



# EU-WIDE STATUS QUO ANALYSIS

A good practice analysis

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# 1. Introduction

# 1.1. About Peripheral Access

In cities and large urban areas innovative mobility solutions such as ridesharing, carsharing, electric mobility, real-time travel information, electronic ticketing with best-price billing, intermodal mobility chains enjoy increasing public attention, outside the cities these concepts are much less used. This is often caused by lower user rates in sparsely populated regions, missing institutional cooperation, or fewer financial resources. Subsequently, in particular in peripheral areas sustainable mobility patterns (e.g. mobility without individual or privately owned cars) are much more difficult to develop.

Therefore Peripheral Access (PA) will focus with its activities on relevant institutions in peripheral regions, i.e. rural and cross-border areas as these areas commonly receive only little attention in mainstream policies and funding programs. It will thereby enhance the planning capacity of the public sector and related entities dealing with regional passenger transport. In order to achieve this aim the work plan schedules activities in three areas of action:

- WP 1: the integration of transport modes through multimodal mobility points (investment1)
- WP 2: new ways to employ ITS and ICT in transport/smart mobility
- WP 3: enhanced institutional cooperation by means of transport authorities and cross-border marketing approaches.

PA will give stakeholders a valuable basis for further mobility related interventions through

- an integrated and transnational approach
- with respect to EU-wide and regional analysis, action plan development, implementation of 3 pilot actions, 2 investments and transparent evaluation.

#### Subsequently PA will

- improve accessibility of disadvantaged and remote areas through better transport connections,
- increase quality of live for people living in these areas by shorter and more continent travel options,
- make transport more sustainable through its focus on public transport,
- make transport systems more resilient through the its focus on cost-benefit ratios and the consideration of tight public budgets
- directly help to reduce the core-periphery divide in Central Europe.





The Peripheral Access project partners are:

- German Association for Housing, Urban Development and Spatial Affairs (lead partner)
- Vogtland region (border region Germany / Czech Republic): Authority for local public transport Vogtland
- Region Friuli-Venezia Giulia (border region Italy-Slovenia): Venice International University & Trieste Trasporti S.P.A.
- Region South Moravia (border region Czech republic / Slovakia / Austria): KORDIS JMK
- Region around the city of Balassagyarmat (border region Slovakia / Hungary): KTI Institute for Transport Sciences Non Profit Ltd
- Region around the City of Graz: Regional Management Metropolitan Area of Styria Ltd (Austria)
- Region Lubin: Powiat Lubiński (Poland)
- Ljubljana Region: Regional Development Agency of the Ljubljana Urban Region (Slovenia)

The average population density in the PA partner regions is well below 150 (135) inhabitants/km<sup>2</sup> and the average travel time by public transport (PT) towards the nearest city with at least 50.000 inhabitants is above 60 minutes. 4 partners focus on border regions, 3 partners focus on the hinterland of urban agglomerations.

# 1.2. About the EU-wide status quo analyis

The objective of the EU-wide status quo analysis is to provide a trend-setting basis related to the regional analysis and the local pilot actions in order to produce an added value. Regarding to the three work packages "Intermodality", "Use of intelligent communication technologies (ICT) & intelligent transport systems (ITS)" and "Smart governance and joint marketing" and the priorities defined therein, relevant EU-policies are researched and good practice examples collected. The priorities were selected along the pilot actions and regional key aspects together with all project partners. Along predefined keywords for each pilot action and key aspect (see Chapter 2) EU-wide (and if relevant international) good-practices will be analysed in order to conclude this document with some benchmarks for further project activities at regional and local level.

The EU-wide status quo analysis addresses the following deliverables:

- Deliverables D.T1.1.1, D.T2.1.1, D.T3.1.1: Joint implementation roadmap planning of WP leaders and lead partner incl. common analysis, action plan and evaluation approach for 7 partner regions
- Deliverables D.T1.1.2, D.T2.1.2, D.T3.1.2: EU-wide status-quo analysis of intermodal mobility options in peripheral areas (rural areas, border regions and urban





hinterlands/agglomerations), EU-wide status-quo analysis of smart mobility options in peripheral areas, EU-wide status-quo analysis of smart governance and marketing approaches in peripheral regions

 Deliverables D.T1.1.3, D.T2.1.3, D.T3.1.3: Report on innovative intermodal mobility solutions in peripheral areas across Europe, Joint report on innovative smart mobility solutions and its economic benefits in peripheral areas, Joint report on smart governance and marketing approaches in peripheral areas

The structure of the document is as follows: An overview of the pilot actions and key regional aspects gives chapter 2. In the third chapter the policy framework is summarised. Thereafter the examples of good practice are described in the fourth chapter, specifically for the topics intermodality (see chapter 4.1), ICT & ITS (see chapter 4.2) and in the field of smart governance and joint marketing (see chapter 4.3). In the fifth chapter a summary of the whole EU-wide status quo analysis is given.





# 2. Overview of the Pilot Actions and Key Regional Aspects

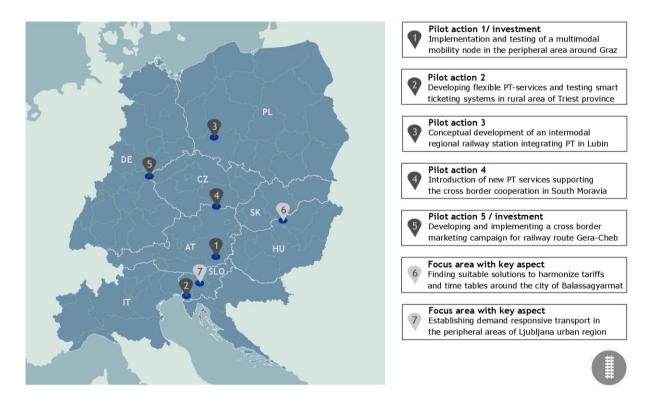


Figure 1: Overview of pilot actions and key regional aspects.

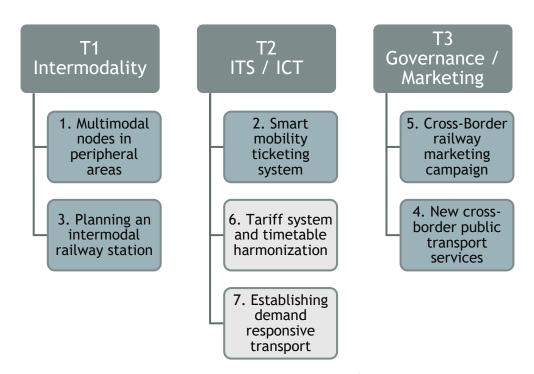


Figure 2: Assignment of Pilot Actions / Key Regional Aspects per Work Package<sup>1</sup>.

<sup>1</sup> Differs from the official allocation for organizational reasons but has no changing effect on the deliverables per work package.





# 3. Policy Framework

The following chapter takes a look at current EU policies in the light of the priorities in Peripheral Access. The short summaries are intended to provide a decisive strategic framework for the herein after demonstrated practical examples.

# 3.1. EU mobility-policies at a glance

# Mobility in regional areas

## **Summary**

In regional areas a deep interaction between different mobility and traffic control centres have to be achieved. The region can be as wide as a whole country, so standardised solutions and interfaces become essentials for compatibility and interoperability of the mobility services. A higher level of coordination has to be introduced, while at the same time, competitive alternatives have to be balanced with the overall Network and Traffic Management objectives, in order to maintain the fairness of the market opportunities.

# Relevance to the project

This strategy underlines the governance focus in Work Package 3, which is the improvement of planning and coordination of regional passenger transport through innovative cross-sector cooperation and interaction.

Reference 1: European Commission, Directorate-General for Research and Innovation, Directorate H —Transport, Unit H.1—Transport strategy. Network and Traffic Management Systems - Expert group report. Brussels 2017. https://ec.europa.eu/research/transport/pdf/stria//network\_and\_management\_systems.pdf#view=fit&pagemode=none

# Mobility as a service

#### Summary

European public transport systems are actively adopting new, ICT-enabled user navigation, routing, booking and ticketing applications. These provide users with real-time timetabling and route optimisation, seamless travel and digital ticketing. Smart public transport services and systems can provide the backbone for future integrated smart mobility. Allowing multiple infrastructures to integrate and communicate with one-another, can pave the way for 'one stop shop' platforms that consolidate multiple forms of transport and provide mobility as a service.

Technological, socio-demographic and behavioural change are facilitating a move towards multimodal transport - combining walking, cars, buses, bikes, trains and other forms of shared transportation. Driven by the transition from "owning" to "using", Mobility as a service (MaaS) enables multimodal mobility by providing user-centric information and travel services such as navigation, location, booking, payment and access that allow the use to consume mobility as a seamless service across all existing modes of transport. Public and private business models, payment methods, technologies, and user choices will continue to coevolve a longside data sharing by users and public infrastructures, and increasing





cooperation between the public and private sectors. Mobility as a service should also provide more cost-efficient mobility options to consumers and households by reducing vehicle acquisition and maintenance expenditures.

Integrated Mobility-on-Demand services can contribute to modal shift to public transport and also address the spatial inefficiencies of private individual motorised transport. User-centric urban mobility systems will provide ubiquitous check-in/check-out user access to enable both inter-and multimodal mobility on demand and enhance overall transport efficiency. In future integrated and sustainable mobility-on-demand systems, electric mobility will become a component of both power and public transport infrastructure and systems. The smart integration of tariff structures, data and user interfaces as well as the disposition of rolling stock across these sectors is a central challenge, which requires new business models and scheduling, booking, navigating, ticketing and charging solutions.

# Relevance to project and pilot action(s)

This strategy deepens the actual trend of multimodal mobility services and smart ICT/ITS solutions, both main topics in PA. Relevant pilot activities within these fields are for example the implementation of a multimodal interchange where different means of transport and customer services meet at one hot spot. Furthermore tariff harmonization, smart ticketing and the development of on-demand services in rural areas are important topics/activities to work on in PA.

Reference 2: European Commission, Directorate-General for Research and Innovation, Directorate H —Transport, Unit H.1—Transport strategy. Smart Mobility and services - Expert group report. Brussels 2017.

## Clean urban transport and commuting

#### Summary

A higher share of travel by collective transport, combined with minimum service obligations, will allow increasing the density and frequency of service, thereby generating a virtuous circle for public transport modes. Demand management and land-use planning can lower traffic volumes. Facilitating walking and cycling should become an integral part of urban mobility and infrastructure design.

#### Relevance to project and pilot action(s)

As all of the pilot actions aim to increase the use of public transport the project contributes to a cleaner urban future.

Reference 3: European Commission (2011). White paper (Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system). Location: Brussels.

# Reflecting of real transport demand

#### Summary

The Committee stresses that the measures proposed to develop new behavioural patterns in terms of both goods and passenger transport must reflect real transport demand and, in the case of public transport, social realities. For example, while intermodal passenger ticketing





might be a useful initiative, the Committee believes that it would be more efficient to proceed with the state-of-the-art ticketless mobile phone technology, enabling the use of different transport carriers thanks to mobile phones that are equipped with Near Field Communication (NFC) cards or chips. A swift standardisation of NFC technology in Europe should be considered, with the aim of permitting smooth travelling across transport carriers and country borders. Attention will have to be paid to reducing the cost of transport through the new measures adopted.

## Relevance to project and pilot action(s)

In PA2 it is important to investigate the possibilities of the state-of-the-art technologies and to develop a system that can widely harmonised (not just at that locality).

Reference 4: European Economic and Social Committee - EESC (2011). OPINION of the EESC on the White Paper. Location: Brussels.

## Modern infrastructure and smart funding

#### Summary

In the European core network one main strategy is to ensure efficient multi-modal links between the EU capitals and other main cities, ports, airports and key land border crossing, as well as other main economic centres. It should focus on the completion of missing links - mainly cross-border sections and bottlenecks/bypasses - on the upgrading of existing infrastructure. Better rail/airport connections must be devised for long distance travel. European actions should focus on the components of the TEN-T network with the highest European added value (cross border missing links, intermodal connecting points and key bottlenecks).

# Relevance to project and pilot action(s)

PA4 and PA5 aim to strengthen cross-border-cooperation and to attract existing infrastructure with new governance and communication measures, which are in line with the above mentioned EU-strategy.

Reference 5: European Commission (2011): WHITE PAPER. Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system. Brussels.

#### Boosting growth and cohesion in EU border regions

# **Summary**

Transport is a key enabler of exchanges between regions across national borders. Especially public transport services not only help integration processes but also enhance the sustainability of cross-border connectivity. Lacking, insufficient or low-quality public transport services are still a reality for many citizens in border regions. This concerns three levels: 1) infrastructure connections, 2) service provision and 3) the quality of services. At EU level greater harmonisation and coordination of technical and legal standards, together with achieving interoperability in the transport sector are high priorities. The organisation and implementation of cross-border public transport services is a competence that lies at national, regional and local level. Member States, regions and





municipalities are therefore urged to step up their efforts to provide individuals with better quality, more integrated public transport services.

## Relevance to project and pilot action(s)

PA4 and PA5 aim to provide new cross-border public transport services in order to better address passengers and tourists which contribute to above mentioned EU-priority "facilitating cross-border accessibility".

Reference 6: European Commission (2017): Communication from the commission to the council and the European parliament. Boosting growth and cohesion in EU border regions. Brussels.

# Transport at a crossroads - New challenges have arrived...

## **Summary**

The European rail system is facing critical challenges:

- railways must play a significant role in meeting future transport demands,
- the rail sector must grow while adapting to increasingly reduced public finances

It is essential to develop an appropriate innovation strategy which goes beyond just technological improvements and can deliver both reliability and a quality product.

Passengers and freight are the two major markets of rail transport. Innovation effort should focus on delivering radical improvements in the European rail system by developing new technology which can address issues which hamper rail services, passengers, freight and operations. There must be further research to improve the user experience. It is necessary to develop products and services that entice passengers to choose rail over other less sustainable modes of transport.

