

TAKING
COOPERATION
FORWARD



Summer School
Brno | 14-15 September 2021



Smart fleet management in integrated transport system of the South Moravian Region



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Central
dispatching (CED)

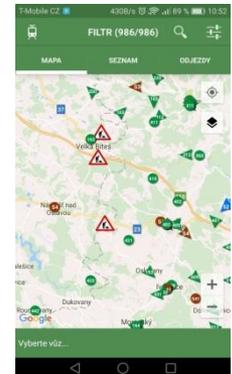
ON-BOARD
COMPUTERS in
regional buses

Electronic
information
pannels



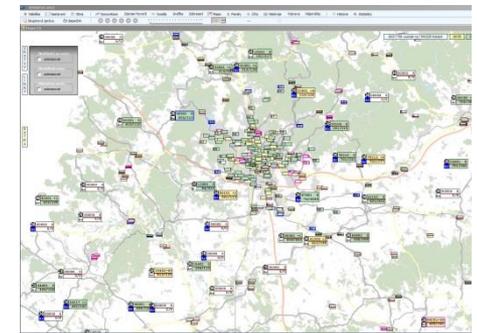
CENTRAL DISPATCHING (CED)

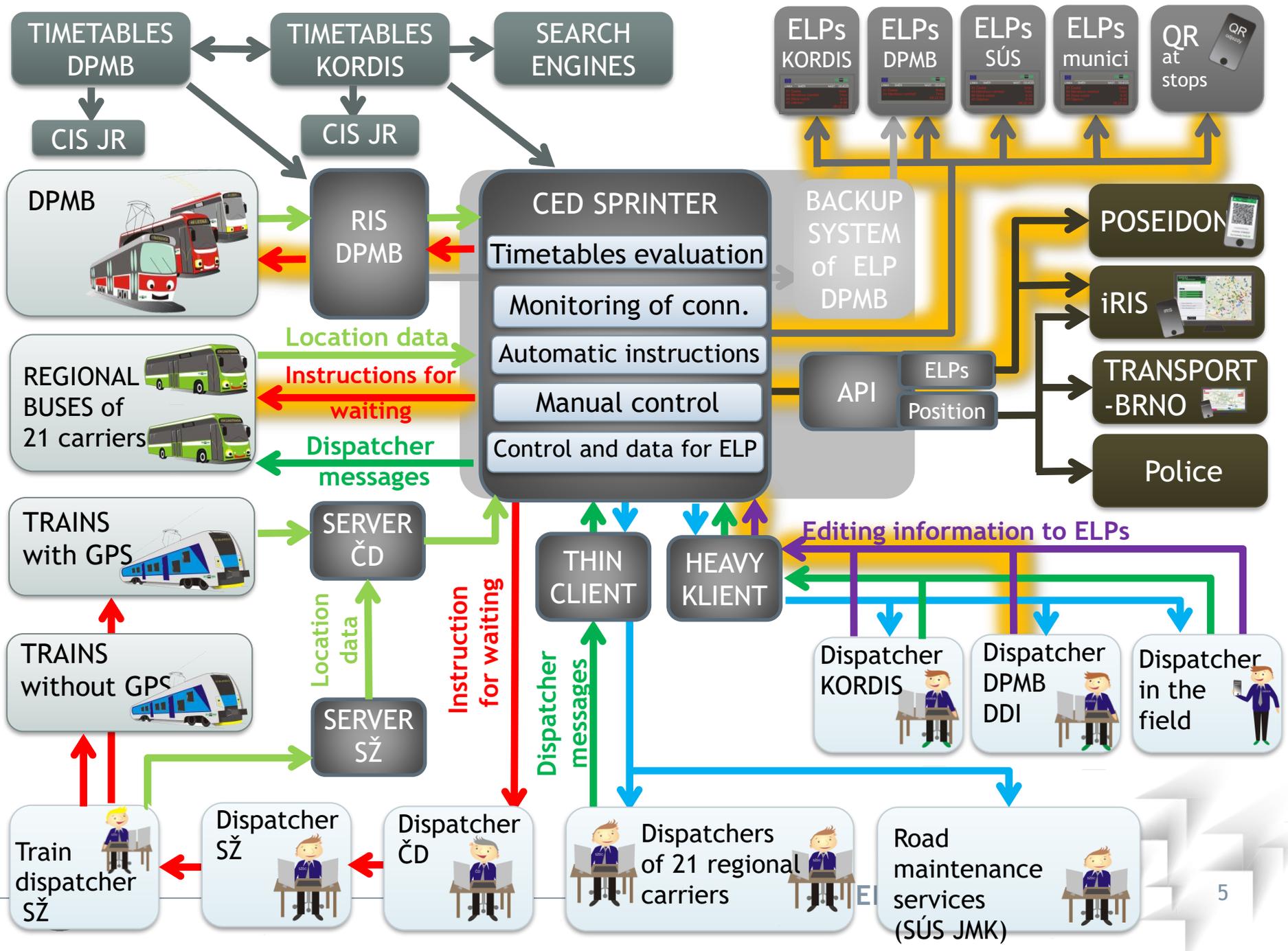
- At the beginning of IDS JMK need to coordinate trains, buses and Brno city transport between each other.
- In operation since 2005, good practice case for other Integrated Transport Systems
- Control centre and source for passenger information systems



