



Example 57 **Information System for People with Visual and Hearing Impairments**

City (country) **Prague (Czech Republic)**

Similar service in Dresden (Germany)

good practice for people with ...	kind of vehicle	kind of measure/approach
... visual impairment ... hearing impairment	city bus tram	engineering/technology approach financial support measure awareness building

Project description

The APEX company in cooperation with the Czech association for the blind has developed a command set for people with visual impairments. The first city that successfully implemented this system was Prague in the Czech Republic. Dresden is the first German city to apply this system.

The basic components of the system are a pocket transmitter and receiver that communicate with equivalent devices in the tram or bus and can thus inform the user about the route number and the direction of travel of buses or trams. It is also possible to activate a voice system giving the same information as shown in the real-time information display at a station like service number, final destination and departure time. A further function of the command set is the possibility to activate an acoustic orientation signal to locate a specific place thereby helping the user navigate through railway stations.

When a bus or a tram approaches the station, the line number and the final destination are announced via loudspeaker when pressing a key on the pocket device. This facilitates better navigation, especially at stations where several different lines run. When the user of the pocket device presses the key for a second time, the driver of the vehicle is informed that a person with a visual or hearing impairment is going to board the vehicle and that he needs to pay special attention. Pressing the key for a third time activates the announcement of the next station.

A transmitter and receiver cost about 300 Euros, but in Prague users get this cost reimbursed by the Czech Department of Social Affairs. For the fitted control unit in bus, tram or train, and for the sound beacon with voice announcement attached to the real-time information display, approximately 1,350 Euros are needed.

In Dresden all modern low-floor trams have the system integrated so that by 2010 all trams will be equipped with this system. About 40 of the 150 Dresden city buses already have the system and new buses will all have it installed, too. The system costs around 600,000 Euros. 90% of this sum is funded by federal money. The costs of the hand-held transmitter in Dresden are about 90 Euros but so far have to be paid by the user itself.

The drivers of the vehicles get special training to better prepare them to use the system.

Sources:

International Association of Public Transport (UITP) / European Conference of Ministers of Transport (ECMT): Improving Access to Public Transport, Paris (2004), pp. 32-33

Newstix: Praxistest bestanden: Sehbehinderte vom neuen Informationssystem der Dresdner Verkehrsbetriebe (DVB) AG begeistert (de), <http://www.newstix.de/index.php?entmsg=true&ref=RNL&mid=1820> (22/10/2007)

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