CiViTAS
Cleaner and better transport in cities

Sustainable Mobility Highlights 2002-2012

CIVITAS is a European Initiative involving more than 200 cities across Europe in the testing and sharing of new technologies and innovative concepts to achieve sustainable and integrated strategies for urban transport.

TRANSPORT TELEMATICS

Zagreb

Upgrades for public transport

Public transport can be made faster, more efficient and more passenger friendly by enhancing the use of innovative transport telematics systems for traffic management and traveller support.

In the field of transport telematics CIVITAS cities have worked on ITS for traffic monitoring, management and enforcement; real-time road-user information; and ITS-based enhancement of public transport. This highlight focuses on the last of these.

ITS enhancements of public transport include fleet management systems based on automatic vehicle location technologies, which can be used to improve services, to optimise routing and scheduling, and to feed real-time information into various passenger information channels. This subtheme also encompasses intelligent traffic lights and priority schemes for buses and trams.

By implementing such measures, public transport becomes more convenient, comfortable, accessible and understandable for everyone. The number of passengers who use public transport should increase and disadvantaged people can be made to feel less excluded from society.

For these reasons, the CIVITAS Initiative has realised 51 innovative ITS measures for public transport in 30 cities. This highlight features some of the most successful and eye-catching among these to inspire other European cities.

Fleet management

A state-of-the-art planning and fleet management system underlies the high quality of many public transport services in CIVITAS cities. Thanks to automatic vehicle location (AVL) technology, operators can take immediate action in case of disruptions and optimise timetables according to the gathered data. Traditionally, vehicles are tracked with the US-owned global positioning system (GPS). However, several CIVITAS cities, including **Skopje**, former Yugoslav Republic of Macedonia, have implemented AVL systems that are compatible with the European satellite navigation system under development, GALILEO. Vehicles in **Donostia-San Sebastian**, Spain, on the other hand, are located through a wi-fi-based positioning system. Their new management system helped to save EUR 0.7 million on operating costs in 2011.

Other inspiring cities are Bath (United Kingdom); Bucharest (Romania); Coimbra (Portugal); Craiova (Romania); Graz (Austria); Iasi (Romania); La Rochelle (France); Ljubljana (Slovenia); Monza (Italy); Ploiesti (Romania); Toulouse (France); and Venice (Italy).

Craiova


Monza

Real-time information in public places

Automatic vehicle location technology not only allows for service improvements, it is also the basis for real-time passenger information. The city of **Ljubljana**, Slovenia, equipped 54 bus stops with remotely managed LED information displays. The introduction of on-board travel information displaying the destination and upcoming stops, as well as the weather forecast, news and advertisements, considerably increased user satisfaction in **Aalborg**, Denmark. In the Portuguese cities of **Coimbra** and **Porto**, LCD displays were installed in hospital buildings to inform visitors of real-time departure times at near-by bus stops.

Other inspiring cities are Barcelona (Spain); Berlin (Germany); Bucharest (Romania); Coimbra (Portugal); La Rochelle (France); Monza (Italy); Norwich (United Kingdom); Ploiesti (Romania); Rome (Italy); Szczecinek (Poland) and Zagreb (Croatia).

Real-time information online

Bristol, United Kingdom, introduced an intermodal trip planner offering high-quality travel information for buses, trains, ferries, cycling and walking. Full door-to-door itineraries were available in either text or graphic form. **Aalborg**, Denmark, invested in many different information channels, including a website which can be personalised with “gadgets” similar to smartphone applications (apps), and the Take Me Home smartphone app, which plots a public transport route starting from the user’s current GPS location. The city of **Porto**, Portugal, integrated real-time information from several public transport operators into their MOVE-ME mobile application.

Other inspiring cities are Burgos (Spain); Krakow (Poland); Rotterdam (Netherlands); Skopje (Macedonia); Suceava (Romania); Tallinn (Estonia); and Toulouse (France).

Aalborg

Monza

Public transport priority schemes

In **Monza**, Italy, previous attempts to give public transport priority at traffic lights failed because of adverse effects when traffic volumes were high. CIVITAS presented the opportunity to integrate traffic light priority with the central traffic monitoring system. Priority requests from buses that are running late are now processed by a central decision module. The city of **Tallinn**, Estonia, increased the number of public transport lanes in the city and installed cameras to spot intruding private vehicles. Police involvement in this measure required an official request to the Estonian Ministry of the Interior.

Other inspiring cities are Craiova (Romania); Ljubljana (Slovenia); Malmo (Sweden); Prague (Czech Republic); Stockholm (Sweden); Toulouse (France); and Zagreb (Croatia).

Learn more at www.civitas.eu/telematics/ITS-pt