CORE ELEMENT OF CED - SW TOOL

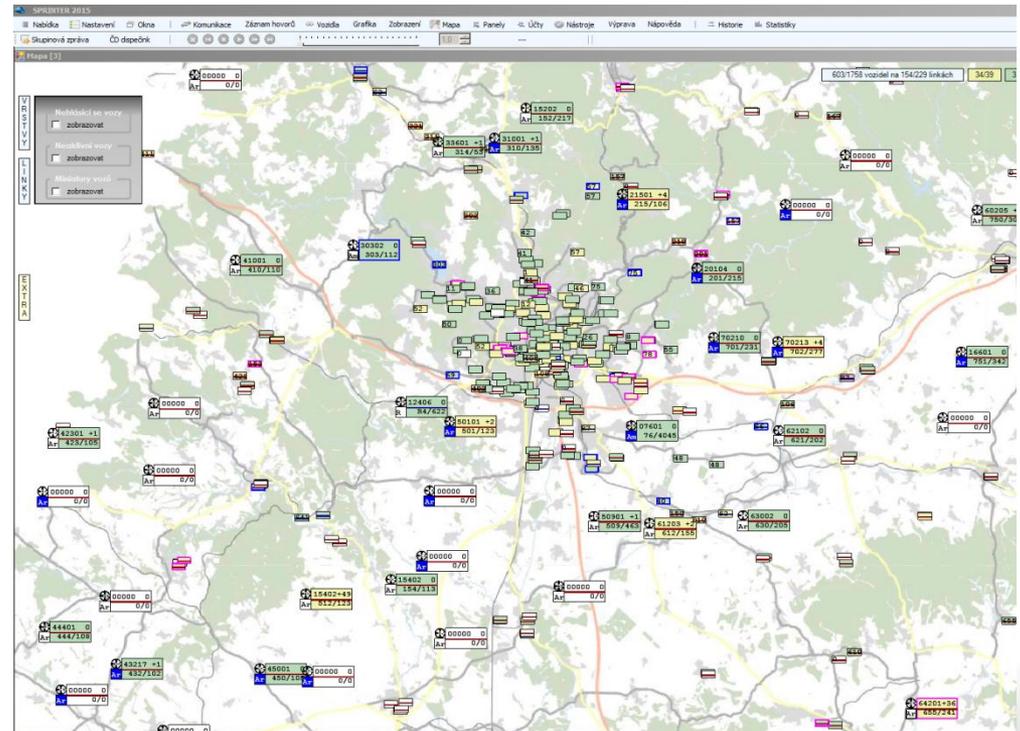
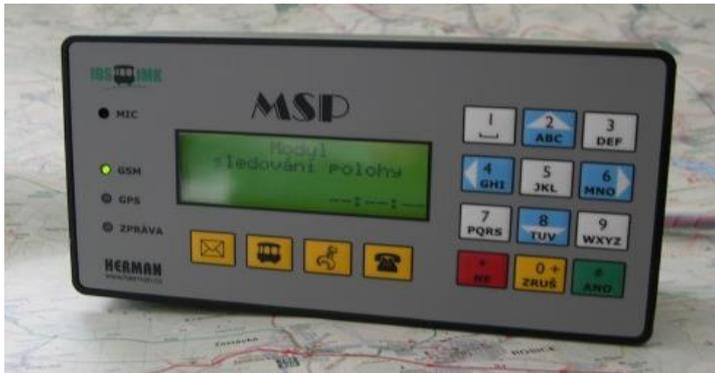
- All data on public transport is aggregated „at one place“.
- CED collects data about operations of all vehicles in the system.
- Automatic evaluation of adherence to time table
- Standardised instructions to drivers about waiting times
- Current status of communication with drivers
- Request for on-demand transport





