

public passenger transport software

# Czech-Austrian Forum on Intelligent Transport Systems

Ing. Tomáš Chlebničan Ing. Petr Buchníček Vienna, 2013



#### CHAPS Ltd.

- leader on the field of public passenger transport IT solutions in the Czech Republic
- founded in 1993
- headquarters in Brno, Czech Republic
- solutions
  - ticketing and reservation system of Czech Railways
  - audiovisual passenger information systems
  - nation-wide multi-modal journey planner IDOS –
     winner of the 1st Smart Mobility Challenge
  - O ...



# Multimodal transport & Door2Door mobility

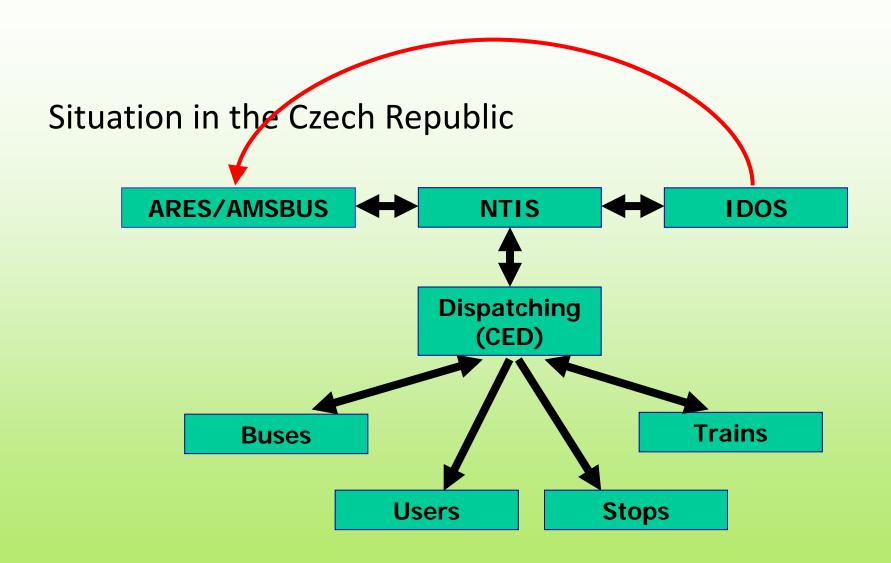
- Journey information & planning
- Ticket reservations and payments
- On-line information when travelling
- Public transportation management
- & co-ordination across regions and also with other transportation means



# Multimodal & Door2Door journey planning

- > Multimodal <
  - includes all mass public transport timetables (trains, buses, urban public transport, airplanes, ...)
  - o optionally supports also taxis, private cars, bikes, etc.
- > Door2door <</li>
  - o includes address points and POI databases
- > journey planning <</li>
  - an optimal unbiased seamless connection searching from a general point A to a general point B







#### **NTIS** basics

- timetables data collection is driven by a legal framework on a national level
- Ministry of Transport established the National Timetable Information System (NTIS) for public needs and commissioned CHAPS to operate it
- main principles
  - public transport operators submit timetables for approval in a standardized electronic format
  - responsible local authorities submit approved timetables electronically to NTIS



## NTIS vs. journey planning

- NTIS contains timetables
- journey planners are expected to provide much more
  - o advanced search options
  - transfer times
  - o fares
  - o international travel options
  - route visualization on a map background
  - o real-time information
  - compare travel options
  - book/buy tickets
  - 0 ...

All data and services must be reliable and up to date!



