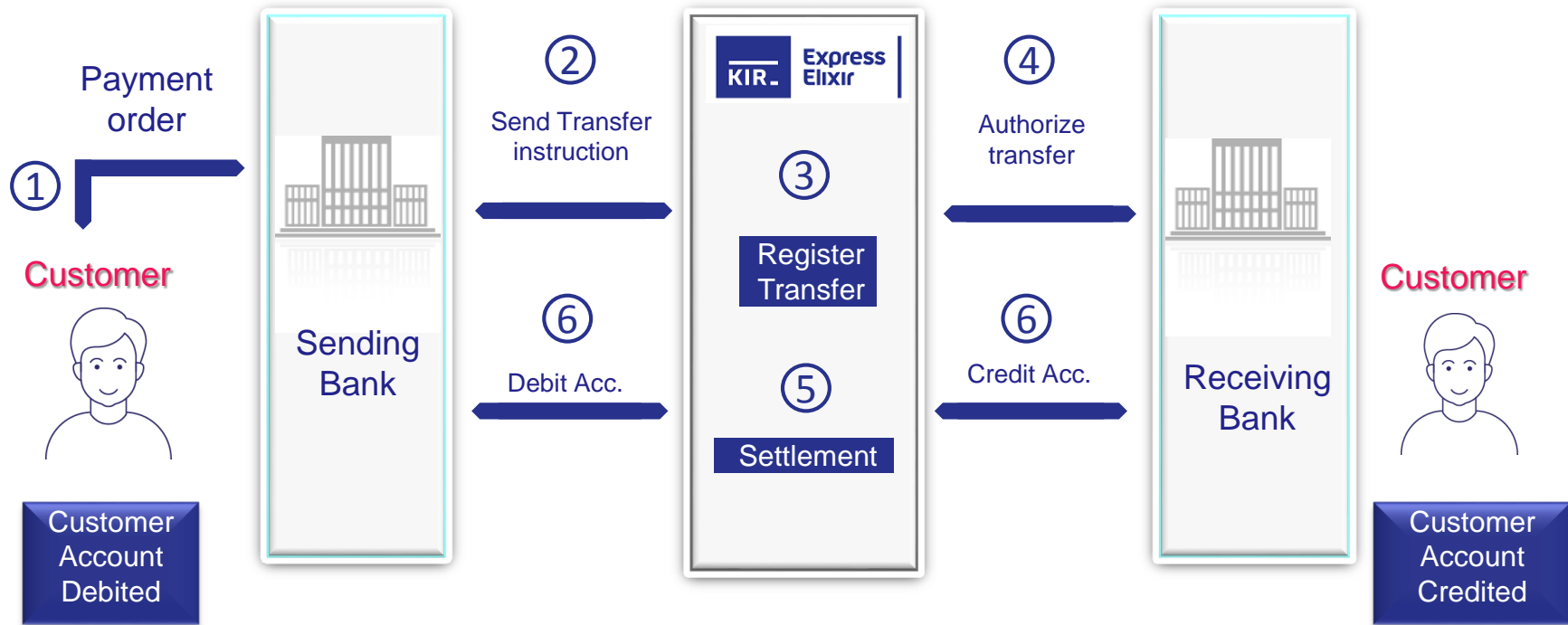


## Express Elixir - new transfer type serves public administration

- In 2017 KIR in cooperation with National Bank of Poland introduced Express Elixir instant payments for the Polish Social Insurance Institution (ZUS), tax and custom authorities.
- Since January 1st, 2018 standard instant payments processing rules are applied for Social Insurance (ZUS) Payments.
- All System's participants executing standard instant payments are able to send tax payments (using agreed format, which requires a minor bank system development), as well as to receive this type of transfers.
- Further development of the Express Elixir system contains introduction of Split Payments (anti VAT fraud tool) as of July, 1st, 2018.



## Express Elixir transaction flow scheme



- Ognivo is an electronic information exchange platform built for the participants of Elixir, Euro Elixir, KIR and the entities cooperating with the banks to accelerate communication in secure network, mainly the Ministry of Finance, The Polish Social Insurance Institution (ZUS) and debt collectors .
- Ognivo allows to streamline the electronic debt collections (which are obligatory by law), banks' enquiries and manage complaints.  
It is composed of modules - new ones are launched to address the users' needs.
- Ognivo also assists the bank clients in transferring of their accounts between the banks. It allows to accelerate and simplify the whole operation, safely exchanging all the necessary information between banks, upon the client's disposition to close the account and transfer the data to another bank.