# Relevance to project and pilot actions 2, 3, 4, 5, 6, 7

This policy clearly underlines the need to develop new products and services to bring the population as well as tourists to the rail instead of individual transport. Several pilot activities in PA are aimed at launching innovative campaigns or creating new cross-border tourism services. Another PA approach to strengthen rail bound travel is to develop demand-responsive mobility solutions as a feeder or to design modern, attractive train stations.

Reference 7: European Commission, Transport research and Innovation: Policy - Challenges and solutions. http://ec.europa.eu/research/transport/index.cfm?pg=transport&lib=rail

# Intelligent transport systems (ITS) for urban mobility

# **Summary**

The Commission envisages offering assistance on ITS applications for urban mobility to complement the ITS Action Plan. It will look at, for example, electronic ticketing and payment, traffic management, travel information, access regulation and demand management, and address the opportunities opened up by the European Galileo GNSS system. As a start, the Commission will launch a study on improving the interoperability of ticketing and payment systems across services and transport modes, including the use of smart cards in urban transport with a focus on major European destinations (airports, rail stations).





# Relevance to project and pilot action(s)

The experiences of ITS technologies in Europe has a wide range and there are lots of opportunities to cooperate with existing systems to share and use e.g. travel information. This can be important mainly in PA2.

Reference 8: Commission of the European Communities (2009). Action Plan on Urban Mobility. Location: Brussels.

A more detailed strategic frame of Work Package 2 (ICT/ITS) is outlined in the following chapter:

# 3.2. The role of ICT/ITS: the FRAME model

Considering the need of developing Intelligent Transport Systems (ITS) to provide efficient transport services in peripheral areas, in this section of the present deliverable two remarkable staples, which are preliminary for the design of the system, are reported: an overview of the main elements of the ITS Architecture and an analysis of EU case studies and best practices of smart mobility solutions.

In the last decades, the application of telematics to the transport field has become more and more important for the purpose to enhance the performances of the mobility sector: it has led to the creation of technological systems, called ITS (Intelligent Transportation Systems), that permit to improve different aspects of both the public and private transport service like traffic management, safety and electronic payments. The ITS can be classified in the following principal functional groups:

- In-Vehicle Navigation Systems (IVNS), that are distinguished in diverse categories according to the user class: Advanced Traffic Management Systems (ATMS), Advanced Traveller Information Systems (ATIS) and Advanced Vehicle Control Systems (AVCS);
- Advanced Public Transport Systems (APTS);
- Emergency Management Systems (EMS);
- Commercial Vehicle Operations (CVO).

Within a strategic perspective, benefits given by the deployment of ITS contributes to the increase of sustainable mobility, but their attainment is possible only thanks to the overall integration of information and systems. In fact, as the growing need of interoperability and multimodal services, respectively, for producers and users, integration has always represented a key factor for an efficient use of ITS, allowing to overcome even national boundaries.

In order to ensure the integration among ITS, these systems must be developed according to an architecture, i.e. a framework that conceptually describes the design of an Intelligent Transport System, defining its structure and the interactions of its components. It usually encompasses not only technical aspects, but also organisational, legal and business ones so that it can support





the planning of the overall system, permitting to reach the established goals. Since the extent of this reference structure can vary a lot, it can be equally created at national, regional or city level; moreover, given that it was intentionally developed as policy-neutral, it does not provide any recommendation for solving local or national concerns but, however, it can be used in relation to specific sectors or services. The architecture, indeed, does not choose between different transport-related alternatives, because it can be tailored to any kind of project option by modifying design details; the selection of the most appropriate intervention for a certain local issue is still left to decision makers and politicians.

The adoption of a reference architecture for the design of ITS turns out to be necessary due to the complexity of the transport field: in fact, it deals with an environment in which several actors are present (users, producers, managers, etc...) and each of them is characterized by different needs and objectives. Therefore, implementing an ITS on the basis of a well-defined framework permits to design a system which is capable of fully satisfying the requirements derived from the multiple stakeholders and, at the same time, that is easy to manage and to maintain. In addition, the architecture enables the design of an integrated system, through interfaces and standards, in which the sharing of common information and resources can significantly improve the provided service with less financial expenses, rather than carrying out all the transport functions separately by means of dedicated subsystem facilities. The initiative of sharing definitely has an impact even on intermodality, fostering users and freight service providers to act more sustainable when planning their travels and movements. This proactive behaviour and, more in general, the deployment of ITS are motivated also by the consistency and the reliability of the information obtained by means of these systems.

Besides, another advantage of the architecture consists in the fact that it is technology independent, i.e. its life-time is longer than the one of any particular technology because it allows new technologies to be incorporated in existing systems.

Finally, it is important to highlight that the architecture is not a design, but it is a structure that states what is needed in the system and not how to implement it, providing as a result the minimum necessary requirements and not the maximum optimal solution.

A prerogative for the development of ITS is represented by the definition of standards that must be applied during the various life-cycle stages of the system, from the analysis and identification of requirements to its development, use and maintenance, until its retirement. The relevance of adopting standards is motivated by the following reasons:

Standards lead to compatibility and interoperability, i.e. two features that entail, respectively, the efficient collaboration among devices or systems, their seamless substitution and their connection without the introduction of special interfaces, and the capability to correctly operate in diverse environments;





- Standards facilitate the creation of marketplace confidence, which means that they ensure buyers that their current purchases will not be susceptible of obsolescence too fast, managing to face the occurrence of innovation and, consequently, extending the product life;
- Standards incite producer investment and involvement, in the sense that, similarly to what happens for buyers, the existence of standards encourage producers to enter the market thanks to the assurance that their product will be in compliance with an existing and growing market;

Standards stimulate the growth of industry, which is actually obtained by the combination of both the enhancement of the marketplace confidence and the increase in the producer investments.

As a matter of fact, the risks of under-standardizing, or even of the absence of standards, can reflect in the formulation of solutions with limited geographical extent and that are affected by unsuccessful implications.

The first National ITS Architecture was created in 1996 by the Joint Program Office of the U.S. Department of Transportation and it was developed by means of a relevant participatory process involving practitioners from the public and private transport sector. It consisted in a consensusbuilding procedure, in which the technical excellence did not represent the priority feature for the definition of the architecture, but rather the stakeholders aimed at delineating a structure that most of them can and intend to promote and commit to implement. Thanks to the contribution of all members of the ITS community, this demanding work resulted in a comprehensive and shared program, that has been constantly updated along with the technological improvement and paved the way for the realization of the architectures of other countries. In fact, in 2000, the collaboration of the European Commission with national authorities and local administrations led to the release of an European ITS Architecture, which constituted a significant outcome of the KAREN (Keystone Architecture Required for European Networks) project. This framework was considered a reference for the development of ITS products and services in order to foster the interoperability not only on the Trans-European Networks, but also across the whole European Union territory. In 2002, within the Fifth Framework Programme, the Commission financed the FRAME (Frame Architecture Made for Europe) project, that permitted to update the previous version of the European ITS Architecture and correct its inconsistencies. This project is actually composed by the following two planning modules:

- FRAME NET, which is a Thematic Network aiming at promoting the exchanges of experiences and the coordination among all the activities performed in Europe in relation to the ITS Architecture, through workshops, meeting and interactive forums on web sites;
- 2. FRAME S, which is a project intended to update the European ITS Architecture, organize training courses and assist users in developing their own architecture.



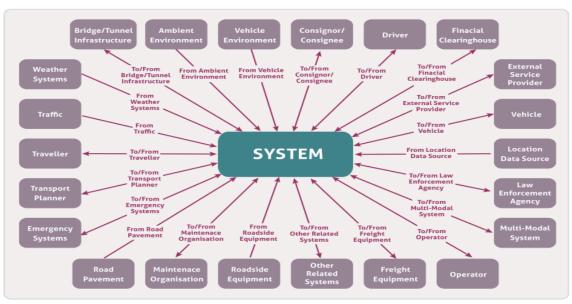


The European ITS Architecture has been further enhanced during this recent years and it has represented a fundamental basis for the development of the national architecture of some specific states, such as France, Italy and Norway. In particular, the Italian ITS Architecture, called ARTIST (Architettura Telematica Italiana per il Sistema dei Trasporti), was created according to the objectives contained in the national transport and logistics plan (Piano Generale del Trasporti e della Logistica - PGTL, 2001), which supports the adoption of a multi/intermodal approach for the realization of telematic systems to be applied in the Italian transport field.

The FRAME Architecture provides EU users a common procedure for planning the implementation of integrated and interoperable ITS systems that deal with the following areas:

- Electronic Fee Collection;
- Emergency Notification and Response;
- Traffic Management (urban, inter-urban, parking, tunnels and bridges, maintenance, incidents, etc.);
- Public Transport Management (schedules, fares, DRT, fleets, drivers);
- In-Vehicle Systems;
- Traveller Assistance;
- Support for Law Enforcement;
- Freight and Fleet Management;
- Provide Support for Cooperative Systems;
- Multi-modal Interfaces.

The model architecture proposed by FRAME is able to support various smart tools on the basis of modularity and customization criteria.



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The documentation concerning the European ITS Architecture includes three principal sections:

- User Needs, that contains a detailed list of user needs that have to be taken into account when designing an ITS system;
- Framework Architecture, which means the telematic architecture supporting the ITS system;
- Supporting Documents, consisting of a series of documents that can be useful for the different levels of the architecture.

In particular, as far as the User Needs are concerned, they are classified into the following ten main groups, that have been defined through an analysis of the real user needs by consulting expert representatives of all categories of ITS users:

- 1. General User Needs;
- 2. Infrastructure Planning and Maintenance;
- 3. Law Enforcement;
- 4. Financial Transactions;
- 5. Emergency Services;
- 6. Travel Information and Guidance;
- 7. Traffic, Incidents and Demand Management;
- 8. Intelligent Vehicle Systems;
- 9. Freight and Fleet Management;
- 10. Public Transport Management.

The second section of the European ITS Architecture is composed by the following four documents:

- European ITS Architecture Overview, which offers some suggestions and recommendations for correctly and efficiently using the elements of the Architecture;
- European ITS Functional Architecture, which contains diagrams schematizing the logical/functional relationships among Functions (i.e. services provided by the ITS technologies to satisfy User Needs), Databases and Terminators (i.e. entities external to the ITS system exchanges information with it);
- European ITS Physical Architecture, which assigns real physical locations to the Functions determined in the previous Functional Architecture (e.g. roadside, on board, etc...);
- European ITS Communication Architecture, which identifies the communication interfaces necessary for the implementation of the ITS system, also analysing the existing technological solutions.
- Finally, Supporting Documents consist of various reports:
- European ITS Cost Benefit Study Analysis, which analyses the costs and benefits of the adoption of a Reference Architecture, specifying those perceived by the different actors





involved in the ITS system, and provides examples of expenses and best practices concerning the development of the national architecture in some EU countries;

- Suggestions for potential scenarios in which ITS are developed according to the Reference Architecture;
- Analysis of existing standards and of their possible evolution.

User needs play a fundamental role in the architecture development as they represent the elements on which it is based, i.e. the requirements that the ITS has to meet; in fact, an accurate analysis of user needs permits to better relate them with the system that has to be design, rather than considering unspecified objectives. In this preliminary phase, using a reference structure as a support for the conceptual definition of the system can be very useful not just for tracing the procedure, but even for the possibility to take suggestions about further relevant requirements.

Moreover, it is necessary to take into account also the aspirations of other the stakeholders involved in the ITS development, like local authorities and operators (who are those that desire ITS for offering an improved transport service), authorities (who rule ITS) and designers (who are in charge of actually making ITS).

Then, sustained by the principle of the logical architecture, the development process of an ITS system continues with the determination of the processes and data flows that allow to satisfy user service conditions; afterword, these two components are grouped in order to form a certain transport management function. This logical framework should be independent from any institutional or technological concern, since it does not describe the subjects performing the functions within the system, nor how functions are put in practice.

In conclusion, to actually realize the ITS with the characteristics resulting from the previous stages, the components have to be attributed to a physical circumstance and they have to be linked together by means of interfaces, which permit data flows between them. The communication layer created through the architecture enables to work in collaboration also with the so called "terminators", i.e. external components, and individuals and entities not belonging to the ITS system that make use of the information provided by this latter; terminators can be essentially classified in three different types, which are related systems, environment and users.

Among the possible legal issues related to ITS, such as products and strict liability, antitrust, procurement and intellectual property, one relevant concern regards privacy and data protection: in fact, in order to provide an efficient transport service, the technologies used in ITS need to track every vehicle movement and to access to some sensitive personal data, like financial ones. Thus, the ITS community members are in charge of contrasting the violation perception that users can potentially feel by explaining them the benefits offered by the ITS and





also the privacy protections that are implemented into these systems. In particular, it is possible to recognize three types of applications that can threaten privacy and data security:

- Surveillance, as it entails the deployment of video-cameras and electronic sensors to manage traffic and incidents;
- Electronic toll collection (ETC), since it implicates the access to personal financial information;
- Regulatory activities (e.g. enforcement of taxes, truck weight, driver hour limitations, etc...), because the will to transfer all these procedures into a paperless system, with the aim of enhancing efficiency and safety, can be considered by truck drivers as an unacceptable intrusion on their privacy.

Therefore, according to the purpose of ensuring the appropriate data confidentiality and of increasing the acceptance of the technological systems by users, the ITS industry must find the right balance between the advantages provided by ITS, intended as useful transport service and improved safety, with the request of the public not to compromise individual's privacy.

From an analysis of several European case studies and good practices, mostly developed during past EU projects, it has been possible to identify the requirements that transport solutions must meet in order to improve the accessibility to peripheral areas. The considered pilot actions are referred to the provision of Demand - Responsive Transport (DRT) services and the use of ICT/ITS tools for supporting them.

Some examples of main ITS features of smart mobility solutions that can be found in EU good practices are:

- Off-line and on-line booking enabling technologies;
- Dynamic assignment of passengers to vehicles;
- Route planning, scheduling and overall network optimization of buses according to users' needs;
- Travel Dispatch Centre;
- GPS-GIS technologies for fleet management operations (vehicle location and monitoring);
- GSM as communication technologies between the TDC and the vehicles;
- Integrated personal software (Trekker, Navitime, etc.) to plan multimodal trips;
- Graphical user interfaces supporting customer management, trip request information management, service information, service reporting;
- GIS ,digital maps, Relational Data Bases, ODBC connectivity.