CENTRAL DISPATCHING (CED)

- **CONTROLS AND MANAGES MORE THAN 600 REGIONAL BUSES**
- **PROVIDES MORE THAN 34 000 CONNECTIONS PER DAY**
- **RESPONDS TO PASSENGERS' INQUIRIES**



Central
dispatching (CED)

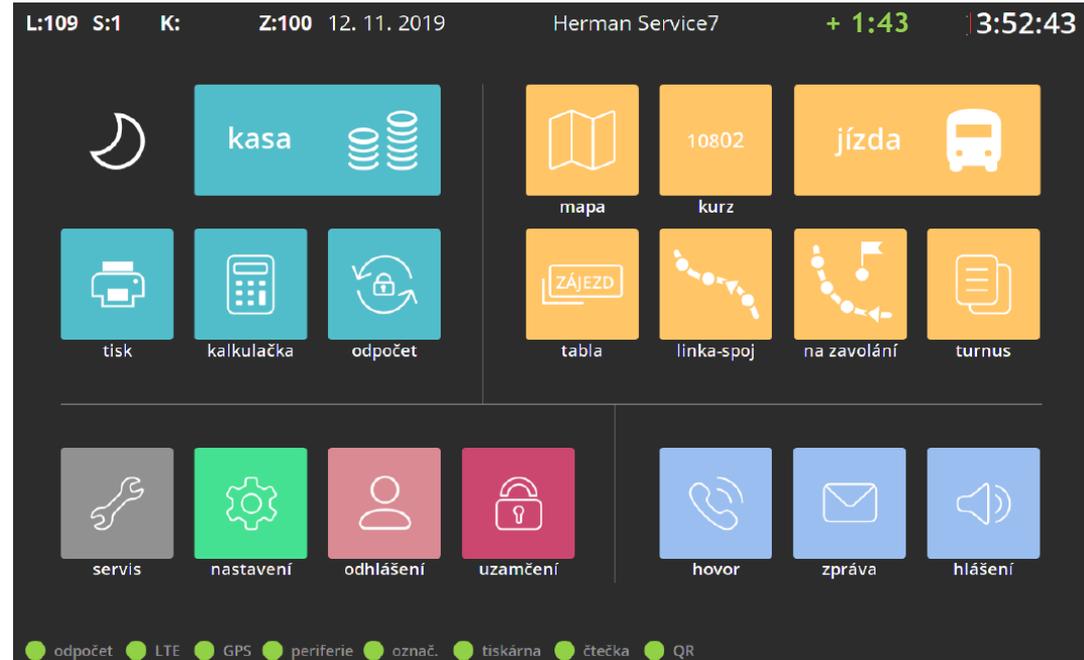
ON-BOARD
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ON-BOARD COMPUTERS IN REGIONAL BUSES

Since 2020 all regional buses equipped with new on-board computer
Incorporates function of several previously independent devices



L:109 S:24 K: Z:900

+ 2:35 17:19:35

- 10:20 ● 900>Ho,Brněnská
- 10:22 ● 900>Ho,STS
- 10:27 ● 900>Ho,Zbrod
- 10:31 ● 910>Mutěnice,kříž.
- 10:33 ● 910>Mutěnice,škola
- 11:46 ○ 100>Aut.nádr.

