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CITY INDUSTRY DIALOGUE - CONFERENCE: THE FUTURE OF PUBLIC TRANSPORT NOT ONLY IN CITIES - MODERN TECHNOLOGIES IN PUBLIC TRANSPORT

Brno, 5th of June 2019



Electronic ticketing based on bank cards in the South Moravian Region



KORDIS JMK, Květoslav Havlík

Past

Present

Future

Of the electronic ticketing
in the South Moravian Region and Brno



INTEGRATED PUBLIC TRANSPORT SYSTEM

- the integrated public transport is operated already 15 years in the South Moravian Region and in Brno.
- unified ticketing and the same ticket price - regardless to operator.
- most of the tickets are still on paper
- vast majority of users has a seasonal tickets (Brno 80%, Region 60%)
- for a long time we consider to introduce the electronic ticketing but the technology was still not developed enough.



FIRST ATTEMPTS

- about 4 operators already had smart cards for their cities when they enter the integrated system. Security was not sufficient, not possible to combine more operators under one card.
- first attempts - about 10 years ago – still based on smart cards, no other solution possible. The tenders were not successful.
- even in that time it was clear, that new solutions will come very soon – quick internet via mobile phone and contactless smart cards.



POSEIDON APP + SMS TICKETING

- SMS ticketing – simple solution but not suitable for regional transport, difficult ticket inspection.
- 2014 - the Poseidon App – the mobile phone based ticketing and information system.
- first system in Central Europe that covered all types of public transport – trains, buses, city public transport.
- simple but robust solution, very easy for implementation.
- based on prepaid model
- rapid growth of users last year



The screenshot shows the Poseidon App interface displaying a list of train arrivals and departures. The top bar shows the time 17:46. The main content area is divided into sections for different stations. The first section is 'Poříčí' (Porici), which lists arrivals and departures for various trains. The second section is 'Adamov, železniční st...' (Adamov, railway station), which lists arrivals and departures for trains. The third section is 'Hlavní nádraží' (Main station), which lists arrivals and departures for trains. The table below shows the details of the arrivals and departures.

Poříčí	
5 Ustřed... ±17:47	6 Kr. Pol... ±17:48
44 Mendlo... ±17:49	5 Stefáni... ±17:54
6 Starý Li... ±17:52	2 Stará o... ±17:55
2 Modřic... ±17:53	84 Stará o... ±17:56
5 Ustřed... ±17:57	6 Kr. Pol... ±17:58

Adamov, železniční st...	
215 Horka, t... ±18:22	215 Adamo... ±19:22
215 Horka, t... ±19:37	
S2 Březov... ±18:21	S2 Brno, hl... ±18:39
S2 Letovic... ±19:21	S2 Brno, hl... ±19:39
S2 Březov... ±20:21	S2 Křenovi... ±20:39
S2 Letovic... ±21:21	S2 Brno, hl... ±21:39
S2 Letovic... ±22:21	

Hlavní nádraží	
2 Modřic... ±17:47	4 Obřany,... ±17:48
1 Bystrc,... ±17:52	1 Rečkov... ±17:51
4 Náměs... ±17:52	9 Juliánov ±17:51
6 Stará o... ±17:55	2 Stará o... ±17:55



