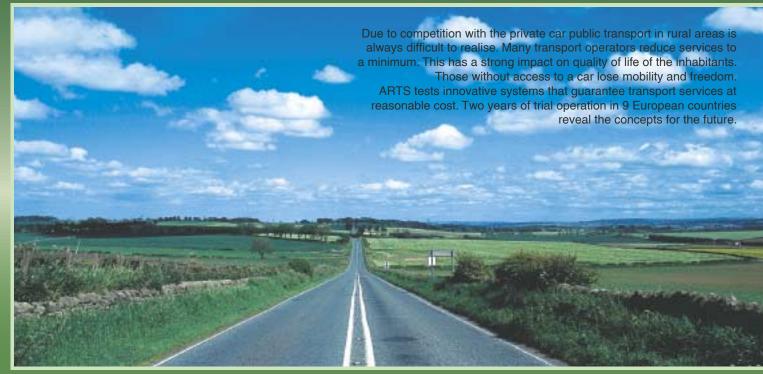




RURAL WWW.RURAL-TRANSPORT. TRANSPORT

PUBLIC TRANSPORT IN LOW DENSITY RURAL AREAS



The Swedish Demosite is located on the Island of Gotland

TEST SITES

The functioning of innovative rural transport systems is demonstrated at 9 European test-sites. Priority is given to the transferability of these demonstration-results to other rural areas within Europe.

BARRIERS

Since the number of public transport users in rural areas is decreasing, transport operators reduce their services, causing further decrease of the already low demand for public transport ... - a vicious circle.

WEBSITE

Further information about effective provision of innovative rural transport services, barriers for rural transport, and promising ways to overcome these barriers can be found at

www.rural-transport.net

We test and demonstrate Rural Transport Systems

The main goal of the project ARTS is to test and demonstrate the effective provision of innovative transport services in the rural environment. The ARTS demonstrations are small scale realisations of rural transport systems that seem successful where regular transport service can not be financed. The demonstrations include a variety of transport types: on-demand rural transport systems, multi-purpose rural transport systems, taxi-based rural transport systems, transport systems operated by volunteers, passenger good combinations and systems supported by applied transport telematics.

The systems are tested in typical rural areas in several European countries to ease transferability to other rural regions in Europe. The specific framework conditions, the identified barriers that may inhibit the development of such services and the possible ways to overcome these barriers are documented carefully - ARTS will produce a practical tool for followers that will provide flexible guidance on the planning and implementation of rural transport services based on the latest experiences.

The ARTS Demonstrations



Austria

'Dorfmobil', a demand responsive door-to-door transport service, is operated by volunteers of a private non-profit association within the area of three neighbouring small villages in Upper Austria.



In Leppävirta, a demand-responsive transport-service is developed including the introduction of a minibus and taxis supported by the existing travel dispatch centre in the neighbouring city.

Crete, the Municipality of Gergeri combines the transport of students with regular passengers to the main village to reach basic supply (school, grocery, medical service).

Hungary

Since the transportation of pupils is still an unsolved and serious problem in Hungary's rural areas, regular school buses have been implemented between Kecskemét and two nearby settlements Matko and Szarkás.

Ireland

In Conamara new flexible local public transport services are being implemented. A travel despatch centre manages their co-ordination and provides information on connections with existing bus services.

In Sangro Valley local authorities (offering school-, disabled-, and healthservices) and the local railways will co-ordinate their services in a larger and more rational scheme by use of telematics.

Galicia, Spain

In the province of Ourense current transport resources (conventional transport, school transport are integrated in order to improve the general mobility within the area.

Sweden

In Gotland the integration of already existing services (on-demand-, elderly/ disabled-, and health-transport) has been enabled by developing suitable administrative, financial and legal/regulative structures.

Wales, UK

Innovative transport telematics bring Real-Time Information to residents and visitors of rural areas of Wales, via displays at bus stops and on buses, mobile telephones (SMS) and land-line enquiry services.