**Paybynet executes online payments with no third party (intermediary) involvement.**

Payment authorisation information is transmitted online –  
24h a day through:

- bank transfers
- card payments

The functionality of the system is not limited to e-commerce. Paybynet is integrated with the Electronic Platform of Public Administration Services (ePUAP), being **the only solution to enable online payments for administrative charges.**



## Paybynet competitive advantage: complete data transfer

The screenshot shows a mobile banking interface on an iPad. At the top, there's a status bar with 'iPad', '3:01 PM', and '82%' battery. Below is a navigation bar with icons for home, transfers, payments, and more. The main screen is titled 'Przelew w PLN' (Transfer in PLN) and shows a form for sending money. The form includes fields for 'Z rachunku' (From account), 'Na rachunek' (To account), 'Nazwa i adres odbiorcy' (Recipient name and address), 'Tytuł płatności' (Payment title), 'Data realizacji' (Execution date), and 'Kwota' (Amount). The 'Z rachunku' field is filled with 'KONTO Direct; 2 777,07 PLN'. The 'Na rachunek' field is filled with '22 1000 2000 3000 4000 5000 60000'. The 'Nazwa i adres odbiorcy' field is filled with 'm. st. Warszawa - Ursynów, Kowalskiego 1, Warszawa'. The 'Tytuł płatności' field is filled with '1234567809 m. st. Warszawa odpis'. The 'Kwota' field is filled with '1000,00' and 'PLN'.

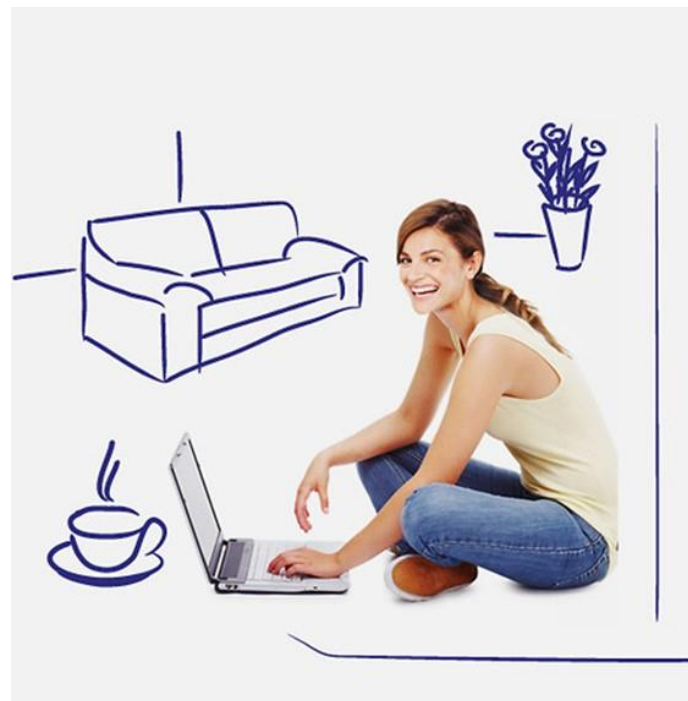
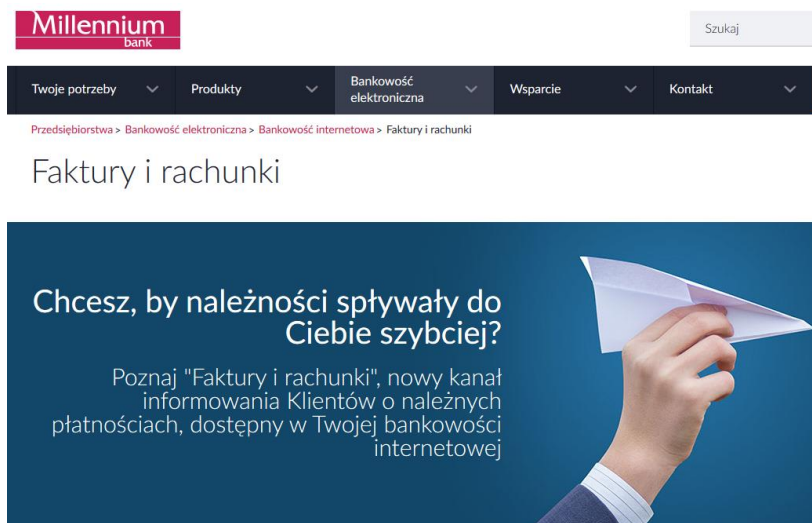
**Complete transaction data –  
coded in the transfer  
information**