The implemented activities have been examined according to some specific criteria, that permits not only to learn about their technical and operational features, but also to understand the successful factors that allowed to attain users' approval and the possible barriers encountered. It turned out that the principal favourable properties that a DRT service can offer





are flexibility and capillarity: in fact, users expect to benefit from this service thanks to its wide availability both in time and in space. In addition to requiring a transport service with limited extensiveness constrains during operation, users demand convenience for those service aspects related to the methods of booking and/or payment of the ticket and to the information supply; to this end, the introduction of ITS technologies (e.g. smartphone apps) is capable of fully satisfying their needs.

As far as obstacles are concerned, despite the arrangement of some financial agreements, in many cases funding problems have been observed, so that they represent one of the main threats when performing a DRT service.

In line with the aim characterizing one of the work packages of the Peripheral Access project, i.e. the enhanced use of intelligent communication technology and intelligent transport systems, the application of the ITS architecture to support smart mobility in rural and peripheral areas is certainly an efficient strategic course of action. Indeed, the reference framework will be capable of sustaining specific ITS tools according to the needs and functionalities of pilot actions.

Therefore, in conclusion, it can be said that the assumption of user requirements revealed by the analysis of previous case studies as the starting point for the design of an ITS system, along with the adoption of the framework suggested by the architecture, can definitely ensure the effectiveness of the planned mobility service.

# References

- International Transport Forum OECD (2014) "International Experiences on Public Transport Provision in Rural Areas"
- Alpine Convention Working Group Transport (2014) Sustainable mobility solutions in remote Alpine territories", final report
- Project ATTAC (Attractive Urban Public Transport for Accessible Cities) (2013) "Joint Best Practice Report", Work Package 3
- Project ITRACT (Improving Transport and Accessibility through new Communication Technology) (2015) "Smart Specialisation in Rural Areas", Interreg IVB North Sea Regione Programme
- European Commission (2016) "EU Action for Small Villages"
- Project SMARTMOVE (Promoting Rural Public Transport Use Through Active Mobility Consultancy) (2014)
- European Union, Interreg IVC (2014) "Policy recommendations for supporting rural development"
- Project MultiBus (call-a-bus-service) (2003), Municipalities Gangelt, Selfkant and Waldfeucht (Germany)





- Di Muro, G. P., Marasco, L. (2006) "ITS e l'Architettura ARTIST Gli elementi caratterizzanti". Ministero delle Infrastrutture e dei Trasporti, Dipartimento per il coordinamento dello sviluppo e del territorio, per le politiche del personale e gli affari generali Direzione generale per la programmazione e per i programmi europei
- FRAME Forum "FRAME Architecture". http://frame-online.eu/
- Institute of Transportation Engineers, U.S. Department of Transportation Federal Highway Administration, ITS America (2000) "Intelligent Trasportation Primer". Washington, D.C.: Institute of Transportation Engineers
- Russo, F., Quattrone, A. (2010) "ITS Sistemi Intelligenti di Trasporto Elementi di base e applicazioni operative per il trasporto privato, per il trasporto pubblico, per il trasporto merci e la logistica". Franco Angeli, Strumenti per l'analisi dei sistemi di trasporto - Università Mediterranea di Reggio Calabria





# 4. Examples of good practice

All examples of good practice were researched along the following keywords of the planned Pilot Actions in PA in order to produce a direct added value:

Pilot actions/Investments	Keywords
Pilot action 1/ Investment (PA1)	multimodal mobility, multimodal mobility node in rural areas, mobility hub, combining means of transport, carsharing, bikesharing, e-mobility, enhance PT, wireless customer key card to unlock cars, sharing software, intercommunal cooperations, city-regional concepts
Pilot action 2 (PA2)	smart mobility, smart ticketing, peripheral area, public transport services, on demand services, intelligent communication technologies, intelligent transport systems, flexible timetables, fostering cross-border mobility
Pilot action 3 (PA3)	new railway station, intermodal interchange, optimization of existing public transport, integration of intermodal connections, autonomous electric vehicles, mobility services, user information, user awareness
Pilot action 4 (PA4)	cross-border-cooperation, cross-border tourist train system, new public transport services, PT services for cyclists, bus lines and trains transporting bicycles, bicycle infrastructure at railway stations, promotion campaign
Pilot action 5/ Investment (PA5)	marketing campaign, regional cross-border railway route, WIFI in trains, attracting railway stations, barrier-free, bi-/trilingual marketing, cross-border-cooperation, acquisition of passengers and tourists, tourism offers, leisure, information boards, travel information, service centres
Focus area with key aspects 6 (KA6)	harmonization of public transport tariff systems and timetables , demand responsible public transport, rural areas, border region
Focus area with key aspects 7 (KA7)	demand responsive transport, ICT solution for demand responsive transport, cooperation with public transport operators, feeding the existing bus lines, hailed shared taxi systems, governance and financing system, solutions for commuters, dispersed areas, connecting employment centres to peripheral areas

Figure 3: Overview of keywords by Pilot actions/Key aspects.

The following table gives an overview - mainly for Project Partners of Peripheral Access - which good practice examples addresses (parts of) their pilot action or key aspects and thus can be helpful to take a closer look at.





	PA 1	PA 2	PA 3	PA 4	PA 5	KA 6	KA 7
Example No.	Multimodal node Graz region	Demand responsive transport Trieste	Intermodal railway station Lubin	New public transport services in South Moravia	Cross- border marketing campaign Vogtland	Harmonize tariffs and timetables in Hungary	Demand responsive transport Ljubljana
Example 1	X	x	X				
Example 2	X	Х					Х
Example 3	Х						
Example 4	х	Х	Х				Х
Example 5	х						
Example 6	х						
Example 7		Х					Х
Example 8				Х			
Example 9				Х	Х		
Example 10	Х	Х	Х	X	Х		Х
Example 11		Х					Х
Example 12		X					Х
Example 13		Х					Х
Example 14		Х					Х
Example 15		Х					Х
Example 16		Х					Х
Example 17		Х					Х
Example 18		Х					Х
Example 19		Х					Х
Example 20		Х					Х
Example 21		Х					Х
Example 22		Х					Х
Example 23		Х					
Example 24		Х					Х
Example 25		Х					Х
Example 26		Х					Х
Example 27		Х					
Example 28		Х					Х
Example 29		Х					Х
Example 30				Х	Х		
Example 31				Х	Х	Х	
Example 32				Х			
Example 33				Х	Х		
Example 34				Х			
Example 35				Х	Х		
Example 36				Х			
Example 37				Х			
Example 38				Х	Х		
Example 39			х	х			





# 4.1. Examples of good practice in the field of intermodality / WP1

While traveller's expectation for door-to-door mobility is constantly increasing, only a well-organized (public) transport system can be a realistic alternative of motorised individual transport. In most cases there are necessary changes between different modes of the transport chain, while intended combination of different modes is one of the unexploited facilities of mobility especially in rural areas. The overall objective of Work Package 1 is to identify the best suiting interventions low-cost multimodal solutions for peripheral rural areas taking into specific consideration of the tight public budget. The project intends to help the partners to develop bus and/or train stations further into effective and attractive intermodal hubs accessible for all.

This deliverable provides several good practices related to intermodal mobility solutions already available in peripheral areas across Europe. Several previously implemented EU projects on the topic of shared e-mobility, demand responsible transport system, car and bike sharing and promotion of public transport were analysed in order to find the added value for Peripheral Access and the possible links to its pilot actions.

All of the good practices were selected according to the following criteria:

- target area covered by the provided transport service
- target groups
- multimodal options of the service
- fares and costs of the service
- operators and stakeholders involved
- relevance to pilot actions of Peripheral Access
- possible added value for Peripheral Access





## No. 1 - Shared e-mobility in Werfenweng (STARTER project)

#### Location

Werfenweng is a well-known Austrian destination for tourists in summer and in winter. It lies at 900 metres elevation on a high plateau in the Tennengebirge. Werfenweng is a small village with 920 inhabitants, situated 45 kilometres south of the City of Salzburg.

#### Overview

Guests arrive by train or refrain from using their car during their holiday. Advantages are offered for guests not using their car. All advantages are integrated in the so-called "SAMO-Card" which includes: e-vehicle rental, taxi- and shuttle services and supplementary benefits. Users pay 8€ for the SAMO-Card (to cover administration costs) and can benefit of all previously mentioned services. The annually total budget for all SAMO-services is raised by the organisations (accommodation enterprises) of the local travel plan network (LTPN).

# **Evaluation results or experiences**

According to the evaluation of the STARTER project, high percentage of respondents have chosen to move around the region by walking, electric car and/or shuttle service. Although it should be noted that the 34% of those who have selected walking, have combined it with a conventional motorized transport mode (car or taxi), a significant percentage of walking trips are combined with either with PT and/or bicycle, either with electric vehicles. The percentage of those who used one or more electric vehicles (electric car, electric bicycle, electric taxi and/or electric moped) during their stay is remarkable (34%). Even more remarkable is the percentage (80%) of respondents that have chosen bicycle (including electric ones), PT, shuttle service and/or walking for their trips.

# Contact / Operator and included Stakeholders

The municipality is the leader of the LTPN which has 49 members (3 alpine Chalets, 15 apartments, 10 farm holidays, 7 hotels S, 2 inns, 9 pension, 2 public authorities and 1 mobility management centre).

# http://www.werfenweng.eu/SAMO/Card/

# Relevance to Pilot Actions 1,2 and 3 / added value for Peripheral Access

For PA1 it is essential how Werfenweng can solve the transport between the village and the railway station (which is in Bischofshofen) with the shuttle service. For PA2 the system of SAMO card can be a good practise. For PA3 the point is that how the municipality of Werfenweng collected together the stakeholders and they built out their specific multimodal system together.

People are likely to choose more sustainable modes of transportation if the multimodal points are well-organized and the communication (+marketing) of the transport system is clear enough for them.

Example 1: The SAMO system in Werfenweng, Austria.













# No. 2 - DRT service in Angus region (FAMS project)

#### Location

Angus has a population of 112,000 people and it is situated in the north-eastern part of Scotland. It lies to the northeast of Edinburgh on the Firth of Tay. In an area of 2,200 square kilometres, mountains, glens, rivers, rugged cliffs, seaside towns, market burghs, turreted castles and ancient relics stand side by side. The area selected for the FAMS Project covers 490 square miles, (58% of the Angus area) and a population of 9,742 (8.9% of the Angus population).

#### Overview

The main aims of the Angus Transport Forum were: to identify the transport needs of individuals and groups in all the communities of Angus; to increase awareness and share information on public transport provision; to liaise with statutory authorities and transport service providers in developing appropriate responses to the needs identified. Flexibility in service delivery was the key factor. "Best fit" was used to deliver services using a wide range of vehicles from taxis/volunteer drivers to coaches. A Flexible Agency was set up to map the true demand and unmet demands for the area. The Angus Demand Responsive Transport (DRT) coordinated transport pilot project seeks to maximise the use of existing public transport resources in the area to produce a flexible, user-friendly integrated service and provide a sustainable means of delivering transport provision utilising new technologies.

# Evaluation results or experiences

In Angus, about half of the surveyed passengers hold a valid driving license and could have made the trip by car if they had wished: about 60% of surveyed passengers have used the services instead of another used previously mode, and about 35% of surveyed passengers make more journeys since the services were introduced. All users rate trip time as 'excellent' or 'good' and rate as 'excellent' or 'good' a wide range of factors of comfort, convenience, reliability, safety and ease of making reservations. Areas of lowest population density and low commercial activity are typically also those with poorest mobile phone coverage. This can have a negative impact on the core DRT level of service.

#### Contact / Operator and included Stakeholders

The main actor of the Angus site is the Angus Transport Forum. It has a membership of over 60 organisations, comprising of voluntary organisations, Community Councils, transport providers and residents of the area. The technology was provided by Mobisoft Oy - MobiRouter journey combination system is the market leader in the UK for scheduling public DRT services.

http://www.enea.it/en/publications/volume-pdf/V2004-Demand\_Transport\_Services.pdf

# Relevance to Pilot Actions 1, 2 and Key Aspect 7 / added value for Peripheral Access

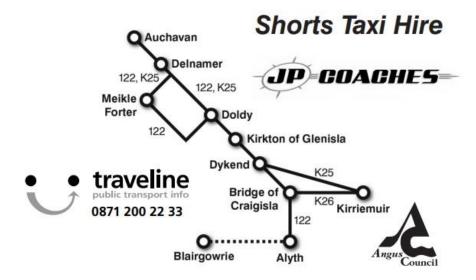
For PA1 there can be areas where (because of low density) it is feasible to maintain a DRT system like above. For PA2 and KA7 the ITS side of demand responsive systems, with the MobiRouter journey combination system can be investigated to find adoptable points. It could also be interesting because of the high number of organisations and also residents included.





In low density rural areas flexible demand responsive solutions can provide economic sustainability and meet the needs of users. If the dispatch centre is easy to communicate and services are door-to-door or flexible stops are at multimodal nodes people will use and love the DRT system.

Example 2: DRT service in Angus region (FAMS project), Scotland.









## No. 3 - Carsharing in Ebersberg

#### Location

District of Ebersberg (in Bavaria) is one of the smallest counties in Germany and has 134,000 inhabitants. Ebersberg city, which is the seat of the district, has 12,000 inhabitants in 40,84 km<sup>2</sup>.

#### Overview

In 2012, the district of Ebersberg unanimously adopted its overall mobility concept 2030 "More mobility with less traffic". One component of this is a district-wide CarSharing development concept. Its objective is to build an economically viable, nationwide CarSharing service throughout the county by 2030. CarSharing is to be made available in every town and community area with more than 1,000 inhabitants. Every district resident should be able to access at least two CarSharing vehicles at a distance of a maximum of 1,000 meters around their own home.

The oldest CarSharing offer of the district is located in Vaterstetten. Founded in 1992, the largely honorary organized association provides the 23,000 inhabitants of the community Vaterstetten today 20 CarSharing vehicles.