Hovor

- ✉ Žádost o hovor s CED
- ✉ Předpokládám zpoždění
- ✉ Čekám na přípoj co nudojel
- ✉ Nepobral jsem cestující
- ✉ Mám poruchu
- ✉ Mám nehodu
- ✉ Komunikace je neprůjezdna
- ✉ Zprávě nerozumím
- ✉ Dotaz cestujícího
- ✉ Děkuji, rozumím

Zprávy

- 17:19 ↩ Dispečink IDS Navaznosti
- 17:18 ↩ Dispečink IDS
- 17:18 ↩ Dispečink IDS

Hlášení

● odpočet ● LTE ● GPS ● periferie ● označ. ● tiskárna ● čt

Hovor

- ☎ Dispečink IDS JMK
543 426 666
- ☎ Dopravce
- ☎ Info kasa
532 191 428
- ☎ 112
Tísňové volání
- ☎ 158
Policie
- ☎ 156
Městská policie
- ☎ 150
Hasiči

Zprávy

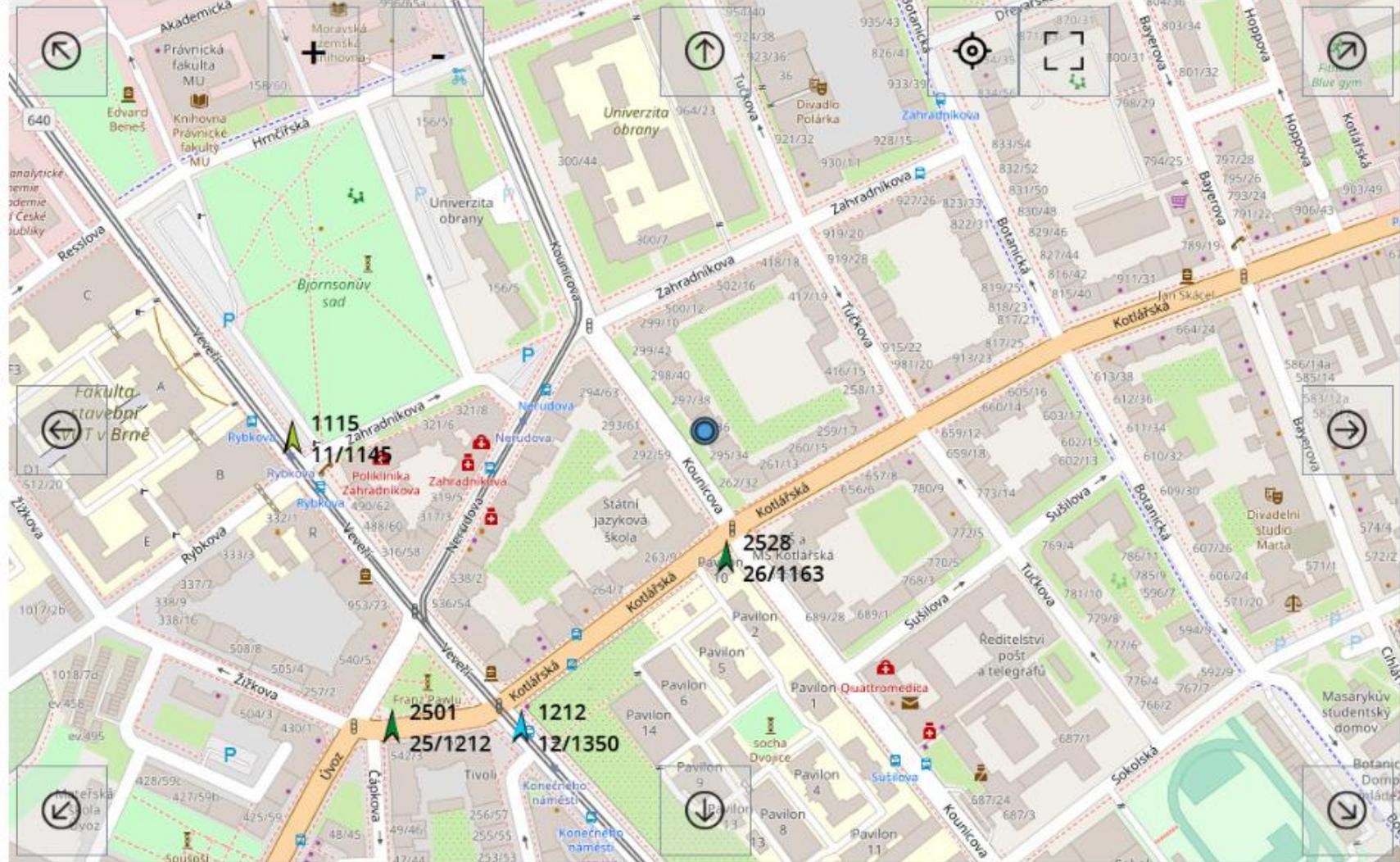
- 11:30 ↻ Dopravce
- 11:30 ↻ Info kasa

Hlášení



L:201 S:2 K: Z:232

- 2:35 18:38:14



Navigation and utility icons:

- Home
- Phone
- Email
- Alert
- Map
- Print
- Signal strength
- Bus

- odpočet
- LTE
- GPS