**Easy accounting model  
Full transaction amount  
transferred  
mass-collect system**



## Invoobill 2.0 – easy and convenient Electronic Bill Presentment & Payment



- A tool allowing to pay the utilities bills (gas, electricity, phone) through the online banking.
- As it is integrated with the bank's transaction system, the payment can be done with just one click.

- Can remind its user of the payments due date,
- The recipient's data is completed automatically,
- Can be used by mass service providers: mobile network operators, digital television operators, water supply systems and energy companies.



- Market standard - the electronic signature guarantees reliable personal identification and confirms data integrity.
- KIR provides e-signature to companies, institutions and individual persons that use it to sign invoices, agreements and other legally binding electronic documents.



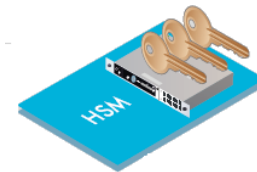




## mSzafir (m-certified electronic signature) - signature in cloud



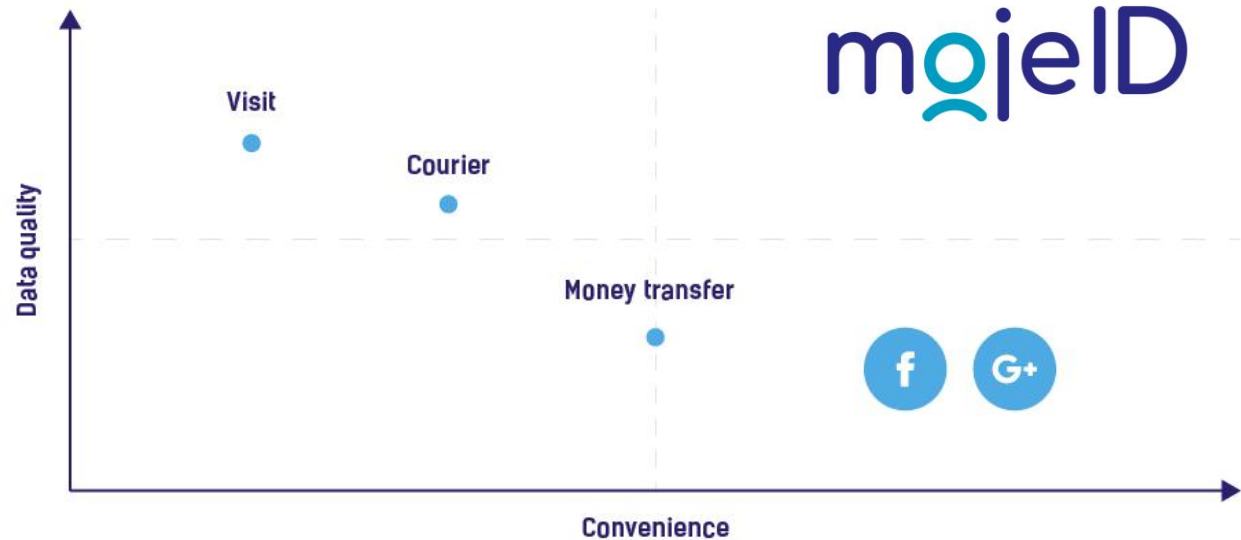
- Alternatively, you can use a signature in the cloud for a traditional signature set consisting of a cryptographic card.
- A qualified certificate confirming the identity of the user
- Creating single signatures or signing multiple documents
- For both individual and business customers



