

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 - EU cities and regions networking for innovative transport solutions
- 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

The background of the slide is a dark blue field filled with white line-art sketches of futuristic, rounded vehicles. The sketches show various views, including side profiles, front views, and interior details. Some sketches have handwritten labels like "GENEROUS GUN" and "LIGHT HAND".

Towards advanced transport for the urban environment



SIXTH FRAMEWORK PROGRAMME



Funded by the Sixth Framework Programme of the European Commission

CityMobil is an Integrated Project, co-funded by the EU, which has been set up to build up 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 tied and tested in previous projects such as Cybercars, Edict and Startdust. 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 small scale demonstrations, showcases and case studies.

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 rational use of motorised traffic with less congestion and pollution, safer driving, a higher quality of living and an enhanced integration with spatial development.

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.

CityMobil activities

CityMobil activities cover a wide range of activities, that are mutually influencing and stimulating each other.

Research & Development program

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

General Issues	Sub-project	Heathrow Demonstration	Rome Demonstration	Castellón Demonstration
	1 Demonstrations			
	2 Future scenarios			
	3 Technological issues			
	4 Operational issues			
	5 Evaluation			

Three large demonstrators

In the three large demonstration projects the technological knowledge is implemented in various systems, being in real operation and fulfilling a role in public transport.

Showcases and small demonstrations

In a handful of European cities temporary showcases will be organised in order to demonstrate to audiences and authorities what automated transport could look like in practice. The showcase vehicles being fully automated vehicles on the one hand, and dual mode vehicles on the other hand, will be developed within the project, and brought to a suitable site in a small number of cities.

City Modelling studies

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.

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 Cybercars will operate in the car park shuttling 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. A platoon 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 carpark to the terminals. ULTra is a system based on small, light and energy efficient vehicles on a dedicated guideway network 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.



ULTra system supplied by ATS to be deployed at Heathrow airport



Cybercars



Cybercars