Advanced City Cars, PRT and Cybercars, New Forms of Urban Transportation

SIXTH FRAMEWORK PROGRAMME
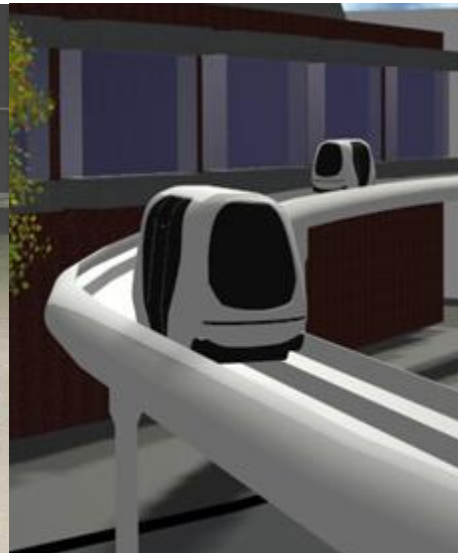
Adriano Alessandrini

CityMobil Evaluation SP leader

DITS Rome

CityMobil

SAPIENZA UNIVERSITÀ DI ROMA

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

CityMobil Advanced Transport Systems

- Advanced city cars: city vehicles integrating driver assistance and other features to be better used in car-sharing services.

- PRT: small fully automatic vehicles operating on guide ways, segregated from pedestrians and other traffic

- CyberCars: fully automated road vehicles for individual or collective transport, for specific areas with little or no interaction with other (manual) vehicles
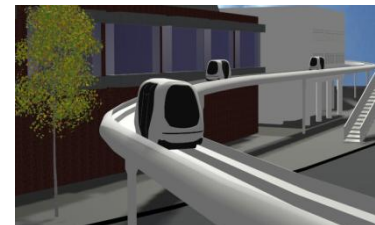
CityMobil approach

- Three large scale demonstrations
- Technical developments on vehicles and infrastructures
- City studies
- Small demos
- Showcases

Reference Group Cities

Almelo

Almere

Cardiff

Clermont-Ferrand

Daventry

Gateshead

Genova

Hyvinkää

Halver

Helmond

La Rochelle

Lausanne

Limeil-Brévannes

Milano

Montbéliard

Opole

Orvieto

Santa Margherita Ligure

Trondheim

Uppsala

Valencia

Vienna

Selection methodology

- Each city had to propose one or more sites for a potential showcase
- Each application had to be "pre-designed"
- Local objectives had to be defined
- User needs had to be analysed
- A form measuring the compliance of each site to each criteria had to be filled

Ranking criteria

- National and local transport strategies and plans
  - Application consistency with local, regional and national plans for transport
  - Application consistency with legal framework
- Site-specific criteria
  - Project progress
  - Integration opportunities
  - Technical feasibility
  - Stakeholder acceptance
  - Data availability
- Criteria related to the project consortium
  - CityMobil partner involvement in the local project

Other selection criteria

- Geographical coverage
- Vehicle availability (within the showcase WP of CityMobil) for the specific application
- City willingness to cover its own costs

Selected showcases

- Cybercars showcases
  - Daventry
  - Hyvinkää

- Advanced city cars
  - Genova
  - La Rochelle

Daventry showcase outcomes

- Open from 24.09.2007 to 05.10.2007
- 3 permanent vehicles (plus 2 other vehicles)
- Conference hosted on 26.09.2007 by the City Council with more than 200 attendants
- Coverage by BBC (news - live morning show - BBC world service, 60M audience reported by BBC), article in THE INDEPENDENT, local TV and 1st page on regional newspapers
- 9 school groups visited on week 1 (~180 children)
- 10-15 individual visitors daily

Daventry showcase pictures

THANK YOU

For information

CITYMOBIL Website:

www.citymobil-project.eu

The first advanced citycar: the praxitel

An example of PRT: the ULTRA test site

Transport Research Arena Europe 2008

An example of cybercar: Yamaha minibus automated by INRIA