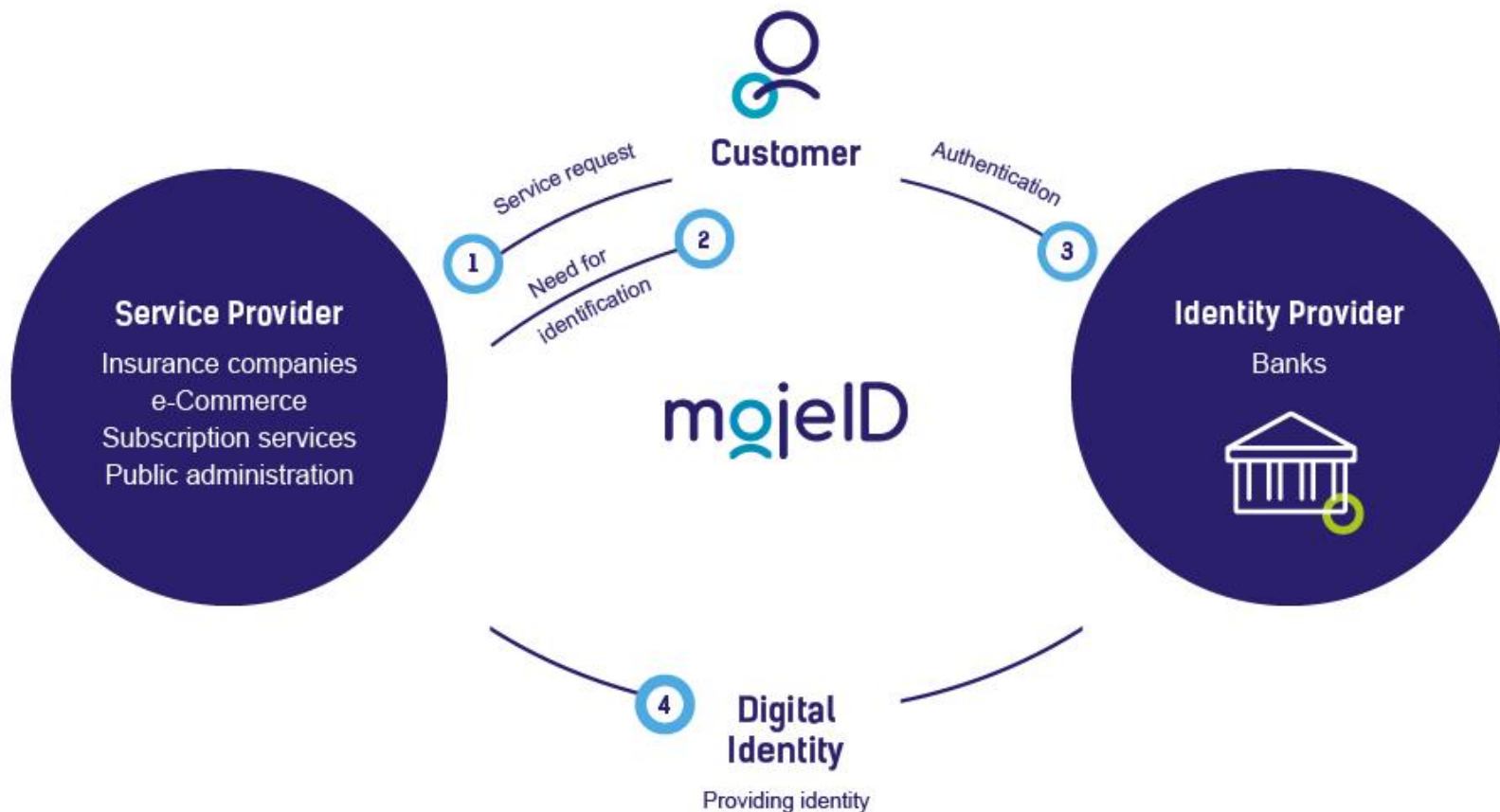
- User keys are stored in dedicated cryptographic modules managed by KIR
- Access to keys can be authorized for with a mobile application or with banks identity
- Signing on any user's device

