

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)

REAL TIME PASSENGER INFORMATION SYSTEM

General information

Description

In 2004, the Prague Public Transport Co. Ltd. (Prague Integrated Transport, PIT; Pražská integrovaná doprava, PID), which is responsible for operation of public transport in Prague, joined the CONNECT project.

The main goal was to enhance quality of provided information and ensure availability of the information for the blind and visually handicapped while using the public transport. The programme followed the first attempts for development of information systems on the stops and already well-established standard of installations of receivers for the blind and visually handicapped in PIT vehicles and also development of information kiosks.

A pilot project has been realized in Prague and its neighbouring areas of interest operated by ROPID company (Regional Organiser of Prague Integrated Transport).

The project was planned in three phases, the first of which started in 2004 and the third one finished in 2009.

Backround and Context

Fostering urban/interurban interfaces to ensure fluent traffic flows between the high level and the connecting road network.



Policy design details

Policy Design Steps and Timing

The project was in line with the strategic plans for the development of the public transport in the City of Prague.

Project start date: 2004.

Completion date: 2009.

Actors Involved

Key partners of the project were these stakeholders:

1)City of Prague

Receiver of the CED project

As an ordering party of the regional PT

2)ROPID

Partner in the project

3)CHAPS – software development of MPVnet system (vehicle movement monitoring) 4)APEX – hardware equipment, the acoustic system for visually handicapped and provision of on-board units and information kiosks.

Decision Making Process

When implementing the project decision roles were set as follows:

- City of Prague: financial issues;
- ROPID: technical issues.

Implementation details

Implementation Steps and Timing

First Stage (05/2004 – 12/2005)

In this phase was implemented:

- three large LED information panels provide information about the operation of public transport and allowing the acoustic output activated personal driver blind;
- installation and trial run of five security information stands, allowing passengers to obtain information about timetables of all PT lines, including the search for connection. Information stands are located at Metro stations adjacent terminals outside the regular service, they replaced racks that were not of audible output.

Second Stage (01-12/2006 – 03/2007)

At this stage of this project, mainly to test individual functions and knowledge-based adaptation of the programs:

- In a trial run remote administration table;
- The development of dual transmitter VPN-D, operating in two frequency bands.

Third Stage (04/2007 – 03/2009)

This stage was mainly focused on the adjustment of certain processes and software according to the knowledge of the test operation:

- Developing web applications for the evaluation of data obtained from monitoring traffic in real-time;
- Preparation and testing of basic outputs of vehicle tracking in real time;
- Testing dual transmitter VPN-D, operating in two frequency bands.

ICT/Infrastructures needed

Further development of MPVNET system for the Internet enables universal use and is available almost anywhere.

Based on the findings of the verification operation was due to data reliability assessment of delays moved from vehicle to the center.

The scoring system delay is linked to the nationwide system of timetables (CIS), which allows for any future expansion of public line transport.

Processing of basic outputs from MPVNET.

Conducted further testing Information panels with remote administration, including the involvement of the coordinating control center, which can transmit up to date information on each bus stop facilities.

A dual transmitter was developed and tested for visually disabled persons in order to meet European standards. Based on the verification operation, it is preparing its presentation and addition of micro GPS that will automatically link the geographic location of the user switch (the radio frequency 86.79 and 433.95 MHz).

Centralized information system in real time.

Supporting Mechanism

Partnerships/Key Supporting Stakeholders

Project was very intensively supported mainly by the regional political representatives.

Results

Expected vs Actual Benefits

Information panels and kiosks in operation.

Further development of MPVNET in the Internet environment ensures universal use and makes it available at almost any place where the Internet connection is provided. The system has been designed as opened, with optional integration of other systems from different transport organisers.

System for delay evaluation is connected to the National Time-table System (Celostátní systém o jízdních řádech - CIS JŘ) which enables further extension for any regular public transport.

Quantitative Results Achieved

Currently, more than 250 vehicles have been equipped with the system in a particular area and further development regarding display tables in compliance with new technologies and their availability has been running. A great effort was put into interface accessibility of the whole system during its designing. Special emphasis was laid on information system for visually handicapped travelers, which was designed and installed according to existing European standards and regulations.

Qualitative Results Achieved

Reducing the travel time of road users by providing them accurate, timely and relevant information as well as by providing cross-border services (e.g. RDS-TMC, web-base services).

Key Considerations

Lessons Learned

Positive experience:

- The system has been designed as opened, with optional integration of other systems from different transport organisers;
- System for delay evaluation is connected to the National Time-table System (Celostátní systém o jízdních řádech - CIS JŘ) which enables further extension for any regular public transport.

Primary Obstacles

Goals of PT policy to be set up at the side of the self-governing regions.

Willingness of various actors to cooperate.

Critical Success Factors

Willingness to set up the system.

Financial resources available.

Transferability Considerations

- Legislation support necessary;
- Harmonization of data formats necessary;
- Political demand for establishing;
- Financial instruments for investment costs very welcome;
- Operational costs to be considered.

Up-scaling Considerations

Standardized information system based on common platforms for future interoperability with other European countries.

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