

NICHES+ POLICY AND RESEARCH RECOMMENDATIONS

WG4: Automated and Space Efficient Transport Systems

Introduction to the working group



Niche applications of automated transport systems already show the potential contribution of shuttle services to parking solutions and to the upgrade of the public transport system with enhanced feeder transport.

Also electric vehicles in car sharing clubs, with certain levels of vehicle automation (in between assistance functionalities and full automation) are becoming mature solutions that can help to enhance public transport systems across Europe.



Three innovative concepts have been developed:

- Group Rapid Transit
- Personal Rapid Transit
- Electric vehicles in city car share schemes

Links have been established within this working group with additional projects, namely with [Citymobil](#) and [CityNetMobil](#).

Research Recommendations

→ RR4.1 Implement a large-scale pilot demonstration test bed in an urban environment

The key recommendation is to set up a demonstration that would provide a real purpose by connecting public areas, and provide a basis for confirming whether systems really can attract car users and pay for themselves as existing research has suggested and whether systems do provide a sustainable means of transport. Such a demonstration would also provide a test bed for further research.

→ RR4.2 Perform research activities using the pilot demonstration test bed (above)

Research into technical, financial/funding, and cultural aspects, ex-post evaluation, behavioural research (accessibility, pricing elasticity, preferences), effects on land use, effects on policy and how new systems could fit into existing infrastructures, the development of a common evaluation methodology, and ideally, investigation into how different system options could fit in different environments e.g. GRT and PRT in new towns, historic, large and small cities etc.

→ RR4.3 Clarification of the legal and institutional requirements for automated and space-efficient transport systems

This is a crucial area of research which will lead to clarification of the procedures and approvals needed for planning, operations and safety certification of automated and space-efficient transport schemes.

→ RR4.4 Carry out awareness campaigns

Awareness campaigns are seen as an integral component of the research to develop automated and space-efficient transport systems in order to promote the sustainability benefits of such schemes.

Policy Recommendations

→ PR4.1 Give increased support to the development of automated & space-efficient transport systems

Increased emphasis on development is required if we are to realise the considerable potential from automated P/GRT transport systems in terms of their capability to provide potentially sustainable transport with reduced land take; personal public transport with consequent greater potential to attract users away from cars and hence for mode shift; and new opportunities for jobs and wealth creation.

→ PR4.2 Pilot demonstrations

Support is needed for pilot demonstrations to increase public awareness of the potential, opportunities and benefits of automated & space-efficient transport systems.

→ PR4.3 Financial support for adopters

This recommendation seeks to encourage the provision of financial support to help mitigate the risks for pioneer cities, industry and stakeholders implementing automated and space-efficient transport systems.

→ PR4.4 Simplify and speed up the adoption process

It is important to help clarify and simplify the requirements for approvals and certification. A critical area where the EC can help is in harmonising the normalisation and regulation work required for schemes to move towards implementation. This includes, for example, new regulations to allow driverless vehicles, approvals for planning and operations such as the Transport Works Act (in UK) or equivalent, and the categorisation of PRT/GRT as a transport mode.

Contact information

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