



POLICY LEARNING IN INFORMATION TECHNOLOGIES  
FOR PUBLIC TRANSPORT ENHANCEMENT

## GOOD PRACTICES – PUBLIC TRANSPORT AND/OR MULTIMODAL INFORMATION SYSTEMS

*INFORMATION ABOUT THIS GOOD PRACTICE IS PROVIDED BY TRANSPORT RESEARCH CENTRE (CDV, PP6)*

### MULTIMODAL JOURNEY PLANNER FOR THE CZECH REPUBLIC

#### General information

##### **Description**

Europe's best multimodal planner 2012 in the EU's First Smart Mobility Challenge competition, awarded by ERTICO (for Internet links see Bibliography).

IDOS is a door-to-door journey planner for the Czech Republic and Slovakia. It also provides other cross-border travel connections around Europe by bus and train.

Traveller multimodal public transport information, planning and payment system available in platforms for: 1) personal computers and networks, 2) PDA and smartphones, 3) Internet, 4) mobile phones (SMS, call centres).

One of the most web sites being visited in our country, recommended to be followed/to share knowledge and experience.

Easy orientation, user friendly applications. Users from children to seniors.

The application at <http://www.idos.cz> allows searching for train, bus, air and public transport connections or combinations of train, bus and public transportation timetables. For selected train routes, it is possible to reserve a seat, sleeper seat or bed in advance, purchase a ticket, or locate the train (delay). For selected bus routes, it is possible to purchase a ticket or a seat reservation.

IDOS for internet is composed of two layers: layer of an independent search engine and presentation layer.

This solution allows the use of the same search algorithm on different platforms (e.g. search engine is used by almost all on-line applications for smart phones - see *IDOS for PDA and Smartphone*).

One of the most famous uses of the search engine is the above application at <http://www.idos.cz>, its map version at <http://mapy.idos.cz> or the version for mobile phones without operating system on address <http://m.idos.cz/>.

Another application that uses the search engine is <http://vykony.idos.cz>, which allows to evaluate the distance traveled and the number of connections in the timetables (fully replaced the previously supplied product Dotace)

At the present time an application in the real time is under construction, and will be available soon in test version.

### **Background and Context**

CHAPS started to develop first electronic timetables in 1993, firstly for the Czech Railways only. Later, more transport modes and various functionalities were added.

Thanks to bilateral agreements, the European transport service providers' information is included.

Today, operational and development costs based mainly from advertisement displayed together with the IDOS application - there are 66 million online views per month.

## **Policy design details**

### **Policy Design Steps and Timing**

Ministry of Transport has expressed its interest to develop electronic timetables and allocated resources for 1993, for a basic railway service.

SW tool online search engine tool available since 1995.

Two major acts (Act No. 111/1994 and act No. 266/1994) which were released in 1994, set up rules, mandatory data provisions, data formats and unique national wide identification for NTIS.

Strategic decision to follow technology developments and offer more platforms for IDOS access.

Since 2001, role of an entity authorized by Ministry of Transport of the Czech Republic (MoT) for maintenance and development stated. Partnership between private sector (CHAPS/the provider) and public sector (MoT/the customer) established, based on commercialization of the services provided (cheaper operation for the state administration).

### **Actors Involved**

1. CHAPS Ltd:
  - Private commercial sector,
  - Delivering side/service provider,
  - Systems integrator.
2. Ministry of Transport:
  - Public sector on national level,
  - Ordering side/customer/users,
  - Legislation support.
3. Czech Railways:
  - State owned joint-stock company,
  - Arterial public transport provider/users,
  - Basic and first transport information provider.
4. Other public transport operators:
  - Various types of ownership,
  - Local/regional/national/international transport,
  - Timetables/transport information providers/users.

### **Decision Making Process**

Before 1993 - Own initiatives of Chaps company to collect schedules from PT operators.

## Implementation details

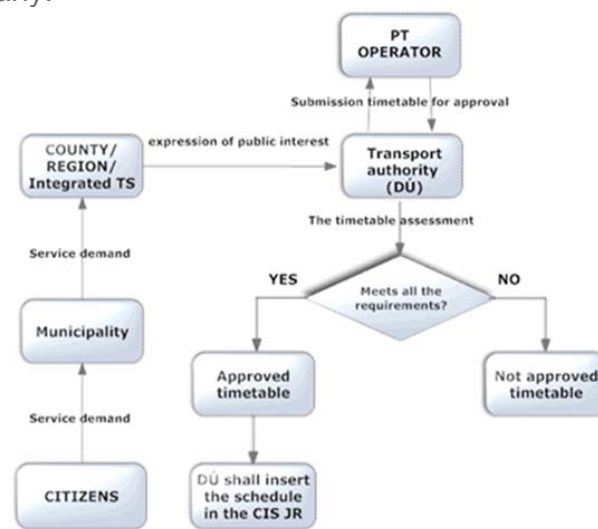
### Implementation Steps and Timing

- 2001 - CHAPS spol. s r.o. has been authorized by the Ministry of Transport of the Czech National Information System of Timetables;
- 2002 - Version for viewing web pages in mobile phones.

### ICT/Infrastructures needed

The ICT application is JDF form and responsible for implementation is CHAPS company.

PT operators has an obligation to notify a change of timetable and send in JDF form to the CHAPS company.



## Supporting Mechanism

### Awareness/Information Campaigns

Workshops for PT operators, conference for public.

### Partnerships/Key Supporting Stakeholders

PT operators, Regional Department of Transport.

## Results

### Expected vs Actual Benefits

- The main benefits of the PT policy was that CIS JŘ is unique policy, that facilitates the development of the real time information system.
- The current benefits are known it is the first place to achieve IDOS as a multimodal planer.

### Quantitative Results Achieved

- Integration of all the schedules from PT operators operating in our country.
- Approximately 67M pageviews/month.
- PT lines in the CIS JR: 215 railways, 5000 bus lines, 1000 city transport lines (multimodal); air transportation is not organized onto lines.
- PT connections: 449 526 railways, 79 794 bus lines, approximately 150 000 city transport lines (multimodal); 113 619 air connections (from the Galileo system).
- 5 railway PT operators, 229 bus operators, 75 city transport operators.
- In IDOS integrated all Czech city transport systems, most of Slovak cities and city of Lodz in Poland.

### Qualitative Results Achieved

Functional system IDOS, 1.75M unique users/month.

## Key Considerations

### ***Lessons Learned***

The duration of training regulations and legislation governing.

### ***Primary Obstacles***

Data availability and enforcement.

Systems integration necessary.

### ***Critical Success Factors***

Legislation, regulation and enforcement rules to be set up.

Financial resources availability for development to be stated in the policy.

### ***Transferability Considerations***

Strategic decision of the MoT to support these activities.

Central information system on PT timetables established in the legislation.

National wide data formatting and enumerations established.

Legislation, regulation and enforcement rules set up.

Decision on co-operation of public and private sector for optimisation of operation and maintenance costs.

### ***Up-scaling Considerations***

1: leading Edge

### ***Contact***

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