- periferie
- označ.
- tiskárna
- čtečka
- QR

TAKING COOPERATION FORWARD

INTERIOR LCD DISPLAYS IN VEHICLES



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ELECTRONIC INFORMATION PANELS

More than 170 panels are currently in operation in the region, about 100 are KORDIS assets, 50 are owned by DPMB and others are owned by municipalities and other entities.

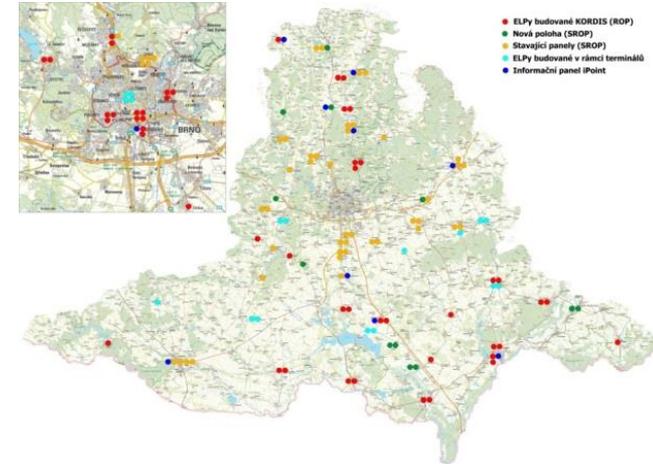
Panels contain not only on-line information, but also the possibility of audio and graphic reporting.



ELECTRONIC INFORMATION PANNELS

We consider the region to be well covered in several places. In the case of smaller stops, we prefer to use mobile phones as a source of information about departures.

In the future, the main emphasis will be put on mobile apps that allow passengers to find departures anywhere.