## Evaluation results or experiences

The district of Ebersberg has the largest density of CarSharing providers among all counties in Germany. 1.2 percent of the driving license holders in the district are entitled to drive in a CarSharing club.

# Contact / Operator and included Stakeholders

Municipality of Ebersberg region, carsharing supporters:

Carsharing-Union Markt Schwaben e.V. http://www.cms-carsharing.de/

Vaterstettener Auto-Teiler e.V. <a href="https://www.carsharing-vaterstetten.de/VAT/Vat">https://www.carsharing-vaterstetten.de/VAT/Vat</a>

Ebersberger Auto-Teiler e.V. <a href="https://www.carsharing-ebersberg.de/">https://www.carsharing-ebersberg.de/</a>

# Relevance to Pilot Action 1 / added value for Peripheral Access

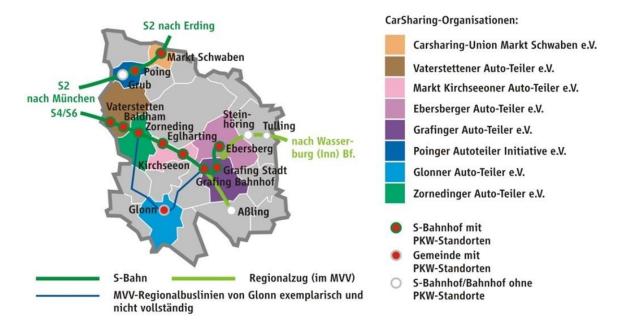
As PA1 is planning to set up a car sharing system it is essential to see how car sharing can be feasible and sustainable for smaller communities.

To promote local Carsharing initiatives, a whole set of measures can be used, adapted to local circumstances: financial start-up aid for new Carsharing offers (by the district, by external sponsors, by the mutual assistance of other Carsharing clubs); use of Carsharing offers for business trips by municipal employees; provision of municipal vehicles as public Carsharing vehicles outside working hours; logistical support (when creating a parking space); non-material support (through public relations, at meetings in the town hall, through press meetings with mayors).

Example 3: Carsharing in Ebersberg, Germany.













# No. 4 - Integrated eMobility Service for Public Transport in Bucklige Welt and Leibnitz (eMORAIL project)

#### Location

Bucklige Welt and Leibnitz are two rural regions next to Vienna and Graz. There are lot of commuters who commute every workday to their workplaces in Vienna or Graz, and eMORAIL project aimed to give them a sustainable travel opportunity.

#### Overview

The goal of the research project is a concept for innovative, cost-efficient and environmentally friendly mobility solutions for commuters. This solution should promote a view of electric vehicles as a supplementary form of mobility that can be combined with public transport and should offer an alternative to owning a car. In the eMORAIL project a business model is worked out that offers commuters a ticket for the Austrian Federal Railways (ÖBB) as well as use of an e-vehicle at their place of residence and an intermodal e-car sharing and e-bike offer at their destination.

Austria's first ever electric vehicle shuttle service was tested in Leibnitz (Styria). In November 2015, the town of Leibnitz launched its own distinctive and cost-effective mobility service called "LeibnitzMobil" based on the eMORAIL model. The electrically powered vehicle has been provided through a cooperation between ÖBB and Graz (a Model Region of Electric mobility) and links the various districts - even travelling to areas not covered by public transport. It takes commuters to the railway station and is also available for personal journeys during the day (so that people can go shopping, get to the doctor's or get to appointments with the authorities).

#### **Evaluation results or experiences**

One of the first feedbacks was related to the price of the eMorail mobility package and included services is very important for commuters, and would influence the relative costs and benefits of a wider roll-out. Alongside the payment structure, some other criteria might also be critical for the roll-out of the project. The implementation of such a solution would result from a shift from individual mobility to public transport in combination with electric-based vehicle for first and last miles, which leads to a reduction of greenhouse gas emissions. The highest possible level of reduction will be reached if public transport and electric vehicles are supplied by power from renewable energy sources.

# Contact / Operator and included Stakeholders

Tbw research GesmbH (Angelika Rauch) <a href="http://www.tbwresearch.org/kontakt.html">http://www.tbwresearch.org/kontakt.html</a>; ÖBB-Personenverkehr AG (Helmut Wolf) <a href="https://personenverkehr.oebb.at/de/kontakt">https://personenverkehr.oebb.at/de/kontakt</a>; Quintessenz Organisationsberatung GmbH (Walter Slupetzky)

http://www.quintessenz.or.at/index.php?item=kontakt

Videoclip: https://www.youtube.com/watch?v=fXZxmvjQ7Xo

#### Relevance to Pilot Actions 1, 2, 3 and Key Aspect 7 / added value for Peripheral Access

The relevance for PA1 is very clear as the project deals with the same area and the same problem - to help commuters getting into and out of Graz. For PA2 the application of eMORAIL can be a good example as it fits to the needs of passengers and KA7 can benefit because they also want to address the target group of communters. For PA3, in the case of Lubin, both sides





of the multimodal chain should be considered as they can operate car sharing, bike sharing or shuttle services also at their intermodal interchange.

The approach of multimodality can work more efficiently if operators think in an integrated way. It is not enough to give multimodal possibilities but to follow the passengers door-to-door and control the whole travel chain.

Example 4: eMORAIL project, Austria.









## No. 5 - Bike sharing system in Esztergom

#### Location

Esztergom is a town in northern Hungary, 46 kilometres northwest of the capital Budapest. It lies in Komárom-Esztergom county, on the right bank of the river Danube, which forms the border between Hungary and Slovakia there. There are 28,000 inhabitants in Esztergom.

#### Overview

EBI was the first bike sharing system in Hungary. It was developed by a local company (Neuzer Ltd.) and it has been operating since 2013. At the beginning there were 5 stations, 80 docking points and 50 bikes. Now there are 6 stations (e.g. at the bus station, at the cathedral) but it is planned to build another 4 stations in the town. The development of the system was co-founded by the EU but then the realization was founded by Neuzer Ltd., the municipality just provided the necessary urban space for the stations.

The bikes can be borrowed by a card which cost  $2 \in$  for one year. For local people two (short-time) hires per day is for free, otherwise the fee is 200 Ft ( $\sim 0.7 \in$ ) per half hour and it is getting more expensive in case of longer travels. Mudguard of bikes are used for advertising purposes which covers the costs of local free usage.

## Evaluation results or experiences

After three years of operation there are more than 500 registered member of the system, 60 % of them are local people the other part represents for the tourists. On average there are 20 hires per day (highly depending on weather conditions), and the users travel for 10 minutes.

# Contact / Operator and included Stakeholders

Neuzer Ltd. as the operator, the municipality as a stakeholder.

#### http://esztergombicikli.hu/

# Relevance to Pilot Actions 1 / added value for Peripheral Access

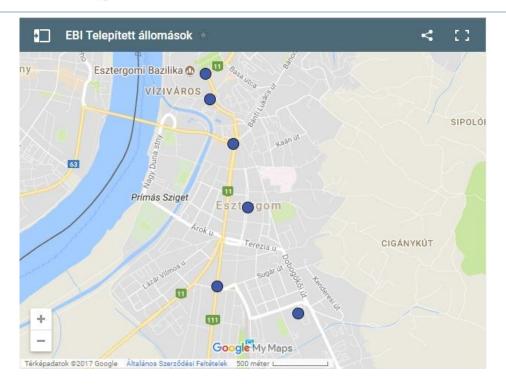
In PA1 these kind of bike sharing systems (for small towns) can be adapted well for creating better connections to public transport nodes (e.g. railway or bus stations).

By a good cooperation of the municipality and the company investment and operation of a bike sharing system in a smaller town can be beneficial for both the operator and user. Docking stations need to be deployed at multimodal nodes (railway stations, bus stations) to improve overall rate of usage.

Example 5: Bike sharing system in Esztergom, Hungary.













# No. 6 - Bike sharing system of Cernusco sul Naviglio, Pioltello and Carugate

#### Location

The cities of Cernusco sul Naviglio (37,000 inhabitants), Pioltello (33,000 inhabitants) and Carugate (14,000 inhabitants) are located east from Milan in northern Italy.

#### Overview

The bike sharing service, which is called "Better In Bicycle", was established by Cernusco sul Naviglio, Pioltello and Carugate, with the contribution of Fondazione Cariplo (a charitable foundation in Milan), in order to stimulate alternative mobility in home-work shifts. The service is active since June 2011 on 10 stations, (3-3 in Cernusco sul Naviglio and Carugate, 4 in Pioltello). These stations are located at metro stations, railway stations and on the other side town halls and industrial zones.

With an annual membership fee (15 Euros) and hourly rates ranging from 1 to 5 Euros (the first hour is free) you can borrow a bike, use it for the necessary time and return it to one of the stations paying only the hours of use.

# Contact / Operator and included Stakeholders

The operator is Bicincittá (<u>www.bicincitta.com</u>), stakeholders are the municipalities and the Fondazione Cariplo charitable foundation.

# Relevance to Pilot Action 1 / added value for Peripheral Access

The way how these three towns united for having a common sustainable bike sharing system can be an example to follow for Styria where towns are close enough for this kind of cooperation.

By the cooperation of smaller cities on their transport perspectives, a sustainable transport system (like bike sharing) can be easier implemented. Besides sustainable (green) transport can be a topic to be supported by civil organisations also.

Example 6: Bike sharing system of Cernusco sul Naviglio, Pioltello and Carugate, Italy.













# No. 7 - Integrative mobility platform in the Gesäuse National Park (Access2mountain project)

#### Location

This pilot region comprises parts of the GSEISPUR (Gesäuse National Park) and the Eisenwurzen Nature Park in Styria, Austria. There is only one village in this area with about 700 inhabitants in 110 km<sup>2</sup>. The main target group is the group of tourists.

#### Overview

An integrative mobility platform in the Gesäuse National Park, GSEISPUR offers flexible mobility for both local and visiting outdoorsmen from May to October. Since its launch in 2013, GSEISPUR consists of a shuttle service to/from the main railway station, a door-to-door taxi service and an e-scooter rental. Further sustainable mobility options are to be introduced over time, including a car sharing facility and "funmobility" products.

# **Evaluation results or experiences**

The response after just one season has been very positive. Despite the initial lack of web and marketing support, 1638 passengers took advantage of the shuttle from June to October 2013, averaging nearly 3.5 passengers per trip. This is an important step forward in terms of economic and ecologic efficiency.

# Contact / Operator and included Stakeholders

The main stakeholder at this project was the Gesäuse National Park, but as the project lead partner, the Environment Agency of Austria is also should be mentioned.

http://www.gseispur.at/

http://www.access2mountain.eu/en/downloads/Documents/brochure\_final01\_web.pdf

#### Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

This well-structured and well-monitored Austrian example of virtual mobility platform can show the main guidelines for PA2. The presence of flexible services are also key elements in PA2 and KA7. Interesting could also be how to handle shuttle services from railway stations.

Establishing a multimodal system based on the demands of local people and tourists is a progressive transport development but it is also essential to have a "virtual multimodality", a clear platform where they can see and understand the system.

Example 7: Integrative mobility platform in the Gesäuse National Park, Austria.













# No. 8 - The improvement of railway services and introduction of multimodal links in Mostviertel (Access2mountain)

#### Location

The Mostviertel region of Lower Austria, with its gently rolling landscape in the north and its rugged mountains in the south, offers a wide range of outdoor activities, catering to adventurers and families alike. This 3,355 km<sup>2</sup> area has 260,000 inhabitants in 9 towns and 767 villages.

#### Overview

Pilot testing and evaluating measures to improve railway services and introduce multimodal links: Measures tested included seat reservation systems for guests, organizing luggage and passenger transportation for cyclists visiting the town of Mariazell, and offering e-bike rental as part of new multimodal transport options. An improved ski bus system for the ski areas "Ötscher" and "Hochkar" was also pilot-tested during the winter season 2012/2013 and followed by an evaluation and optimization process.

# Evaluation results or experiences

The first responses of customers and population were ultimately positive. Guests informing themselves via Mostviertel Tourismus were really glad to hear about that improved offers and same is true for the information points in Lackenhof, Gaming, Lunz and Göstling. So far it seems that this has been the first project which has not caused any negative feedback yet. Also the local inhabitants are happy about the new offers and were surprised, that finally there was a regional cooperation established to connect the skiing areas.

# Contact / Operator and included Stakeholders

Mostviertel Tourism GmbH was the leader of this pilot project, but the support of the Environmental Agency of Austria should be highlighted.

https://www.mostviertel.at/

http://www.southeast-europe.net/en/projects/approved\_projects/?id=138

# Relevance to Pilot Action 4 / added value for Peripheral Access

The main aim of PA4 is to support the (on-board) transport of bikes as it was in Mostviertel. The other passenger services of Access2mountain project should be also investigated in South Moravia.

It has to be carefully looked at the stakeholders and double-checked whether the measures agreed upon have actually been implemented. In the Mostviertel, one part of the region (Gaming-Göstling) took the initiative and made marketing for the newly established product as much as it was possible, while the other part of the region (Annaberg-Mariazell) remained rather passive. Mostviertel Tourismus as project initiator should have put higher efforts into the internal and regional marketing of that product which has not happened due to a lack of time.

Example 8: Improvement of railway services, Mostviertel, Austria.













# No. 9 - "Bike and Ride" - Multimodal Corridor Development between Miskolc and Košice (Access2mountain)

#### Location

Northern Hungary is a unique region with diverse landscapes, medieval castles, exquisite wines and fruit brandies, and is home to several World Heritage sites. The area around Košice is situated in the southeast of Slovakia and borders Ukraine to the East and Hungary to the South. As a national park listed also among the UNESCO International Biosphere Reserve, it is marked by deep gorges, long canyons, wild ravines and roaring waterfalls, and flanks the Slovak Karst Mountains to the Southwest.

#### Overview

A feasibility study analyses the framework conditions in the cross-border region of Northern Hungary-Košice in terms of multimodal transport and proposes measures within three cross-border multimodal corridors in the area between the cities of Košice and Miskolc. The study outlines key recommendations for action plan developers. Concurrent with the process of the feasibility study development, small-scale pilot investments were implemented to set first visible signs towards the improvement of bike infrastructure and to test possible multimodal connections (e.g. by combining bike and train routes). The introduction of bikes racks, guidance systems for multimodal connections, rest areas, and interactive info boards helped to raise awareness among the local population.

