

# Advanced Transport for the Urban Environment

## What is CityMobil

CityMobil is an Integrated Project co-funded by 6th Framework Program of the EU.

## Citymobil objectives

- A more effective and sustainable organization of urban transport
- A more rational use of motorized traffic with:
  - less congestion
  - safer driving
  - higher quality of living
  - enhanced integration with spatial development
- By bringing the implementation of automated transport in urban areas a major step forward

## Examples of Advanced Transport Systems



## Citymobil background

- Mobility demands cause an ever increasing pressure on the urban arena
- There is a need for innovative solutions to facilitate mobility
- Automated road transport may contribute to sustainability by a more efficient use of resources and space and increased transport safety

### Facts and figures

Project start:	May 1, 2006
Project duration:	5 years
Coordinator:	TNO
Number of Partners:	28
Project Budget:	40 million Euros
EU funding:	11 million Euros

## How do we reach the objectives

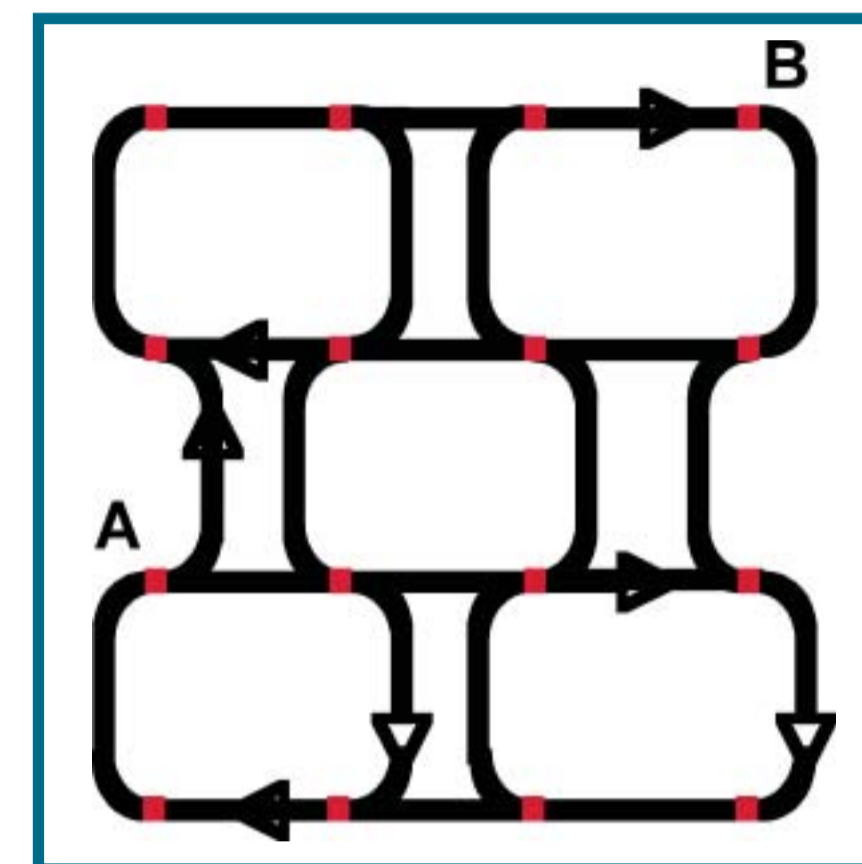
(How do we intend to bring the implementation of automated road transport a major step forward?)

- 3 large scale implementations of advanced transport systems
- A number of studies into real city applications
- An R&D program to support the demonstrations and to address unresolved questions
- Showcases and small demonstrations in small number of cities
- Installing a Reference Group of European cities, that are interested in or dealing with implementation of Advanced Transport Systems

## City demonstrations Heathrow

Personal Rapid Transit (PRT)

At Heathrow airport, a personal rapid transit system will be implemented to bring people from the carpark to the terminals.



### Features

- Small automatic vehicles
- One way guideway network
- Off line stations

Giving on demand non-stop journeys and excellent operational flexibility. Transport that is waiting for you rather than you waiting for it.

### Agreed Route

- Link from Car Park to T5
- 3.9 km of track
- 18 vehicles
- 500,000 persons/year
- Installation 2007
- Operational June 2008

## City demonstrations Rome

At the new exhibition centre in Rome, a fleet of automated shuttles will operate in the car park carrying visitors between the car park, the railway station and the exhibition centre.