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Actions on the Integration of Rural Transport Services

Improving transport systems in rural areas has proved to be essential since it provides rural communities with the capacity to face their mobility problems, assisting them in their efforts to reach a sustainable mobility pattern. It helps people living in rural areas to improve their quality of life, providing accessibility to user groups which are not able to reach standard patterns of mobility (young people and students, people working at home, retired people without access to a private car, ...). The development of minor transport systems in rural areas can be seen as a way of improving mobility of captive groups and increasing accessibility to activities related. It can be linked to the rural decline-development process and can be seen as an active policy for local development and social redistribution.

Aware of the effects of the lack of public transport in low density rural areas, mainly due to the unattractive market for conventional transport operators, ARTS seeks to implement actions of innovative rural public transport for common users by both making use of services originally designed for other activities (make them more flexible) and implementing new services in a context of efficiency and cost saving. ARTS demonstrations cover a wide range of non conventional transport using both current local services and infrastructures (school & health buses, on-demand taxis, etc,...) or new systems based on volunteers, on-demand services rail & bus links, etc,... All these experiences will be transferred into a wider context inside the EU and accession countries. Impacts of the measures should be evaluated not only as a better public transport efficiency but in the demographic, economic and social context.

Read more about the ARTS Demonstrations in the next Newsletter

Economic and Socio-economic Barriers

Financing / Funding / Subsidies

In most countries special funds for public transport services in rural areas are not available. Thus it is often very difficult to finance innovative transport services, because common funds only cover the scope of regular (bus) services. On-demand and voluntary services in particular are affected by lack of funds as the introduction of these services

is relatively expensive (e.g. for a travel dispatch centre) and strongly dependent on public funding. Time limit on public funding is another common problem, because funds are often limited to a short period of time, thus only covering the start-up phase of a new service. Demonstration projects are in danger of expiring once the funds expire. Additionally, short contract periods or time restrictions on licences hinder long-term operation.

Most of the available funding is scattered over different governmental levels and different administrative responsibilities. Hence, for municipalities and regional authorities it is very important to be fully aware of possible funding/subsidies.

Cost-Coverage

Very low cost-coverage of public passenger transport in rural areas has been found in every country investigated. Since the number of inhabitants in rural areas is declining and car ownership is steadily increasing, the demand for public transport continues to decline and consequently the level of cost-coverage of rural public transport will be even lower in the future. However the low cost-coverage of regular services in rural areas is not only seen as a barrier but is stated as an incentive to develop innovative transport systems for rural areas. Improved co-ordination and more effective use of existing recourses might improve the situation.

Taxation and Insurances

In some countries the development of new and flexible transport services could face problems since current taxation rules and the scope of insurance do not fit the needs of these services. Voluntary schemes, in particular, are obviously disadvantaged in both cases, because non-profit organisations and private volunteers have to make more effort (with taxation) and also incur higher risks (for insurance). Under these preconditions it is difficult to find volunteers to offer their services.

Legal and Regulatory Barriers

Legal and Regulatory Framework

In most countries, national legal and regulatory frameworks only take into account conventional public passenger transport whereas innovative transport services are rather neglected. In some cases the legal framework restricts or prohibits the integration of regular and special services or the combination of passenger and freight transport (multi-purpose transport services). This situation forces operators offering innovative services in an unclear legal environment with 'special authorisation'.

A further problem is, that the passenger transport market in many countries is regulated very rigid and market access for new private operators is confined by strict rules of competition, traditional structures, and a divided market which does not favour new competitors. In many European countries the transport market is dominated by the state or by state-controlled organisations with quasi-monopolistic positions. Besides, the traditional public transport market is not attractive enough to draw large amounts of private capital and bring in many private operators.

Licences and Concessions

In nearly all countries investigated licences and operating concessions are used as means for regulating access to the public transport market by new transport operators or new transport services. Operating concessions are often granted by national or regional authorities and only in case of special services (e.g. for disabled people or tourism) by municipalities. In some very rigid cases they are mainly granted to the operator controlled by the state. In Italy, the current situation is in flux because the devolution programme, includes a shift away from the concession system towards a public tendering process.