# Evaluation results or experiences

Local population and tourists in North Hungary frequently use the wooden shelters. The shelters are welcome and favoured, especially by tourist visitors riding bikes. Unfortunately, the small-scale investments were not implemented yet on the Slovak side so there are no responses.

## Contact / Operator and included Stakeholders

This pilot project was managed by Miskolc Holding Plc <a href="http://miskolcholding.hu/elerhetosegek">http://miskolcholding.hu/elerhetosegek</a> and Agency for the Support of Regional Development Košice <a href="http://www.arr.sk/?kontakt">http://www.arr.sk/?kontakt</a>.

# Relevance to Pilot Actions 4 and 5 / added value for Peripheral Access

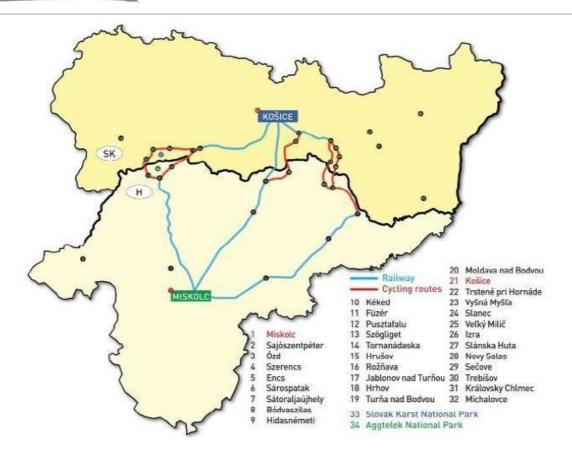
Because of the cross-border type of the Access2mountain project there are lot of connecting with PA4 and PA5. PA4 is also close to the project above because of supporting bikers.

Awareness rising without providing real alternatives is nearly useless. Small-scale investments have been communicated as frequently as possible through printed newspaper articles and by a website and additionally on whatever media channels locally available. Otherwise, success figures will not be realized and target groups cannot be reached. Furthermore, an early development of core elements of awareness rising is necessary for a better integration from the project start. Identification and subsequent meetings with all local stakeholders is very important in order to find out their needs and to raise awareness among them from the early beginning of the project.

Example 9: "Bike and Ride" - Multimodal Corridor Development, Hungary.















# No. 10 - Promoting public transport in Waldviertel (SmartMove project)

#### Location

The Waldviertel (Forest Quarter) is the north western region of the Austrian state of Lower Austria. The region has 220,000 inhabitants who live in 4600 km<sup>2</sup>.

## Overview

The public transport provider implemented an active mobility consultancy (AMC) campaign in order to strengthen contacts with existing passengers, attract new users, and obtain feedback about its services. Responses were received from 868 households (57% of the 1,500 contacted). Of those who responded, 84% requested further information about the public transport system (67% were not users of public transport and 33 per cent were regular passengers). Requests were received from 725 households: 568 returned the questionnaire; 433 requested a free regional map; 374 requested a bus network map; 317 requested a timetable; 309 requested ticket information and price comparisons; 229 requested a free weekday ticket; and 227 requested various information products.

# Evaluation results or experiences

As a result of the AMC campaign, passenger numbers have grown by an additional 14% on the two test bus lines on top of the general trend of an increase in bus users. Based on the collected feedback, the project team identified the following priorities: to take greater account of the needs of commuters; to designate more on-demand bus stops; to change departure intervals and weekend schedules; and to improve connections. The feedback also helped the bus operator to identify cost-saving measures and further improve marketing and communication.

# Contact / Operator and included Stakeholders

With the help of the SmartMove project team the local public transport provider (VOR) organized the consultancy campaign.

## http://www.smartmove-project.eu/

## Relevance to Pilot Actions 1, 2, 3, 4, 5 and Key Aspect 7 / added value for Peripheral Access

The good promotion and communication should be part of all pilot actions, but mostly PA5 is connected to this project as their main goal is a cross border marketing campaign. Such questionnaires could be a good method to get to know the needs of certain target groups e.g. for demand responsive transport systems in PA2 and KA7.

In order to create the best fit multimodal nodes it is necessary to consult the target groups of passengers to know what their real demands are. If people/possible passengers feel that they were asked and their suggestions were considered they might be more likely to use and promote the new systems, new approaches.

Example 10: Promoting public transport in Waldviertel, Austria.













# 4.2. Examples of good practice in the field of intelligent communication technologis (ICT) & intelligent transport systems (ITS) / WP 2

The overall objective of the deliverable consists of defining an EU reference point (benchmark) in the field of smart mobility solutions for rural and peripheral areas to the benefits of partner regions and regional planning options. Although the deliverable somehow discusses the issues of smart mobility solutions in peripheral areas at large, it specifically addresses partner regional needs and pilot actions objectives. In other words, EU good practices have been collected, analysed, selected and assessed as they refer to regional needs and pilot actions in PERIPHERAL ACCESS. To this aim, a brief description of pilot actions is first presented.

As such, the deliverable focuses on various cases and good practices in Europe - mainly collected from previous EU projects - about DRT (demand-responsive transport) services and the role of ICT/ITS tools supporting them. In particular, functionally linked with the needs of the regional pilot, a section is devoted to identify and analyse some reference ITS framework architecture models supporting the pilot implementation in Friuli-Venezia Giulia.

On the basis of on an extensive desk research, a number of EU good practices of smart mobility solutions are analysed. Functionally linked with pilot actions, good practices focus on DRT services and correspondent ITS/ICT requirements. Provided information is available, good practices are classified according to the following criteria:

- target (peripheral/rural) areas
- target groups
- operators and stakeholders involved
- service overall operational features
- vehicles employed
- accessing the service
- fares and costs
- funding schemes
- impacts and benefits





# No. 11 - ALLÔ-BUS COURMAYEUR

#### Location

Courmayeur - Valle d'Aosta region (IT)

## Target groups

**Tourists** 

# Overview

WHEN: From 4th September to 24th December 2017 -from Monday to Friday (school days) 09:00-12:00 / 14:30-16:30 / 17:30-19:30 -Saturday, Sundays, Holidays and non - school days 09:00-12:00 / 14:30 - 19:30

PROCEDURE: 1) Calling at the phone number from Monday to Sunday 2) Saying the bus stop of departure and arrival (specify on the map). 3) Saying the departure time. 4) Waiting for the confirmation.

FARES: For the Allô Bus service is possible to use all tickets (including weekly, monthly tickets and senior cards). For this special service is requested an extra of 0.50 € per single trip within the territory of Courmayeur and 1 € for the Val Ferret and Val Veny.

# Contact / Operator and included Stakeholders

Services are operated by Savda (Società Valdostana Autoservizi Pubblici) with the support of the Municipality

Contact/homepage: http://www.savda.it/it/55/alla-bus-courmayeur/

# Relevance for Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

## Medium

The case concerns a geographical area with some similarities to the Pilot Action 2. On the contrary, the service is mainly aimed at a tourist-seasonal target that is not the case of the Trieste pilot.

Example 11: Allô-Bus Courmayeur, Italy.









# No. 12 - ALLÔ-NUIT

#### Location

Valle d'Aosta region (IT): towns of S.Pierre, Aosta, Aymavilles, Brissogne, Charvensod, Gignod, Gressan, Jovençan, Pollein, Quart, Roisan, S.Christophe, Sarre, Nus, Fénis e S.Marcel

# Target groups

Locals

# Operators and stakeholders involved

Services are operated by Savda (Società Valdostana Autoservizi Pubblici) with the support of the Municipalities. Service is funded also by the Region.

## Overview

The service can be requested from 21:00 to 05:30. From 1 April 2016 the ALLO NUIT service will be performed without the help of telephone switchboard. The user must call the service driver directly. No reservation is required. On Fridays, Saturdays and Pre-Festivals there will be 3 vans, The remaining days of the year will be 1 solo car.

Fares: the urban one at 4 euros per user, 3.50 each for two users, 3 euros each for 3 or more users; Extraurban tariff (up to 15 km) 5 euros per user, 4.50 euros each for two users, 4 euros each for 3 or more users; extraurban tariff (over 15 km) 6 euros for one user, 5.50 euros each for two users, 5 euros each for 3 or more users.

#### Contact

# https://www.svap.it/it/10/allo-nuit/

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

## Medium/High

The case concerns a geographical area with many similarities (i.e. mountain area with small municipalities / villages) to the Pilot Action 2. As for the Pilot Action 2, the service targets the local users. This example works for the night, and it is not the case of Trieste for the Peripheral pilot. For Ljubljana Region a night service could be interesting for linking the city with other municipalities.

Example 12: ALLÔ-NUIT, Italy.















# No. 13 - BUS ALPIN

## Location

Municipality / regional entity: 7 regions in Switzerland; Start date: 2005/6 Duration: ongoing

#### Target groups

Locals; Tourists

# Operators and stakeholders involved

Services are operated by a non-profit association (Bus Alpin) founded by partner regions

## Overview

# Objectives:

1) Securing the viability of the existing new bus services 2) Recruiting new members/regions to enlarge the existing network 3) Operating as a contact point and information platform for involved/interested parties 4) Providing advisory support to strengthen public transport in mountain areas 5) Creating synergies through joint marketing activities for all service providers

# Activities:

1) Establishing working and support groups with members from different sectors 2) Developing public transport concepts; introducing the services 3) Securing the funds in the initial phase 4) Marketing the new bus services, networking and PR work 5) Operating the website "www.busalpin.ch"

# Evaluation results or experiences

From 2005 to 2011, a total of approx. 130'000 passengers used the new/additional bus services. In 2011, 7 seven regions (the famous Greina valley is served from the Cantons of Grisons and Ticino making it actually 8) across Switzerland are benefiting from the new/additional bus services. The results of a survey based on a questionnaire (for the initial phase 2005-2007 only) are as follows: 1) Without the new bus services, 30% of passengers would have travelled by car to these or other regions. 2) Taking into account the emissions deriving from the new bus services, the reduction in car usage represents a net saving of 100 tons of CO2. 3) The initiative generated 2 million Swiss francs in added value (initial phase only) 4) The initiative has received public recognition in terms of several prizes (e.g. it is one of CIPRA's winning cc.alps projects)

# Contact / Operator

IG Bus Alpin is promoted by Schweizerische Arbeitsgemeinschaft für die Berggebiete SAB, Verkehrs-Club der Schweiz VCS, Schweizer Alpen-Club SAC and PostAuto Schweiz AG. <a href="http://www.busalpin.ch/">http://www.busalpin.ch/</a>

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

#### Medium/Low

The case concerns a geographical area with low similarities (i.e. mountain and alpine resorts) to the Pilot Action 2, and they are all very connected to the Swiss' background (regulations, national contracts, etc.). The cases of the BUS ALPIN's network are nevertheless of some interests for the Trieste and Ljubljana cases in terms of communication of the "concept" behind.

Example 13: Bus alpin Beverin, Switzerland.











# No. 14 - DEF-MOBIL

#### Location

East Tyrol (Defereggen Tal).

# Target groups

Residents, tourists - users with no car. Young people mostly use the services (61%) to go to work, school, for leisure, shopping and visiting.

# Operators and stakeholders involved

Services are operated by a non-profit association (Bus Alpin) founded by partner regions

#### Overview

Vehicles employed: Services are operated with minibuses (up to 9 passengers) by the 3 local municipalities (Hopfgarten, St. Jakob, St. Veit).

Accessing the service: Trips must be requested at least 1 hour beforehand by phone and services follow fixed stops and timetable.

Funding schemes: Financed by local municipalities, the Land and the Austrian national program of sustainable mobility "klimaaktiv mobil".

# Evaluation results or experiences

Given decreasing population, DRT services are to be seen as a mean to reduce migration;

Average patronage: 500 passengers/month (up to 700 during the touristic season).

## Contact / Operator

http://www.defereggental.eu/page.cfm?vpath=index/defereggental-mobil/defmobil

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

# Medium/Low

The case concerns a geographical area with some similarities to the Pilot Action 2. On the contrary, the service is mainly aimed at a tourist-seasonal target that is not the case of the Trieste pilot or Ljubljana focus but nevertheless it could be interesting from the cooperation point of view.

Example 14: DEF-Mobil, Austria.











# No. 15 - DORFMOBIL KLAUS

#### Location

Municipality of Klaus in the mountain region in the south of Upper Austria, 60 km from Linz.

# Target groups

Residents needing to get to grocery, doctors, post offices, etc.

# Operators and stakeholders involved

Services are organized by volunteers of a private non-profit association (Dorfmobil - "mobile village").

## Overview

Vehicles employed: DRT services are operated with vans (up to 5 passengers) and minibuses (up to 9 passengers).

Accessing the service: Services are operated on working days from Monday to Friday (7.00-19.00). Trips must be requested by phone at least half an hour beforehand.

Fares and costs: Single ticket costs 1.80 euros, one-year pass 25 euros.

Funding schemes: services are financially supported by local economic activities (shops, restaurants, banks, etc.) and the government of Upper Austria (for instance, if passengers buy goods in the store, the store pays the ticket); Passengers are invited to join the association by paying an annual fee.

# Contact / Operator

https://www.bedarfsverkehr.at/content/Dorfmobil\_Klaus

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

#### Medium/Low

The case concerns a geographical area with some similarities (i.e. mountain area with small municipalities / villages) to the Pilot Action 2. As for the Pilot Action 2, the service targets the local users with specific needs. Even the non-profit nature of the service is few comparable with the Trieste case. This concept is useful for very peripheral areas and has an interesting governance approach.

Example 15: Bus alpin Beverin, Austria.













# No. 16 - ELASTIBUS IN VAL DEL CHIESE

#### Location

Valle del Chiese (Trentino Province, Italy)

# Target groups

Mainly residents / elderly locals

# Operators and stakeholders involved

On demand-services arranged by the Provincial Department of Mobility of the Trento Province

# Overview

Service overall operational features: two shuttles are employed each day:

- the first from 7.00 to 14.00, open to elderly people and users without driving license;
- the second (9.15 12.00; 13.45 15.30; 17.30-18.30) open to students.