Mobile CZ 46% 14:34

Odjezdy

OBLÍBENÉ V OKOLÍ VYHLEDAT

Židlochovice, aut. st. (525)

1; 505>Rajhrad - Brno

505	Brno, ÚAN Zvonařka	14:46
505	Brno, ÚAN Zvonařka	15:17
505	Brno, ÚAN Zvonařka	15:47
505	Brno, ÚAN Zvonařka	16:17
505	Brno, ÚAN Zvonařka	16:47

3; 151, 514>Blučina

151	Líšeň, Jírova (> 202 Lazaretní)	14:57
514	Rajhrad, žel.st.	±15:59
151	Líšeň, Jírova (> 202 Lazaretní)	16:58

2; 521, 522>Hrušovany u Brna, 154>Ivančice

522	Hrušovany u B., ž.s.	14:45
521	Hrušovany u B., ž.s.	14:46
521	Hrušovany u B., ž.s.	15:15
522	Hrušovany u B., ž.s.	15:18
154	D. Kounice, M.nám.	15:24

4; 521, 522>Velké Němčice

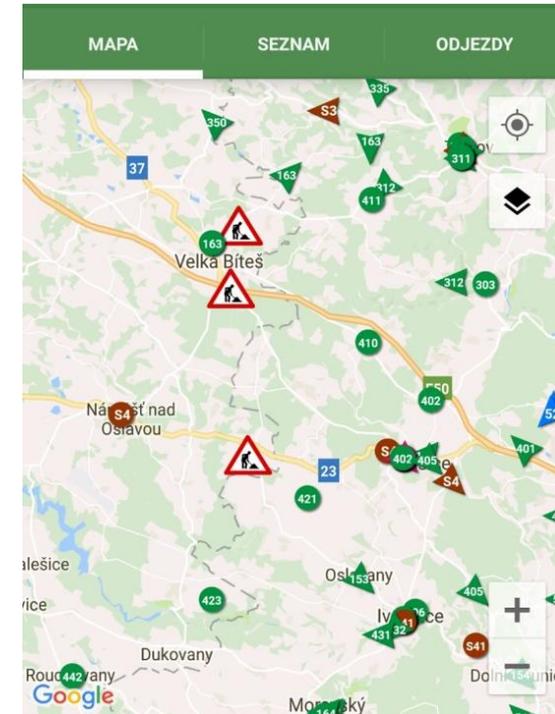
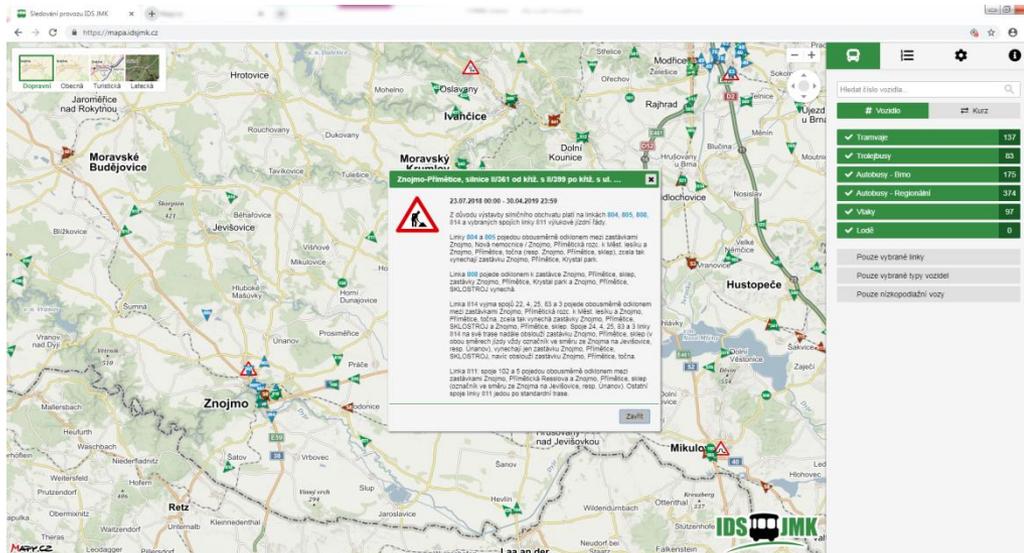
521	Hustopeče, a.n.	10min
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DISPLAY DATA ABOUT EXCLUSIONS AND EMERGENCIES

In cooperation with DPMB, KORDIS was first able to run the system to entering and displaying up-to-date and forthcoming exclusions and emergencies in traffic.

