Project partners

TNO - The Netherlands Organisation for Applied Scientific Research
ETRA Investigacion y Desarrollo
CRF - Centro Ricerche FIAT
INRIA - Institut National de Recherche en Informatique et Automatique
ITS - Institute for Transport Studies, University of Leeds
DLR - German Aerospace Center
Robosoft SA
TRG - Transport Research Group, University of Southampton
CSST - Centro Studi sui Sistemi di Trasporto S.p.A
TRW Conekt
IKA - Institut fuer Kraftfahrwesen der RWTH Aachen
SINTEF - Norwegian Institute of Technology
Università di Roma “La Sapienza”, Dipartimento di Idraulica Trasporti e Strade
GEA J-M Vallotton - T. Chanard SA
POLIS - Promotion of Operational Links with Integrated Services
Rups Consultancy & Projectmanagement B.V.
Frog Navigation Systems B.V.
Transport & Mobility Leuven
ISIS - Institute of Studies for the Integration of Systems
Technion (IIT) Israel Institute of Technology
RATP - Régie Autonome des Transports Parisiens
Comune di Roma
ITR - Ingegneria dei Trasporti Roma
ATS - Advanced Transport Systems Ltd.
Generalitat Valenciana
Fundación Comunidad Valenciana - Región Europa
ENQ
Uniresearch BV

www.citymobil-project.eu

Towards advanced transport for the urban environment

CityMobil is an Integrated Project, co-funded by the EU, which has been set up to increase knowledge of the issues arising from the integration of automated transport systems in the urban environment. The technical capacity of automated transport vehicles has been tried and tested in previous projects such as CyberCars, CyberMove, Edict and Stardust. However, knowledge on the wider implications of implementing an automated transport system in a city is not so well established. For instance,

- How can a city assess the economic viability of an automated system?
- What are the operational issues in relation to integrating an automated system into an existing public transport system?
- How do users react to such systems and how can the systems be made more user friendly?
- How to select and design a system, which meets a particular demand?

These and many other questions will be answered through the knowledge gained primarily from the 3 major demonstration projects as well as a series of smaller scale demonstrations and case studies.

ULTra system supplied by ATS to be deployed at Heathrow airport

Funded by the Sixth Framework Programme of the European Commission
CityMobil objectives

The main aim of CityMobil is enhancing the deployment of advanced transport systems to achieve a more effective organisation of urban transport. It is inevitable that automation, in all possible forms between providing information at one end of the spectrum and fully autonomous driving at the other, will play a major role in the integrated traffic solutions of the city of tomorrow. CityMobil will contribute to a more sustainable and rational use of motorised traffic with less congestion and pollution, safer driving, a higher quality of living and an enhanced integration with spatial development.

CityMobil activities

CityMobil examines various key aspects related to the wider roll-out of automated transport systems, including, future scenarios, technological issues, operational matters, user’s acceptance and evaluation.

In addition to the main demonstrations, ‘theoretical’ studies in a small number of other cities will be carried out to identify to what extent automated transport can resolve their problems and at what cost. In some cities, “showcases” will be set up to demonstrate to audiences and authorities what automated transport could look like in practice.

The main demonstrators

- The **Spanish town of Castellón** (Valencia) will deploy dual-mode buses, which can be operated both automatically and manually depending on the road environment. The proposed system will comprise two corridors totalling more than 40 kilometres. The vehicles will travel on a reserved platform, although on some stretches of the itinerary they will circulate on shared infrastructure. At intersections, the bus/tramway will be given priority over the private traffic.

- At the **new exhibition centre in Rome**, a fleet of fully automated shuttles (or cybercars) will operate in the car park moving visitors between the car park, railway station and exhibition centre. The system will provide a fully on-demand service, and vehicle reservation will be integrated with the car-park management. Each time a car enters the car-park gate it will receive the parking space number to which it has been allotted and an automated vehicle will be called to wait for the car occupants at the closest stop to the allotted space. Platoons of cybercars will also be allocated to the station to coincide with train departures/arrivals.

- At **Heathrow airport**, a personal rapid transit system, called ULTra, will carry people from the car park to the terminals. ULTra is a system based on small, light and energy efficient vehicles on a dedicated guideway offering a personal, automated taxi service with point-to-point non-stop travel and no waiting. The Heathrow scheme will take the form of a pilot project, 3.9 km in length, linking the passenger car park and terminal areas. Success of the pilot will lead to the roll out of the system over the whole of Heathrow and to other airports, with links to public services in the local area.

Examples of advanced transport systems

In future mobility scenarios advanced transport systems will be part of the urban environment. The following new transport system concepts are expected to be able to contribute to an improvement of the efficiency of road transport in dense urban areas.

- Cybercars
- Advanced buses
- Dual Mode vehicles
- Personal Rapid Transit