#### NTIS -> IDOS

- IDOS = MMJP based on data from NTIS
- main features

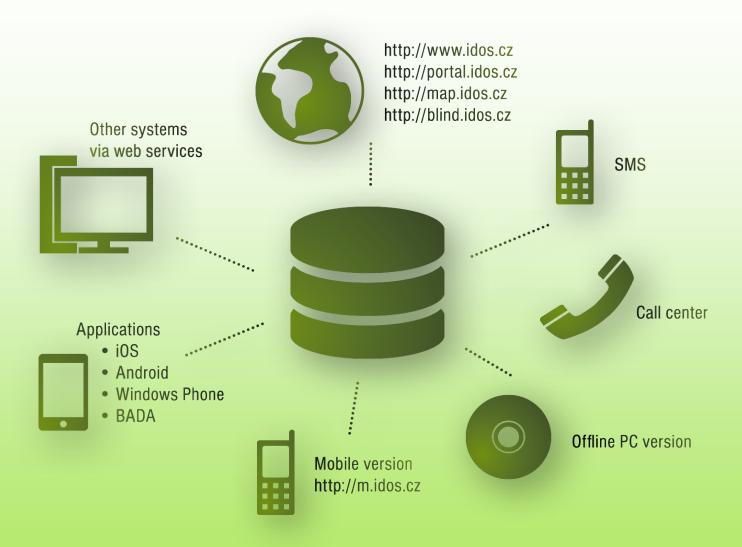
optimal seamless connections from/to station, POI, address or

geo coordinates

- o departures/arrivals boards
- stop timetables for urban public transport
- Google maps route visualization
- basic fares calculation
- 0 ...
- IDOS completely covers whole Czech Rep. and Slovakia









#### **IDOS** in numbers

- the search engine
  - o about 220 million API requests per month
  - typically 100 to 300 API requests per second
- www.idos.cz
  - about 70 million page views per month (3/2013)
  - o about 1.7 million unique users per month (3/2013)
  - in the top 5 most popular web applications on the Czech Internet
- iOS and Android mobile clients steadily in top 10 most popular Czech applications

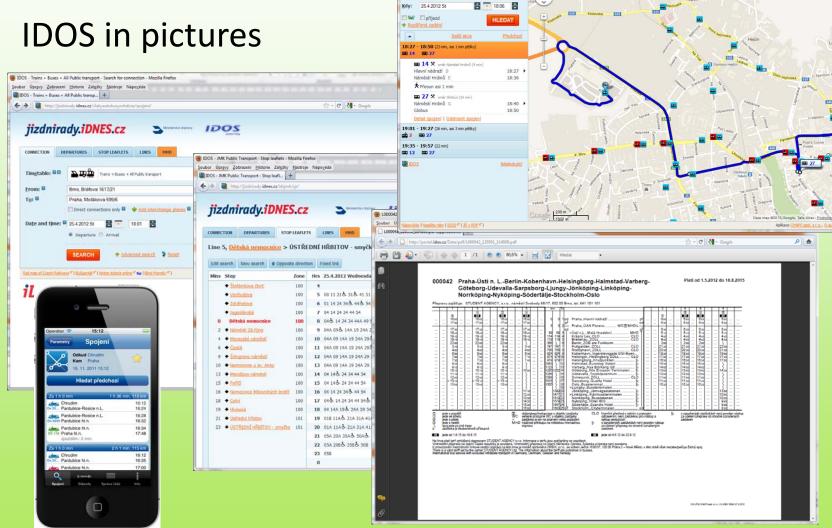
Pm

Mapa Satelitní

1 + C 3 - Google

MAP IDOS BETA





Map IDOS - MHD Olomouc - Mozilla Firefox

Soubor Úprgvy Zobrazení Historie Zál<u>o</u>žky <u>N</u>ástroje Nápověda

+

jizdnirady.iDNES.cz

Map IDOS - MHD Olomouc

MHD Olomouc



## Possibilities of CZ-AT cooperation

- EC continues with its idea of "European MMJP" coordination of work/ideas/proposals
- data exchange (timetables, POI, ...)
- services exchange (realtime information, ...)
- know-how exchange
- ...

=> Central European MMJP?



# Thank you for your attention...

Ing. Tomáš Chlebničan Ing. Petr Buchníček CHAPS Ltd. www.chaps.cz