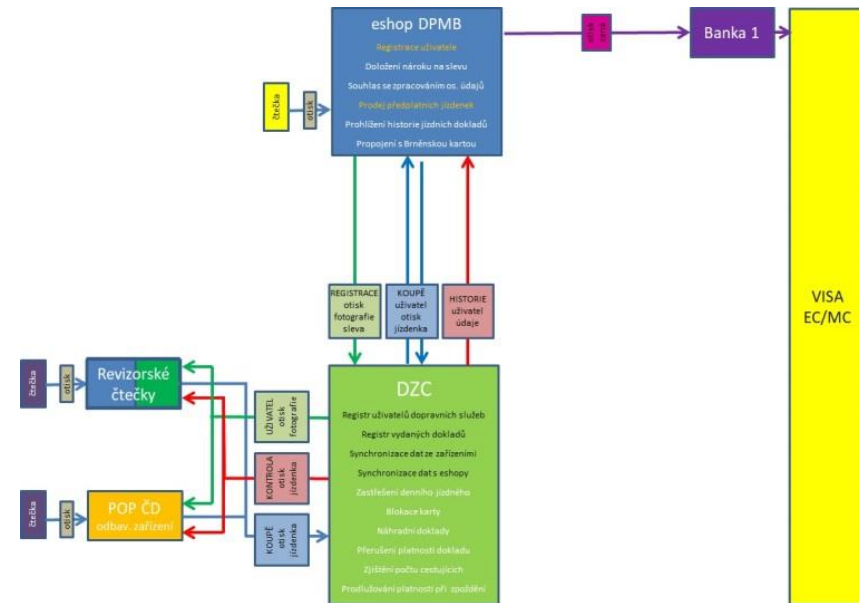
TICKETING BASED ON BANK CARDS

- 2015 - KORDIS and Brno PT company started to think about centralized system based on bank card as an identifier.
- Working group on the national level set up some rules and ideas.
- The most important for Brno and IDS JMK – to introduce solution for seasonal tickets.
- From January 2017 the system started in Brno but the tickets are checked in all the region.

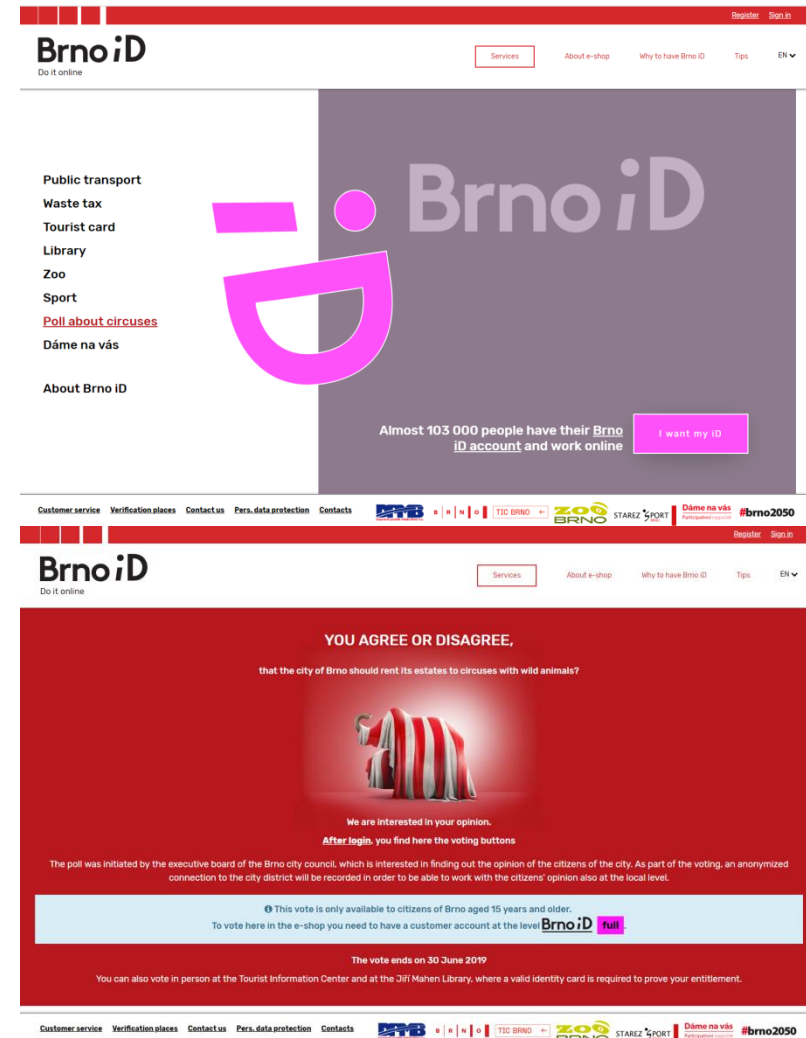


FIRST PHASE

- Bank card = identifier, nothing is loaded in it.
- Two main players:
 - KORDIS - back office and distribution centre
 - DPMB - eshop for Brno tickets
- Other players:
 - ticket inspectors DPMB + KORDIS
 - train inspectors and drivers
- Not only bank card - but QR or mobile possible.