Accessing the service: Services require users to call for booking (8.00-17.00 - Monday to Friday): for morning trips, by 16.30 the day before the trip; for afternoon trips, by the 12.00 the same day.

Fares and costs: Ticket can be bought on-board, same price of ordinary public transport tickets. No additional subscription is needed.

# Evaluation results or experiences

- the service was initiated thanks to the EU Project "GABRIELE" (2003) focusing on innovation of public transport in peripheral areas and it is still successfully run;
- the services have experience a significant increase in demand in recent years (some 4.000 users/year, eg, +30% yoy). Remarkably, some 400 users were refused due to lack of additional shuttles.

# Contact / Operator

http://www.trasporti.provincia.tn.it/elastibus/

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

# High

The case concerns a geographical area with many similarities (i.e. mountain area with small municipalities / villages) to the Pilot Action 2. As for the Pilot Action 2, the service targets the local users. The focus of the experience to the elderly is also of some interest for the Trieste case. Also interesting for Ljubljana region (KA7) is how the service is divided between students and elderly people depending on the time of the day.

Example 16: Elastibus in Val del Chiese, Austria.













# No. 17 - GO-MOBIL

#### Location

Peripheral and rural areas of Carinthia.

# Target groups

31 peripheral communities (where ordinary public transport is non-existence or insufficient);

# Operators and stakeholders involved

The services are organized by 20 private non-profit local associations belonging to the holding company GMZ and they finance the services through annual membership fees.

## Overview

Goals: the services aim at providing residents for access to grocery, doctors, post offices and bus stops independently from car availability; the services complement those of ordinary public transport systems, which mainly focus on schoolchildren trips.

Vehicles employed: Micro public transport systems. The on-demand services use cars, vans and minibuses (up to 9 persons including drivers).

Accessing the service: Services are operated on working days (8.00-24.00), on Saturday (9.00-24.00) and Sunday (9.00-22.00). Journeys must be pre-booked by phone.

Fares and costs: Single ticket costs 3.80 euros if it it is bought in shops, hair dressers, restaurants, etc., otherwise it costs 5.20 euros when bough on-board vehicles.

Funding schemes: Between 70% and 100% of costs are covered by tickets revenues and membership fees (including OBB). Remaining costs are covered by municipalities, the state of Carinthia and the national state (federal government financing regional public transport).

# Evaluation results or experiences

- some 160.000 users are served yearly, with a growing trend. GMZ is seen as a successful public-private partnership;
- GMZ is about to introduce new local/regional services in neighbor regional areas;
- Go-Mobil is included in the web timetable information platform "Scotty" managed by OBB and can be accessed to the website www.gomobil-kaernten.at

# Contact / Operator

# http://www.gomobil-kaernten.at/

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

## Medium/High

The case concerns a geographical area with many similarities (i.e. Peripheral and rural areas with small municipalities / villages) to the Pilot Action 2. As for the Pilot Action 2, the service targets the local users. For KA7 the concept of a public private partnership and the coverage of such a big area can be interesting.

Example 17: GO-MOBIL, Austria.













# No. 18 - GMOA BUS

#### Location

The services are operated in rural region of the lake Neusiedl in Burgenland (Austria).

# Target groups

Disabled people, residents with no cars or who would like to reduce car usage. During the summer, many tourists use the services, especially around the lake Neusiedl.

# Operators and stakeholders involved

The organization providing the services has been established by municipalities.

# Overview

Service overall operational features: Operating hours are: Monday to Friday from early morning to evening (21.00 or 19.00), with evening extension during the touristic season.

Vehicles employed: Minibuses (up to 9 persons including drivers).

Accessing the service: Door-to-door services are offered through pre-booking (also, until just 10' before).

Fares and costs: Single tickets cost 1-1.50 euros, annual subscription (some 150 euros).

Funding schemes: services have been supported by EU territorial cooperation projects (eg, FLIPPER) and by the Federal Government and they are still successfully operated; 20% of revenues come from tickets, 10% from the Federal Government, 60% from the municipalities and 10% from the Land of Burgenland.

# **Evaluation results or experiences**

- users are around 30.000 (some 100 users/day);
- the services could be integrated into the overall eastern Austria region ticketing system;
- services are displayed on e-platforms and are based on a Mobility Service Centre (www.b-mobil.info/)

## Contact / Operator

# www.b-mobil.info

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

## Medium

The case concerns a geographical area with many similarities (i.e. mountain area with small municipalities / villages) to the Pilot Action 2. As for the Pilot Action 2, the service mainly targets the local users, which is the case of Trieste. Both PA 2 and KA 7 can also benefit from the financing scheme of GMOA Bus.

Example 18: GMOA BUS, Austria.











# No. 19 - PROVIBUS

#### Location

- services are operated on-demand in the rural areas of Piemonte Region (Turin Province, hills nearby Turin);
- services were initially operated in the Crescentino areas, then extended to other municipalities of the Turin province. Up until now, the services have been operated for the last 10 years.

# Target groups

 Mostly residents for occasional and regular trips which are increasing in weak-demand areas and where poor ordinary public transport systems significantly affected quality of life.

## Overview

Trips must be booked by phone.

# Evaluation results or experiences

- 97% of users turn out to be satisfied by the services and some 26% of users access the services on a daily basis;
- some 195,000 people are transported each year (some 134 pax/day) with an average covered distance of 5.8 km. Some 780 km are covered every day.

# **Contact / Operator**

http://www.provincia.torino.gov.it/trasporti/provibus/index.htm

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

#### Medium

The case concerns a geographical area with some similarities (i.e. Peripheral and rural areas with small municipalities / villages, hilly area) to the Pilot Action 2 and Key Aspect 7. As for the Pilot Action 2, the service targets the local users.

Example 19: PROVIBUS, Italy.













# No. 20 - TÄLERBUS LUNGAU

#### Location

Operated in the Land of Salzburg (Lungau), Styria (Murau) and Carinthia (Nockberge) as a combination of public transport and taxi systems.

# Target groups

Tourists (e.g. hikers) - bus rides pick up tourists at the end of a hike and take them back to parked cars, or they take them into valleys where cars are forbidden - and local residents.

# Operators and stakeholders involved

Cooperation between local public transport system and taxies based on a common ticketing system and integrated transport system.

# Overview

Minibuses (and in some valleys by electric vehicles).

# **Evaluation results or experiences**

- introduced in 1989 and still operating. Some 330,000 passengers access the services each year;
- services are displayed on the internet (www.taelerbus.at) and disseminated through brochure showing timetables and information

## Contact / Operator

# www.taelerbus.at

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

#### Medium-Low

The case concerns a geographical area with some similarities to the Pilot Action 2. On the contrary, the service is mainly aimed at a tourist-seasonal target that is not the case of the Trieste pilot or Ljubljana focus. An interesting aspect is that it has been in place for a long time.

Example 20: Tälerbus Lungau, Austria.











# No. 21 - ON-DEMAN TRANSPORT IN MODANE

#### Location

On-demand services operated in Modane in the Maurienne Valley in the Savoie Department.

#### Target groups

Tourists and local residents

## Operators and stakeholders involved

Association of municipalities of the Modane Canton for the elderly (over 60).

# Overview

Service overall operational features:

- two lines have been provided (Aussois-Modane and La Praz-Modane) liking sparse villages to Modane via van/taxies (up to 7 persons);
- the service has been in place since 2009 and it is available on Thursday morning (market day in Modane).

Fares and costs: Ticket costs 1.50 euros per round trip and it has to be pre-booked by phone (before Wedsnday noon).

## **Evaluation results or experiences**

Some 300 passengers access the service each year, women in particular (some 75%). Peak periods are August, September and October.

# Contact / Operator

n.a.

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

#### Medium-Low

The case concerns a geographical area with some similarities to the Pilot Action 2. On the contrary, the service is mainly aimed at a tourist-seasonal target that is not the case of the Trieste pilot.

Example 21: On-deman transport in Modane, France.











# No. 22 - ON-DEMAND TRANSPORT IN DROME

#### Location

Operated in rural municipalities in the Drome Department since 2009.

#### Target groups

Residents (except pupils going to school) and tourists not served by ordinary public transport.

#### Overview

Services link municipalities, railway stations and ordinary public transport stops. Specific services are provided to the benefit of elderly and disabled; in particular, 3 types of services are provided:

- a "regular" on-demand service with predefined lines, stops, days and working hours. It costs 2.5 euros (single ticket) independently from the covered distances;
- a "feeder" on-demand service connecting rural municipalities to the central area of Lucen-Diois and Chatillon-en-Diois. Stops are predetermined but route and schedule depend on booking requests;
- a "connecting" on-demand service connecting railway stations or ordinary bus stops.

Accessing the service: Trips must be pre-booked 24 hours in advance, otherwise vehicles do not operate. Passengers can access the services only at predefined stops

## **Evaluation results or experiences**

Services are disseminated through flyers and on the Department website.

# Contact / Operator

http://www.ladrome.fr/nos-actions/deplacements/transport-a-la-demande

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

Low (PA2)

The case concerns a geographical area with some similarities to the Pilot Action 2. On the contrary, the service is mainly aimed at a tourist-seasonal target that is not the case of the Trieste pilot.

Medium (KA7)

It is a three level system - similar of what Ljubljana public transport has in mind in Key Aspect 7.

Example 22: On-demand transport in Drome, France.











# No. 23 - ON-DEMAND TRANSPORT WERFENWENG SHUTTLE

#### Location

Operated in Werfenweng (Land of Salzburg), a tourist village of about 2,000 visitors and 930 inhabitants.

# Target groups

Tourists, while 25% of passengers are commuters. Services were launched to include tourists using public transport into the regional transport demand (consisting of just schoolchildren and commuters).

# Operators and stakeholders involved

Operator is a controlled-company of the local tourist board receiving financial contributions by the 3 local municipalities, the regional cooperation body (Regionalverband Pongautakt) and the Land of Salzburg.

## Overview

Service overall operational features: Shuttle services connect Werfenweng with Pfarrwefen (2,200 inhabitants) and Bischofshofen (10,400 inhabitants).

Vehicles employed: Microbuses (up to 9 persons) operated on-demand.

Accessing the service: Shuttle on-demand services are operated upon phone call booking every 2 hours (from 7.00 to 20.00) every day (including Sundays) also as a door-to-door service. Part of the services are operated through electric vehicles (E-lois).

#### Evaluation results or experiences

Some 300 passengers access the service each year, women in particular (some 75%). Peak periods are August, September and October.

## Contact / Operator

http://www.werfenweng.eu/SAMO/Ganzjaehrige-Angebote/shuttle-fahrplan-werfenweng.php

# Relevance to Pilot Action 2 / added value for Peripheral Access

## Medium

The case concerns a geographical area with some similarities to the Pilot Action 2. On the contrary, the service is mainly aimed at a tourist-seasonal target that is not the case of the Trieste pilot.

Example 23: On-demand transport Werfenweng shuttle, Austria.













# No. 24 - PRONTOBUS MODENA PROVINCE

#### Location

In the peripheral area of the Modena Province (including Pavullo, Carpi, Mirandola, Maranello, Serramazzoni, Castelfranco and Fiorano), the service Prontobus has been active since 2003.

#### Overview

Prontobus is a call-based mobility service, managed by SETA, to integrate urban and extra-urban public transport with neighboring villages. To access the Prontobus service, it is necessary to make a reservation at the dedicated call center or use the Prontobus RUMOBIL Modena app.

From a list of stops, you choose the one you want to start from and the one you want to get to, so you decide the time of departure or time of arrival. For telephone reservations, travel must be requested at least 60 minutes in advance of the desired departure time. It is possible to book a ride for the same day, for the following days or for the following week. It is not possible to make more than three calls per call. Each race can be booked for one or more people. It is not possible to get on at the stops if you have not booked the service.

You go up and down only and exclusively at the stops marked by the service logo. The service allows the transportation of people with disabilities, on specific request at the time of booking, with at least 3 hours notice. Prontobus does not replace the scheduled service for those trips where it is possible to use the ordinary scheduled service. To access the Prontobus service, all ordinary tickets can be used. You can also buy the ticket on board the driver at the current rates.

Vehicles employed: Small and ecological buses for trip of less than 30 minutes.

Accessing the service: Trips must be booked through a call center (open from 8.00 to 17.45) up to 30 minutes prior the departure.

Fares and costs: Fares are comparable with those of traditional public transport in Modena (1,20 euros for one way trip) and tickets can be purchased onboard.

Funding schemes: Overall operating costs are covered 50% by the local Agency of Mobility and 50% by the municipalities

## Evaluation results or experiences

Transport demand consists of some 550,000 km/year.

# Contact / Operator

http://www.setaweb.it/mo/Prontobus/1

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

#### High

The case concerns a geographical area with many similarities (i.e. mountain area with small municipalities / villages) to the Pilot Action 2. As for the Pilot Action 2, the service targets the local users and for Ljubljana region (KA7) the aspect of feeding busses could be interesting.

Example 24: Prontobus Modena Province, Italy.













# No. 25 - DRINBUS GENOA

#### Location

On-demand services (Drin Bus) with flexible timetable serving the hilly peripheral areas around Genoa.

# Target groups

Major user profiles consist of women, employees, retired people and students.

#### Overview

To travel on Drinbus: booking the ride, calling the call center 800.085302, choosing stop of origin and destination of your move, time and day, or several days. The route is developed, for each area, in a series of stops on which the planned itineraries are built during the day. A minibus, easily recognizable by the integral decoration, will wait for you at the chosen stop in the indicated timetable.

When it works: The service is active from Monday to Saturday (excluding holidays) from 7.00 to 20.00; in the area of Bolzaneto / Cremeno / Morego / San Biagio from 6.00 to 20.00. The Drinbus Valbisagno is active from Monday to Saturday (excluding holidays) in the evening from 21.00 to 24.00.

How to book: Book by calling the toll-free number 800. 085 302 (the call is free) from Monday to Saturday from 6.00 to 23.30.