## Reliable customer ID is vital for business and administration

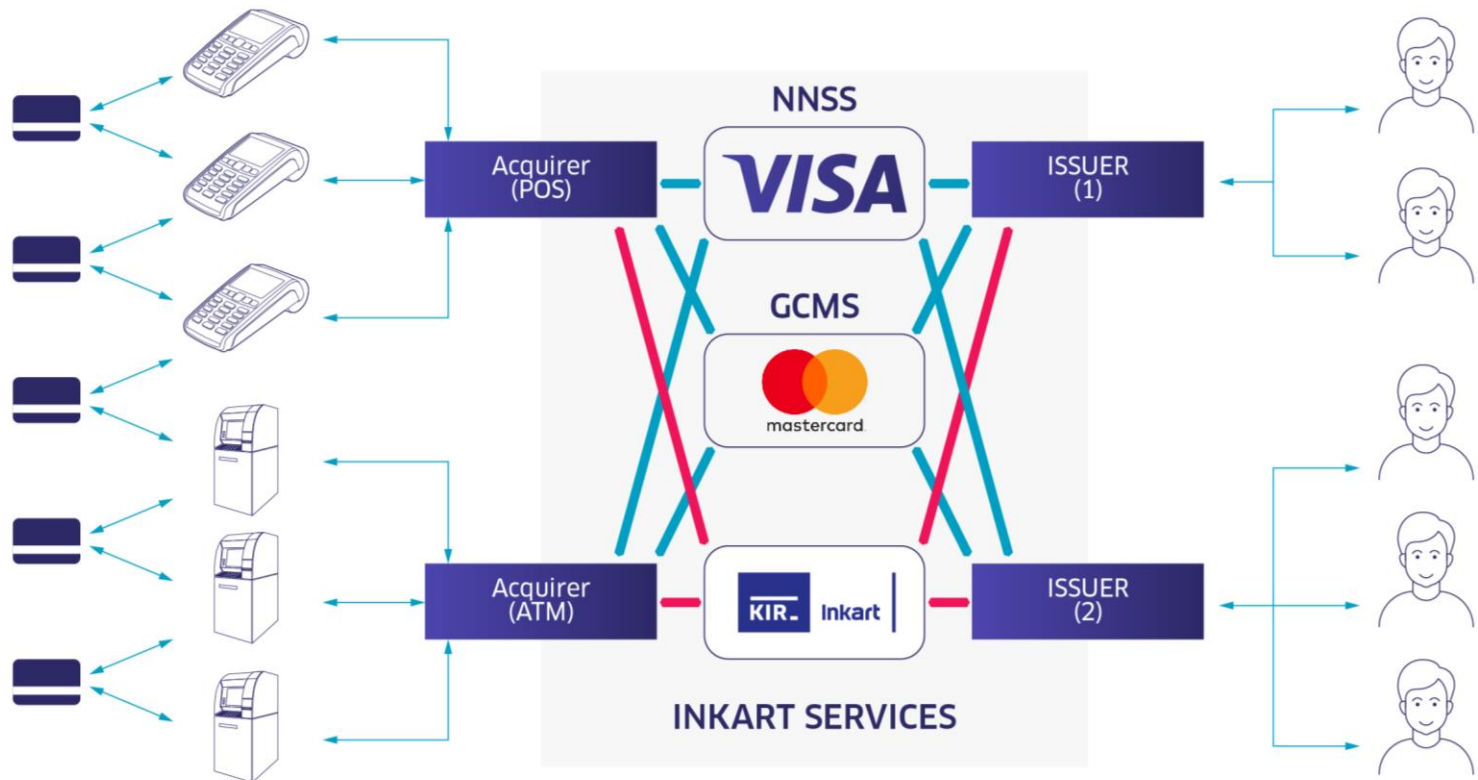
*Data quality  
(depends on the way  
how we share it)*



*Convenience  
(sometimes convenience  
does not equal to  
data reliability)*



Inkart is a system owned and operated by KIR – only for domestic cards' authorization and settlement transactions issued under MasterCard and VISA brand.