The introduction of new transport services is discouraged by the fact, that in most cases licences and operating concessions are not obtainable. Additionally, new services usually do not fit well within a conventional inflexible system of operating concessions with fixed routes and timetables or limited capacity. This is a fundamental barrier for on-demand services, which depend on the opportunity to react flexibly to irregular demand with e.g. door-to-door routes, whereas the conventional concession system provides a too inflexible and stiff framework for the implementation of innovative transport services.







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Barriers for Rural Transport Systems

The main characteristic of rural areas, namely low population density, is at the same time a major problem for public transport. Low population is one reason for poor demand and thus helps to prevent cost-effective operation of existing public transport services. Low population density is worsened by high migration rates in many regions. A further problem for public transport in rural areas is the on average low income of people living in rural areas. People who need transport most can least afford it.

The car has not only become a necessity in rural areas due to the lack of public transport services, but has also become a component of lifestyle and prestige. Moreover, public transport in many countries acquires a poor image. People often feel that public transport is only for elderly or disabled people or for those without a car. The image is sometimes made even worse by old, uncomfortable, outdated vehicles and low quality.

All these problems contribute to the decline of an already low demand, ending in a vicious circle: migration and the poor image of the existing public transport system result in decreased numbers of possible users, leading to less revenue resulting in fewer services etc. A breakthrough might be leveraged by new and flexible transport services that are more attractive and have considerable advantages compared to regular services. In the first phase of the ARTS project barriers and obstacles were investigated, that might hinder or prevent the introduction of transport services in rural areas with a focus on the introduction of innovative transport services like on-demand services, multipurpose services or voluntary services. They are often more difficult to implement than conventional services because of their complexity and need for flexibility.

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Organisational Barriers

Public Institutions

Lack of co-operation between the responsible authorities has been observed in almost every country. This is felt to be a fundamental barrier in most EU countries, but the majority of the Eastern Accession Countries, although they observe similar circumstances, do not describe them as a source of problems. Lack of co-operation has been identified at and between all levels, between different public authorities, between public authorities and commercial as well as non-commercial entities, often with the result that current regular transport services have not been developed optimally. The development and implementation of transport services capable of serving rural areas in an improved manner by combining different transport systems and travel purposes is even more difficult to manage because of complex and often ambiguous allocation of responsibilities.

Transport Operators

The fragmented transport market and the competitive situation between transport operators are reasons which make co-operation between operators difficult or even unwanted. Thus, integrated co-operation in terms of operational and fare issues becomes very difficult or even impossible to implement.

An existing co-operative operational network between operators, like the 'Verkehrsverbund' in Austria, could help to overcome problems related to the co-ordination of different aspects of the transport system. Nevertheless, new innovative services may have problems in joining such networks.

Another problem that is felt at all administrative

levels is the lack of (experienced) staff in rural areas. On the one hand there is a shortage of bus- and taxi-drivers, which is an especially significant problem for the implementation of voluntary services. On the other hand there is also a lack of transport planners and project managers experienced in the implementation and

operation of innovative services.

Information and Communication

The current supply of information about public transport services in rural areas is – apart from few exceptions – not very satisfactory. It mainly covers timetables whereas possible interchanges with other transport modes are usually absent. However, including information about new on-demand and integrated multipurpose services in an integrated information system would be difficult because of the inherent dynamic and flexible structure of these services. Another important problem in some remote areas is the lack of availability of mobile phone services which are very useful for the provision of real-time information, for reservations, etc.

Technical Support

In most countries technical support was not considered to be very important for running a transport service, but it nevertheless would facilitate the planning and operational processes, particularly for demand-responsive services. Barriers are on the one hand lack of financial resources for new technology and on the other hand lack of existing technical tools for the specific needs of innovative transport services.

Physical Barriers

Natural Barriers

Natural barriers do not prevent the implementation of regular or innovative transport services, but there are obvious disadvantages in comparison with urban public transport. Because of the topography and disperse settlement structures public transport in rural areas often has to cope with longer distances and longer travel times. Additionally, extreme weather conditions might affect the demand negatively. However these are not really barriers but the characteristics of rural passenger transport.