This information is also available to all partners through API.



DATA SOURCE FOR OTHER APPS

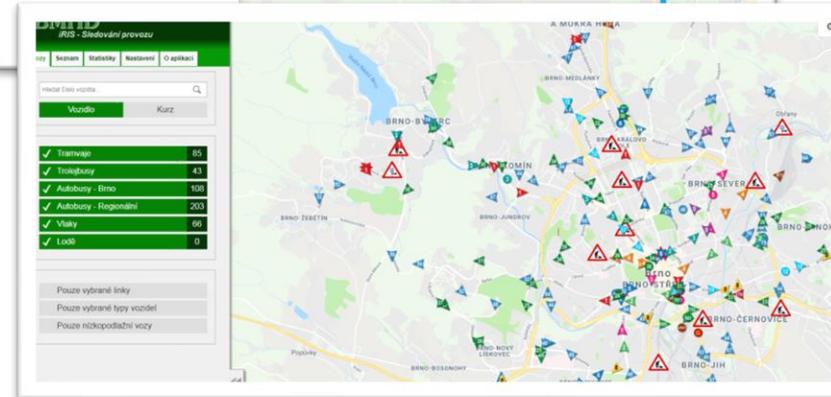
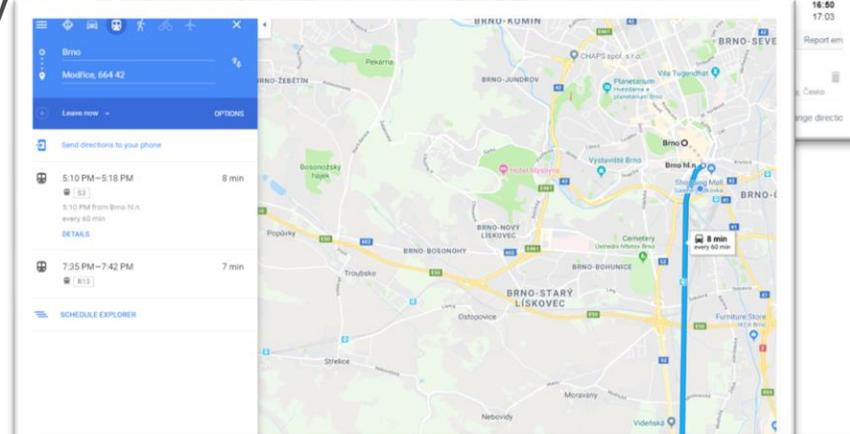
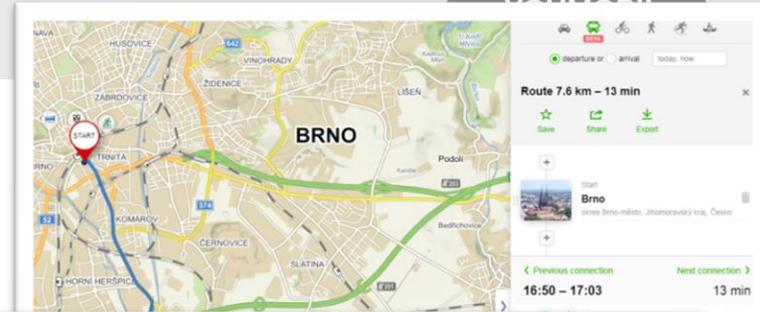
Availability of data - the basis for smart mobility solutions

Data about IDS JMK timetables in journey planners: IDOS, Seznam, Google...

OPEN DATA for third parties for non-commercial purposes

Data subscribers:

- Official apps: DPMB, iRIS, POSEIDON
- Google maps, <https://mapa.idsjmk.cz/>
- Integrated Rescue System
- MUNI Faculty of Informatics





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