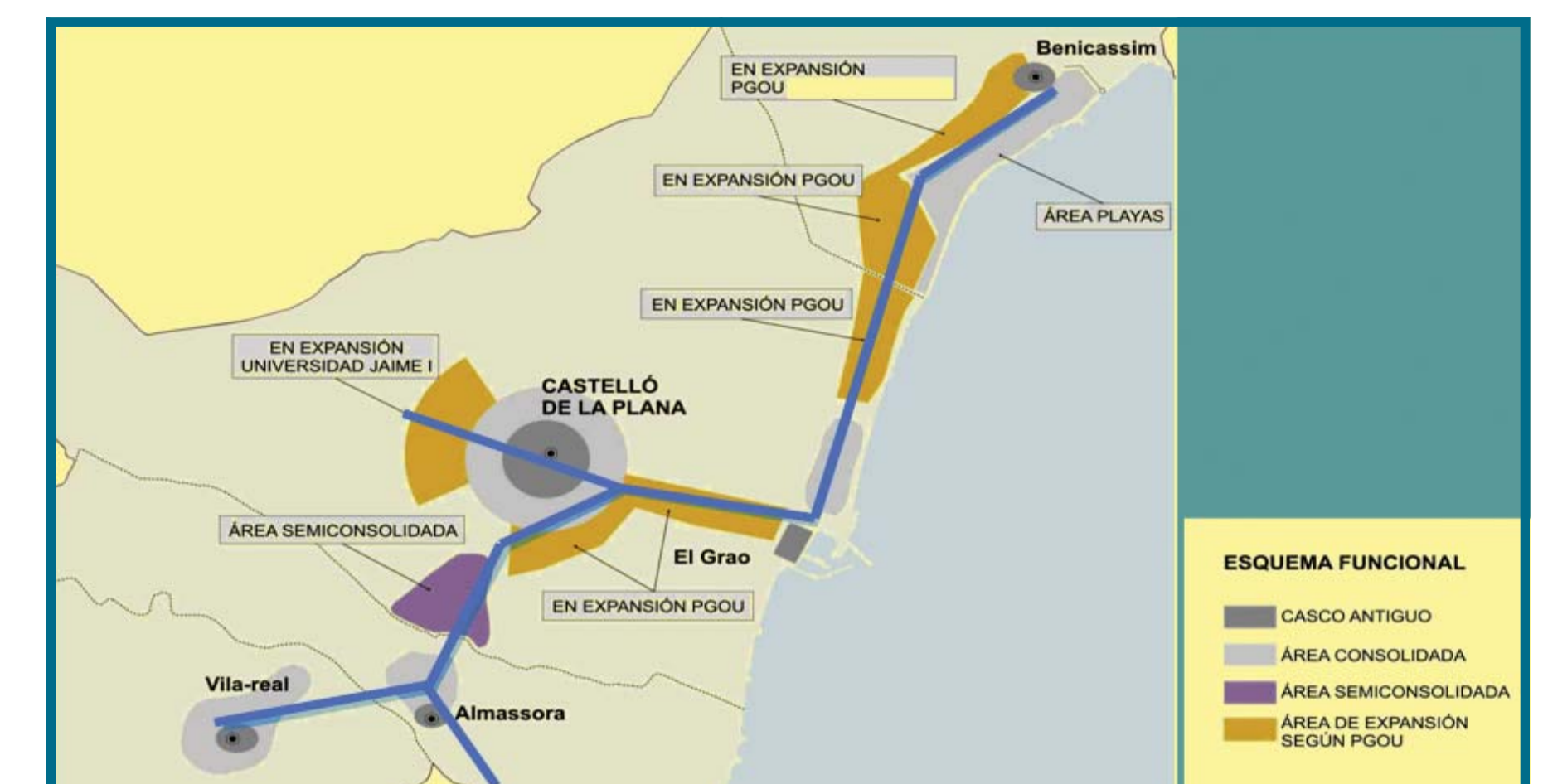
- Short distance transport service
- Use of small automated vehicles (cybercars)
- To improve visitors' accessibility to the building for people coming both by car and by train
- To eliminate the current shuttle needed to serve the farthest car-slots
- To demonstrate the economic viability of automated systems for feeder transport service

## CityMobil 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

## City demonstrations Castellón

The Spanish town of Castellon will deploy dual mode buses, linking some corridors along the coastal line with the inner city centre and university.



- A more than 20 Km corridor linking the University, the city of Castellón –including the old city centre-, the port and then the coastal line up to the next big population
- High speed, high quality public transport service
- A flagship project for the Regional Government, large potential of replication
- The project is already included in the Plan for Strategic Infrastructures of the region, with an allocated budget of 97 M€
- The call for tenders for first phase - from the University to the city centre- is being opened in the course of 2007, with a budget of 17.5 M€

### Technical aspects

- Electric buses/trolleybuses with dual propulsion – in city centre should be autonomous e.g. by using batteries.
- Operating within dedicated platforms in some sections, but on shared infrastructure in others.
- Dual mode of operation: autoguided during normal operation but intervention of a human driver should always be possible.
- Initially conceived for passenger transport, but a study on urban logistics was already made in Castellón and the Generalitat is open to consider that issue as well within the project.

## R&D Program

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

- 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