Infrastructure

Rural areas are generally disadvantaged concerning their rail and road infrastructure compared to urban areas. This is an

overall problem, but it is an obstacle, that can principally be overcome through investment. However, on the one hand security standards of the traffic/ transport infrastructure have to be met, but on the other hand it is questionable, whether roads in remote

rural areas need to be built to top quality standards.

Settlement structure

A dispersed settlement structure is a fundamental barrier, and it is almost impossible to offer a cost-effective supply with conventional transport services. Innovative and flexible transport solutions have the advantage that, unlike conventional regular services, they are not bound to fixed time schedules and fixed routes. Additionally, they are able to bundle different travel purposes and therefore increase vehicle capacity utilisation.

Cultural & Political Barriers

Cultural Barriers

The very important cultural barrier caused by high rates of car ownership and the position of the car as a status symbol, strongly contribute to the decreasing demand for public transport in general. It is now very common for rural households to be 'forced' to have one or even two cars. In many countries, however, because of an ageing population in rural areas, the number of potential public transport users is still increasing -mainly among the elderly who do not have access to a car and therefore are particularly dependent on public transport.

Another major – often underestimated – problem for rural public transport is its poor and inflexible image. Not only existing services but also new transport services have to tackle this poor image. An additional problem for innovative services is a very low willingness to start private and voluntary initiatives, that is essential for developing especially on-demand and voluntary services, is noticeable. On the other hand possible users often see them as 'amateurish', unsafe or charitable.

Moreover, it has to be kept in mind, that these innovative transport

services are not easy to understand because their flexibility and complexity. That could be a problem for elderly people.

Political Barriers

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Obviously, rural public transport as political issue does not play an important role at the national level. This topic is not on the top of the political agenda on all political levels. As a result of the lack of awareness of this problem there is no political mood for innovative transport solutions, apart from the lack of knowledge about how to develop them. At least at regional and local level this issue ought to feature on the political agenda. In this respect, best practice examples could help disseminate information about innovative services more widely. It is probable that politicians, who are up to date, are more willingly to create more space for further initiatives.

> Deliverable 2 - WP3 Barriers Report at www.rural-transport.net

How to overcome barriers

As innovative transport services often do not seem to fit into existing structures it needs unconventional solutions for new problems and the encouragement of decision makers in politics, administration and in the private sector.

In the further development of the project, the nine demonstration projects will be closely monitored as they progress so as to focus on barriers as they occur and on possible solutions that can be found to overcome those barriers. In this sense the results are only a starting point for further experiences.



Next ARTS Newsletter June 2003: The Demosites

Detailed system description, maps, schedules, organisation, adminstration, purposes, planning.







Flexible Bus Routes

Volunteer Driver - Village Taxi System Combined School & Passenger Transport Preview ARTS Newsletter No. 2

The ARTS - Consortium

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ILS: Institut für Landes- und Stadtentwicklungsforschung des Landes Nordrhein-Westfalen (D)

JP-T: JP- Transplan Ltd (FIN)

BOKU-ITS: University for Bodenkultur Vienna - Institute for Transport Studies (A)

SOT: SYSTRA-SOTECNI S.p.A.Società Tecnica Internazionale (I)

TLTC: Bealtaine Limited Taylor Lightfoot Transport Consultants (IRL)

FORTH: Foundation for Research and Technology Hellas (EL)

TRIV: Trivector Traffic AB (S)

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BUTE: Budapest University of Technology and Economics (H)

SMC: Soluziona Managemement Consulting, S.A. (E)

KUN: Kungság Volán L.S (H)

NAW: National Assembly for Wales (UK)

ISLH: Provincial State Office of Eastern Finland (FIN)

SANG: Sangritana (I)

UG: Údarás na Gaeltachta (IRL)

HER: Prefecture of Heraklio (EL)

GOT: Gotlands kommun (S)

FGM-AMOR: Forschungsgesellschaft Mobilitaet FGM, Austrian Mobility Research, (A)

MAIN SUB-CONTRACTORS

POLIS: European Cities and Regions Networking for New Transport Solutions,(B)

IVV: Ingenieurgruppe IVV-Aachen (D)

ECORYS Transport (NL)

LV: Langzaam Verkeer VZW (B)

CTA: The Community Transport Association (UK)

www.rural-transport.net