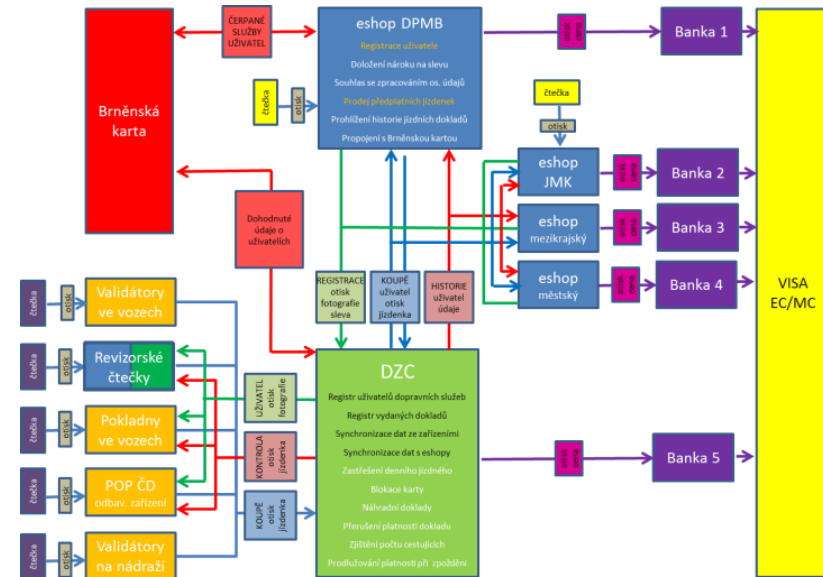


- The city-environment growing on the electronic ticketing system.
- At the moment >97.000 users.
- Tourist Card, Libraries, Zoo, sport activities included.
- Payments for city waste disposal.
- Polls
- Many possible add ons.
- The system is operated by Brno public transport company.



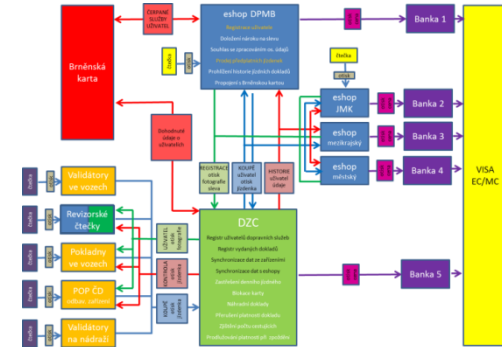
CLOSE FUTURE

- electronic seasonal tickets will be sold for all system including the other cities with public transport
- e-shop operated by KORDIS which will sell prepaid tickets for all the region
- new on-board computers for regional buses
 - QR code reader
 - bank card reader
 - central database of tickets



NEXT DEVELOPMENT

- single ticketing
- Brno PT company's vehicles equipped by validators
- for travelling within Brno just approaching the card needed
- for travelling outside Brno to choose the ticket needed
- similar equipment for railway stations / trains
- daily capping calculated by KORDIS's system.



WHAT COULD COME NEXT?

- Tarif and ticketing systems are changing approx. once per 10 years.
- be in be out systems (Galileo)?
- free tickets?
- IoT?
- Mobile phone as ticket?
- Face recognition?



THANK YOU FOR YOUR ATTENTION!



Kvetoslav Havlik
KORDIS JMK, a.s.



www.interreg-central.eu/peripheralaccess



khavlik@kordis-jmk.cz



+420 5 4317 4317



facebook.com/periaccess