Vehicles employed: Small (up to 13 seats) and ecological (methan powered) vehicles (Mercedes Sprinter Minibuses) and show a specific brand image (name, logo, etc.).

# Evaluation results or experiences

Transport demand consists of some 550,000 km/year.

#### Contact

https://www.amt.genova.it/amt/trasporto-multimodale/drinbus/

# Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

## High

The case concerns a geographical area with many similarities (i.e. peripheral and rural area with small municipalities / villages) to the Pilot Action 2. As for the Pilot Action 2, the service targets the local users and for Ljubljana region (KA7) the aspect of feeding busses could be interesting.

Example 25: DrinBus in Genoa, Italy.













## No. 26 - PERSONAL BUS FLORENCE

#### Location

- PeronalBUS DRT service operate in the urban, peri-urban, rural and mountain areas of the province of Florence;
- overall covered area is of some 100.000 sq km with a population density of about 3.6 inh/sq km.

## Evaluation results or experiences

- originally introduced with the SAMPO and SAMPLUS EU-funded projects, it has now an overall number of 175 meeting points
- 74% of users are satisfied/very satisfied with the service right now.

#### Contact

## http://www.ataf.net/

## Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

## High

The case concerns a geographical area with many similarities (i.e. mountain area with small municipalities / villages) to the Pilot Action 2. As for the Pilot Action 2 and Key Aspect 7, the service targets the local users.

Example 26: PersonalBus Florence, Italy.







#### No. 27 - GOOD PRACTICES IN THE UK

#### Location

Lincolnshire (UK)

## Target group

Residents

### Fares and costs, funding schemes

- Unit costs per passenger tend to be high, in the order of £4-6. Meaning planning objectives
  can effectively be achieved that is, accessibility to peripheral/rural residents is improved but at higher costs per trip;
- Example: Shropshire Link service covering rural areas in Lincolnshire (based on Call Connect service - number: 0845 6789068)
  - proportion of population with a service at least two days/week rising from 57% to 95%;
  - costs: £571,000 vs. revenue £64,000;
  - average support per passenger trip: some £19
- "FLIPPER" pilot projects compare costs per passenger trip as related to density of demand to derive a guidance for vehicle choice
- Willingness to pay (in particular, for existing car users and bus users) for DRT door-to-doorservices is higher than existing bus fare.

Trips per vehicle hour x trip length [i.e. passenger-km per vehicle-hour]	Suggested vehicle choice
Less than 10	Taxi
Between 10 and 20	Taxi(s) or flexible minibus – choice will depend on availability and relative costs locally
Between 20 and 50	Flexible minibus, with lower degree of route flexibility at the higher end of the range
Greater than 50	Largely fixed route bus, with limited deviations

#### Evaluation results or experiences

- overall UK experiences: the number of DRT services rising from under 50 in the late 1990s to over 250 in 2010, but then declines (funding cuts);
- demand (trips per user per week) negatively related to population density, but positively related for mobility impairment (eg, elderly people) and travel to work;
- potential markets for DRT: rail station, airports, workplace outside the urban core;
- steadily growth of taxis, however in the form of traditional "single hirer", rather than other innovative service types like taxibuses in rural areas;
- conclusions: depending on density of demand, demand-responsive services dramatically improve accessibility (number of residents in rural/peripheral areas benefiting from regular services), however at rather high costs - eg, increasing effectiveness, low efficiency (depending on density of demand)





## Relevance to Pilot Action(s)

Not applicable

Example 27: Shropshire Link, United Kingdom.







## No. 28 - OSTFOLD (SOUTH-EAST NORWAY)

#### Location

OSTFOLD (SOUTH-EAST NORWAY)

#### Target group

Initially restricted to elderly people and co-travellers, then open to all users.

#### Overview

- different DRT services depending on target groups, frequency and flexibility;
- two different routes: northern (three days/week) and southern (the other two days);
- two scheduled departures each of the service days: first departure at 10 o'clock (eg, after school transport ends in the morning) and the second after 3 hours;
- routes: a circle starting and ending in the municipality centres.

Vehicles employed: Minibuses or taxis, depending on the number of passengers.

Accessing the service:

- flexibility: passengers can be picked up at home up to two kilometers away from specified routes;
- travelers make a request for the service by phone at minimum two hours in advance; if nobody calls for the service (two hours in advance of the scheduled departure), there will be no trip

Funding schemes: Government funds to develop public transport in rural districts, in particular for demand-responsive services.

#### Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

Low (PA2)

The case concerns a geographical area with low similarities to the Pilot Action 2. As for the Pilot Action 2, the service targets the local users.

Medium (KA7)

For Ljubljana the example could be interesting because they are considering of using the fleet (and maybe the routes) of the operators of school buses.

Example 28: OSTFOLD, Norway.





## No. 29 - EASTERN NORWAY (COUNTY OF HEDMARK) - SERVICE "HALF PAST"

#### Location

Eastern Norway (county of Hedmark) - service "Half past"

#### Overview

#### Service overall features

- departures from the municipality centre every hour, if requested at least two hours in advance;
- operating schedule: from 7 o'clock AM to 10 PM during workdays, 9AM-7PM during weekends
- Route: fixed stops (maps illustrate the stops);
- central planner for all the municipality involved in the area.

Vehicles employed: Services are offered by taxis.

Fares and costs: Fares are equal to ordinary public transport services.

Funding schemes: Grants from government are now over: the first model is being developed in other rural areas, while the second is now more uncertain.

#### Evaluation results or experiences

- when substituting ordinary bus services with DRT services, popularity among travelers increases, especially among young (eg. going to sport activities or visiting friends and relatives) and elderly people (eg. in the morning when going shopping of to treaments and in the evening when going to senior dances) without driver licenses;
- parents particularly value such services
- sport teams have adapted their schedule to those of the transport services.

## Relevance to Pilot Action 2 and Key Aspect 7 / added value for Peripheral Access

Low (PA2)

Medium (KA7)

Interesting aspect from the point of view of how to increase the independence of young people.

Example 29: SERVICE "HALF PAST", Norway.





# 4.3. Examples of good practice in the field of smart governance and joint marketing / WP 3

Especially in border regions, there are some barriers in the field of public transport that need to be overcome together. These can be different tariff systems and zoning or even complex licensing procedures and varying regulations. An equally important point is the information on travel connections, offers and tickets which often only exist in one national language. Due to new media and innovative possibilities of communication channels, the attraction of public transport and its supplementary measures has a great potential. In order to provide appealing service packages for the regional population as well as for tourists, it requires a good (cross-border) cooperation and coordination of the joint offers. Thereby it is crucial to use existing legal instruments and to develop long-term strategies in order to solve permanently existing problems.

On the basis of on an extensive desk research, a number of EU good practices of smart governance and joint marketing are analysed. The focus was always on the added value that can be derived from them for Peripheral Access. Functionally linked with pilot actions 4 and 5, the following good practices focus especially on:

- cross-border cooperation in public transport
- governance approaches in cross-border-areas
- methods of transporting bicycles by bus and train
- cross-border tariff systems
- multilingual marketing & promotion campaigns
- new services for tourists

A variety of the following good practice examples are the result of previous EU projects.

The following criteria where crucial for the selection as a good-practice-example for WP3:

- target areas: focus on peripheral/rural areas & cross-border-areas
- target groups: focus on tourists
- operators and stakeholders involved: focus on cross-border-institutions
- governance structure: focus on cross-border cooperation
- service provided: focus on services for cyclists and tourists in general
- fares and costs: focus on common tariff systems across borders
- marketing measures: focus on multilingualism





# No. 30 - Upper Rhine Conference (Swiss-German-French intergovernmental commission for border affairs) / Working Group on Transport Policy

#### Location

The German-French-Swiss Government Commission forms the roof at the national level and connects the governments of the three countries through their respective foreign ministries. The German-French-Swiss Upper Rhine Conference connects the government and administrative authorities at regional level. Included are the administrations of the federal states of Baden-Württemberg, Rheinland-Pfalz, Kantone Basel-Stadt, Basel-Landschaft, Aargau, Jura and Solothurn, as well as the state and territorial authorities of France - conseil départemental du Bas-Rhin, du Haut-Rhin und conseil régional Grand Est.

#### Overview

As the Upper Rhine area is an important European transport corridor the working group on transport policy is of most interest. Evaluating the resulting capacity bottlenecks and traffic problems across borders and jointly providing them with a solution is the core task. The basis for this is the mutual information on all cross-border transport projects. The working group also functions as a coordinating and steering body for 2 expert committees: The Public Passenger Transport Expert Committee deals with rail and transport-related topics with regard to passenger transport and proposes measures for an integrated rail service in the region. The Committee of Experts Freight Traffic deals with freight transport topics and develops proposals for environmentally friendly handling.

In many parts of the trinational Upper Rhine region, successful cross-border cooperations have developed. With the German "Ticketplus Alsace" and the French "Pass Alsace - RheinNeckar" for example, a successful tariff cooperation exists between the Verkehrsverbund Rhein-Neckar (VRN) and the Région Alsace in the north of the Upper Rhine region. This offer meets the demand of tourist excursion traffic and allows cross-border travel by public transport on weekends and public holidays. Parts of this offer are bilingual brochures including tips for tourists or recreation seekers.

Further cross-Border emphasis of the Upper Rhine Conference are f.e. multimodal traffic studies, report on common tariffs, transport policy models for the Upper Rhine.

#### Contact / Operator and included Stakeholders

Upper Rhine Conference, Working Group "transport policy", info@oberrheinkonferenz.org <a href="http://www.oberrheinkonferenz.org/de/verkehr/arbeitsgruppe.html">http://www.oberrheinkonferenz.org/de/verkehr/arbeitsgruppe.html</a>
Verkehrsverbund Rhein-Neckar GmbH, <a href="https://www.vrn.de/tickets/ticketuebersicht/tages-karten/alsace/index.html">https://www.vrn.de/tickets/ticketuebersicht/tages-karten/alsace/index.html</a>

#### Relevance to Pilot Actions 4 and 5 / added value for Peripheral Access

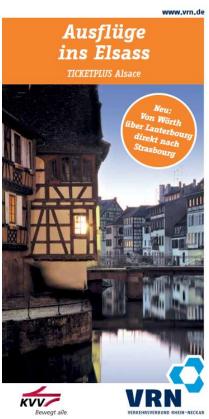
Referring to Work Package 3 "Joint governance and marketing" the approach of the Upper Rhein Conference with the special transport working group and their measures concerning common tariffs, tickets and services- also for tourists - is a very good best practice-example for all activities within this workpackage. The coordinated presentation of the cross-border tourist routes in the two national languages with the opposite start and end point makes the service a common one but nevertheless with important local/regional influences. Maybe this approach can serve as a suggestion for the activities in South Moravia or Vogtland.

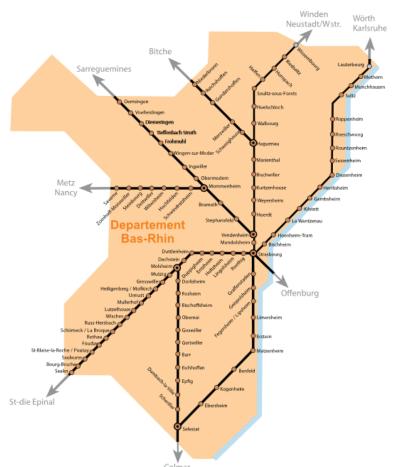
Example 30: Upper Rhine Conference, Germany/Switzerland/France.















## No. 31 - Cross-border tram line between Strasbourg and Kehl

#### Location

Strasbourg, France and Kehl, Germany are separated by the Rhine River. The two cities form the cross-border agglomeration of 'Strasbourg-Kehl'.

#### Overview

36 000 vehicles cross the bridge linking the two cities every day. To provide an affordable solution for cross-border commuters and other travellers, the two cities cooperated in building a tramline (line D) linking the two cities. Ticket rates were a key concern - how should tramway fares fit into the public transport pricing schemes already available in both cities? By creating a common tariff zone for cross-border transit only, Strasbourg and Kehl found a solution to the problem of ticket pricing. The tramline began operating in early 2017 across a new bridge. Both Strasbourg and Kehl authorities agreed that a fair price for tickets should be decided upon, comparable to a domestic fare. A common zonal tariff was the solution. To establish this, Kehl ended its association with the German transport operator. Instead, a new transport operating authority was created in Kehl. Bicycles may be taken in the tram, but not in the rush hours from 7 am to 9 am and 5 pm to 7 pm. On Sundays and public holidays bicycles are allowed throughout the day. One-way single ticket: 1,70€

Europass Mini 24h: Ticket valid for 24h for unlimited rides on bus-tram lines and TER Trains within the greater Strasbourg area (EMS) and on the Kehl (Germany) TGO buses.

The Homepage <a href="https://www.cts-strasbourg.eu/en/">https://www.cts-strasbourg.eu/en/</a> is available in 3 languages (French, German, English) and the APP "CTS Transports Strasbourg" in 2 languages (French, German).

#### Evaluation results or experiences

EU recommendations for cross-border transport advise authorities to:

- gather detailed information on cross-border movements
- engage citizens to identify needs for new public transport services
- coordinate bids for local cross-border transport between two countries
- use existing legal instruments for cross-border cooperation
- develop long-term strategies to remove persistent problems.

http://ec.europa.eu/regional\_policy/en/information/publications/factsheets/2017/overcoming-obstacles-in-border-regions-affordable-tickets-for-local-travel-across-the-border

Contact / Operator and included Stakeholders

Compagnie des Transports Strasbourgeois

www.cts-strasbourg.eu/en; Stadt Kehl <a href="https://kehl.de/stadt/tram/">https://kehl.de/stadt/tram/</a>

#### Relevance to Pilot Actions 4, 5 and Key Aspect 6 / added value for Peripheral Access

This example has a relevance to PA 4 and PA5, because of the cross-border-cooperation approach. Objectives both in PA4 and 5 is to overcome obstacles in border regions and encourage the cooperation and communication across the border in the field of PT. As the Hungarian Project partner wants to focus on cross border time table and tariff harmonization, this example could service as a good practice for the region of Balassagyarmat too.