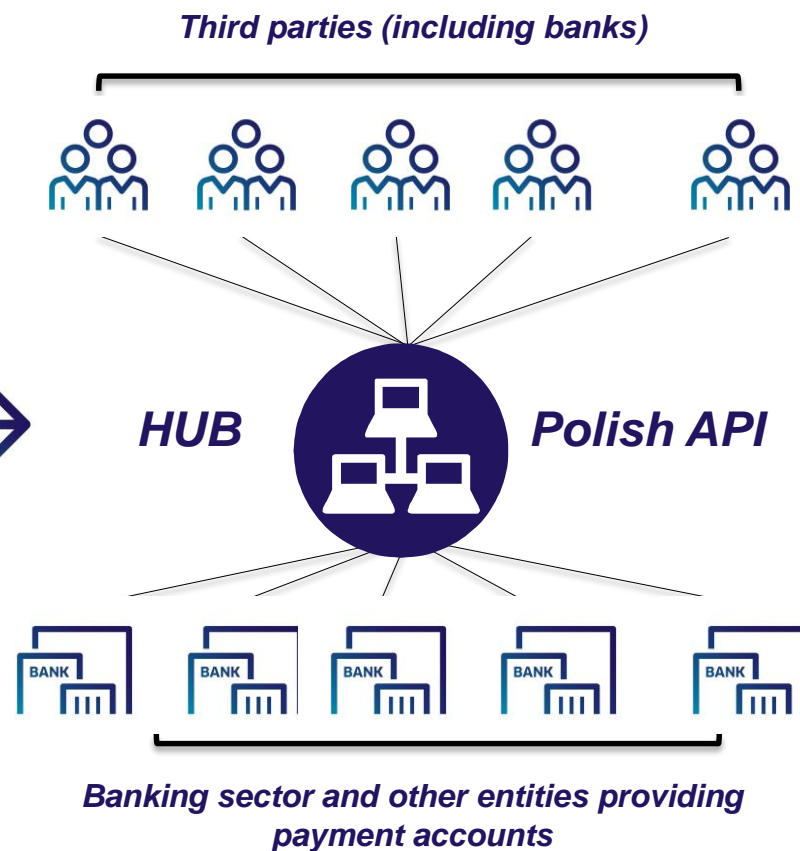
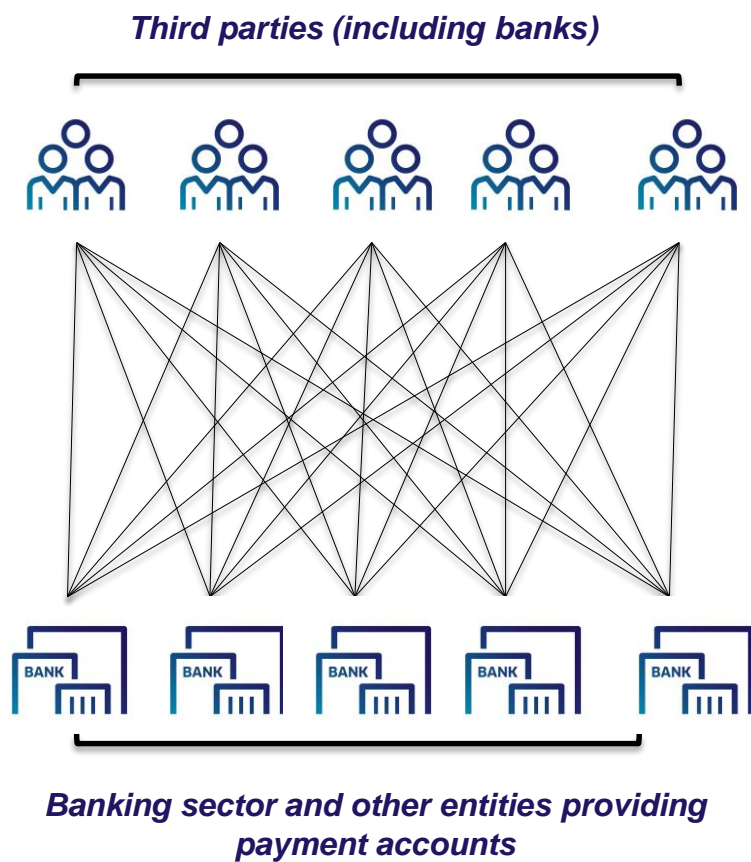
**In Poland in commerce, cards and mobile payments are very popular:**

- Over 38,5 mio card issued, >80% contactless
- 97% VISA and MasterCard, American Express and Diners Club also available
- Over 4 billion cards transactions yearly, >65% contactless
- YoY growth of transaction number 15% - 20%
- Over 600.000 POS terminals, >90% contactless
- Over 23.000 ATMs (also with contactless or biometric option for cash disbursement)
- Over 97% of transactions are domestic

**But: Less than 10% of authorities institutions accepted cards or mobile payments before POS GOV Program started**



## PSD2 is a business opportunity provided we focus on cooperation



- **Durable medium (blockchain and electronic stamp)**
- **Cloud services**
- **Split Payment**
- **STIR (cybersecurity, AML, antyfraud)**



**KIR.**

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