The solution between these two cities (originally two tariff zones) of a fair, affordable, common tariff zone for cross-border traffic only can be seen as a best-practice example with an added value for these 3 related projects in PA.

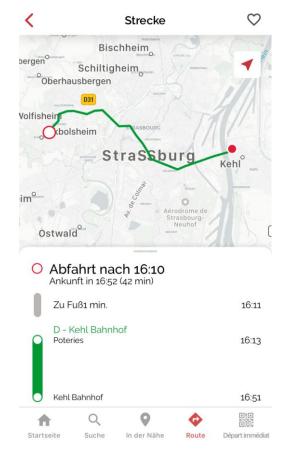
Example 31: Cross-border tram line between Strasbourg and Kehl, France/Germany.















#### No. 32 - Bicycle transport in the Stuttgart region

#### Location

The city of Stuttgart as well as the four neighboring districts Böblingen, Esslingen, Ludwigsburg and Rems-Murr-Kreis with a total area of slightly more than 3,000 square kilometers live about 2.4 million people. In the public transport system of Stuttgart region bike trans port is possible in different ways.

#### Overview

A very special offer is the bike tender of the rack-rail train (Zacke) which permits to take the bicycle uphill. Stuttgart has a share of bicycle transport of 5% in the modal split. Because of this low percentage, there is no significant number of bicycles transported in public transport. Additionally, Stuttgart provides cycling service stations at six intermodal points where commuters can store their bicycle and switch to public transport. As a consequence, for many commuters there is no need to take their bicycles in the trains or buses.

A very recent new service was introduced on the SSB bus line No. 92 which connects the city with the recreation area "Wildpark" from May till October. Because of a huge demand of passengers that like to ride their bicycle in this area, the SSB transport company offers during the weekends and public holidays a bicycle transport on this line (incl. route description). Passengers can place their bike on the special trailer "Rad Tourer" which is coupled in the back of the bus and has space for 15 bikes. Loading and unloading and proper attachment of the bike is done by the passenger. This service is part of a pilot. After evaluating the performance and acceptance of this new service, the public transport operator SSB will decide if they will continue with the "Rad Tourer".

As part of the "Fahrrad2Go" pilot project of the VVS, up to 5 bicycles can be taken along on bus lines 310, 393 and 245 every day, on line 244 on Sundays and holidays directly in the bus or on a bicycle rear carrier. Between 200 and 500 meters of altitude can thus be effortlessly overcome. The aim of the project is to improve the connection between bus and bicycle traffic in order to increase the attractiveness of public transport for passengers and tourists. The loading/unloading on the lowerable rear carrier saves energy and works simply. The operation works via a side-mounted pushbutton. For the bike transport in the bus new hangers were installed in the area of the second door entrance.

#### Contact / Operator and included Stakeholders

Stuttgarter Straßenbahnen AG (SSB) & Verkehrs- und Tarifverbund Stuttgart (VVS)

http://www.ssb-ag.de/Informationen-zum-Rad-Tourer-1125-0.html

https://www.vvs.de/fahrrad2go-rmk/

#### Relevance to Pilot Action 4 / added value for Peripheral Access

The examples of combining bus lines with bicycle transportation in Stuttgart region is related to PA4 as the idea of their pilot action is to implement a bus-system with exactly this intention.

There are different hardware solutions, rules and regulations concerning when combining public transport with cycling. This concrete example of Stuttgart region but also many more within the Study "Bicycles on Board" from CIVITAS Project "2MOVE2" can give an added value to the activities in PA4.

http://civitas.eu/sites/default/files/bikes\_on\_board\_2move2\_di7.02.03.pdf





## **Rad-Tourer**





## Fahrrad2G0









## No. 33 - Alpine Pearls - Holidays in Eco-Motion

#### Location

Alpine Region, Germany, France, Austria, Italy, Slovenia and Switzerland

#### Overview

In 2006, Alpine Pearls was established by 17 member villages, the "Pearls of the Alps". The Association was the result of two successive EU projects (Alps Mobility and Alps Mobility II). Both of these projects originated in an initiative by the Austrian Ministry of Agriculture, Forestry, Environment, and Water Management. The idea behind the Alpine Pearls was to create innovative tourist packages that protect the environment. The results of these EU projects were implemented by creating the transnational umbrella organization Alpine Pearls for the entire Alpine region. Currently 25 Alpine Pearl villages are strung across the entire Alpine area of Germany, France, Austria, Italy, Slovenia and Switzerland.

On the multilingual Homepage www.alpine-pearls.com tourists can choose between 25 Destinations for Softly Mobile Holiday in the Alps. These handpicked villages provide a variety of mobility options ensuring the ability to get around in ways that do not adversely affect the environment. It begins with train and/or bus trip to the accommodation. After arriving numerous shuttle services, hikers' and ski buses, taxicab services, mikro-PT, e-car sharing, bicycles and e-bikes make sure that tourists get around easily. Included is a free access to local public transportation. Local tips and special Alpine Pearls offers complete the all-round service.

#### Contact / Operator and included Stakeholders

ALPINE PEARLS, A-5453 Werfenweng, info@alpine-pearls.com

#### https://www.alpine-pearls.com/en/

Included Stakeholders: Lebensministerium für ein lebenswertes Österreich, ÖBB, DB, MeinFernbus Flixbus, WESTbahn, BCS Bundesverband CarSharing Deutschland, Zipcar, GreenMe, Jojob, Alpenkonvention, Klimabündnis Österreich, Mobilito, CIPRA International, Naturfreunde Internationale, Mobilitätsagentur Wien, Equo Tube, voyageons autrement, verträglich reisen, Ecotrans, Mondial, CAI Club Alpino Italiano, DAV, Bayrische Eisenbahngesellschaft BEG, Stadtradeln, VCÖ, VCD, Green City München

#### Relevance to Pilot Action 4 and 5 / added value for Peripheral Access

In PA4 it is about testing of new approaches for the creation of product packages for tourists based on the enhancement of transport services. Also in PA5 one expected outcome will be the direct link between PT and tourism offers. The good-practice example "Alpine Pearls" combines various mobility needs of tourists with the existing local and regional multimodal mobility measures and communicates them as an attractive package.

The project "Alpine Pearls" can add a value to both PA4 and 5 in how tourism offers can be combined with various mobility measures. Especially for PA5 the example may provide an excitation for the content design of the information boards.

Example 33: ALPINE PEARLS, Germany/France/Austria/Italy/Slovenia/Switzerland.



## **Peripheral Access**



## Our Pearls

## 25 Destinations for your Softly Mobile Holiday in the Alps

Alpine Pearls Switzerland →

Alpine Pearls Germany ->

Alpine Pearls Slovenia

Alpine Pearls Italy →

Alpine Pearls Austria ->

Alpine Pearls France



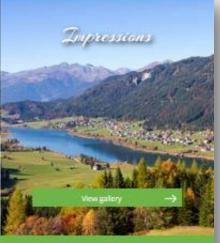




#### Premium Pearl for HIKING

Pack that knapsack and off you go into the picturesque countryside of the Weissensee area

00000



# Guaranteed mobility without your car Special softly mobile services in the Pearl

#### From train station/bus stop to your destination

The shuttle bus takes you from Greifenburg train station directly to you lodging. To book the bus: Tel. +43 (0) 800 500 1905 /

#### NATURE PARK BUS

In July and August, the Nature Park bus operates every half hour in the Websensee area. The rest of the year it operates on an hourly basis.

### HIKERS' BUSES

In the summer, hikers' buses take you to the cable car and to the major trailheads in the area. Use of the bus is free with your "Erlebnispass mobil+".

#### WEISSENSEE CABLE CAR

The cable car takes you to the trailheads for glorious hikes and the mountain bike technical parkour (a circular route with 9 practice

#### \_# 1

An eyrar is available for rent at the toy not information

#### HORSE-DRAWN CARRIAGE & SLEIGH RIDES

Use 1 or 2 horse powers to treat yourself to an idylic ride along the lake

#### **EXCURSIONS BY SHIP**

Ships operate regularly between May and October. Experience Austria's first electro-hybrid passenger boat "MS-Alpenperie".

## P

### ERLEBNISPASS MOBIL + (GUEST CARD)

Free guest card - gives you free access to many green mobility options.

Take advantage of this free card to explore the surroundings without leaving a carbon footprint.

## 늞

## EVENING DIAL-A-BUS SERVICE (SUMMER)

evening, just call and hop on in: +43(0)800 500 1905



#### SKI BUS WEISSENSEE-NASSFELD

In the winter, the ski bus takes you directly to the Nassfeld ski area. Use of the bus is free with your "Erlebnispass mobil+".

## FREE PARKING AT THE ENTRANCE TO THE VILLAGE



if you need to take your car to get here, you can park it free of charge in the parking area P1 at the entrance to Pradiliz. A bus takes you from her directly to the control.

## ර්ර්ර 🍱

Our local Movelo partners provide e-bike rentals. You can also swap

#### **GUIDED SEGWAY TOURS**

BOAT RENTAL IN THE SUMMER

Quiety gilde through the Nature Park with e-mobile power. A guided Segway tour will help you explore more than you ever knew existed. C our Seaway School Weissensoe.



With or without e-power: Domeriig boat rental has a variety of partitionals, e-boats, canoes, and e-water blies.









## No. 34 - Fahrradbus von Aachen in die Eifel (Bikebus and biketrain from Aachen to the Eifel)

#### Location

The Aachener Verkehrsverbund (AVV) includes the cityregion Aachen as well as the districts Düren and Heinsberg. The AVV comprises 35 cities and municipalities covering an area of 2,276 km<sup>2</sup>.

#### Overview

The buses and trains in the AVV give you the opportunity to bring your bike with you.

In the buses marked with a bicycle symbol you can take your bike from Monday to Friday from 19:00 and Saturday from 15:00, on Sunday and public holidays all day. In trains with multipurpose compartment: All day. In trains without multipurpose compartment: 2 bicycles in the entry areas - Monday to Friday from 9:00 to 15:30 and from 18:00. Saturday, Sunday and public holidays all day.

Especially the bike-bus from Aachen in the Eifel region is very attractive for tourists or recreation seekers. Every Sunday and on public holiday from the 14th of April to the 5th of November, you and your bike can travel quickly and comfortably directly to the starting points of the most beautiful cycling tours in and around the National Park Eifel, the Rursee, the Kalltal, Monschau and Vogelsang. The AVV has therefore prepared 11 tours of different lengths and requirements. The tours start and end at the bus stops of the bicycle bus or train stations of the Rurtalbahn. Each bicycle is independent of distance to solve a bicycle ticket. The Fahrrad Tages Ticket NRW for 4,80 Euro is valid on the whole route. For trips in the AVV to Einruhr or Kalterherberg costs a single trip 2.10 euros, a ticket for any number of trips in one day you get for 3.10 euros. The transport takes place within the available space capacities. The bus carries passengers with and without a bicycle. The connection is therefore ideal for hikers. He carries a trailer for up to 24 bicycles.

In order to make travel across the borders of the AVV as easy as possible, AVV tickets can be used on many transition lines to neighbouring regions - even across the border to the Netherlands or Belgium. The illustration below shows the AVV area and destinations that can be reached with most of AVV line tickets and season tickets, even though they are outside the compound area.

## Evaluation results or experiences

The increasing proportion of recreational traffic in local traffic is also noticeable in the AVV. The Eifel National Park is one of the magnets for tourism development in the region. The continuous development of recreational traffic is therefore also a main focus of the AVV and its partners.

## Contact / Operator and included Stakeholders

The Aachener Verkehrsverbund GmbH was founded in 1994 as a municipal taskforce association. It is made up of four regional authorities: Aachen City, Aachen City Region, Düren County and Heinsberg District. The organization of local public transport follows the three-level model: political level, management level, operational level.

https://avv.de/de/freizeit/rund-ums-rad/fahrradbusse; info@avv.de

## Relevance to Pilot Actions 4 / added value for Peripheral Access

This good practice example is strongly related to PA4 which is about implementing a system of





bus lines transporting bicycles in South Moravia Region. All activities therein focus on crossborder regular and tourist transport for cyclists in order to create new opportunities for tourism.

The bike-bus and -train concept of the AVV shows that it is one innovative and trendsetting approach when it comes to a public feeder to regional recreation and leisure activities. Important is an appealing overall concept. Only in conjunction with easy booking options, joint (cross-border) tickets as well as the service of recommended hiking or cycling routes the system becomes a success. Existing measures or cooperation, as for example between the AVV and the regional e-bike-sharing institution "eifelrad" (<a href="http://www.eifelrad.de">http://www.eifelrad.de</a>), can be an added value for PA.

Example 34: Bikebus and biketrain from Aachen to the Eifel, Germany.









## No. 35 - Euregioticket Maas-Rhein (EMR) - trilingual marketing

#### Location

The Euregio Maas-Rhein (EMR) is one of the oldest cross-border working groups in Europe. At the intersection of three countries - the Netherlands, Belgium and Germany - it unites the Regio Aachen, the south of the Dutch province of Limburg, the two Belgian provinces of Limburg and Liège, as well as the German-speaking community of Belgium in a highly respected euregional interest group with at least 3.9 million people.

#### Overview

In view of the further coalescence of the regions in the Euregio Maas-Rhine region, the development of cross-border traffic is becoming increasingly important. Together with partners in Belgium and the Netherlands, the Aachener Verkehrsverbund works on the boundless integration of bus and train. In addition to joint projects with regard to tariffs and the range of services, there is also increased cooperation in the area of customer information. The coordinating office of the Euregional public transport platform, founded in 2003, worked out solutions (based on the "Euregional local transport plan") to problems, such as the completely different technical and administrative framework or tariff systems in the Euregio Maas-Rhine, which is all settled at the AVV. With the EuregioTicket people and tourists can use almost all bus and train lines in the Euregio Maas-Rhein for € 18.50 per day. On weekends and national holidays - whether in Belgium, the Netherlands or Germany - the ticket is valid for one day for max. 2 adults and 3 children under 12 years in the entire Euregio Maas-Rhine. Multilingual publications and euregional networks have also already been implemented. In the avvconnected - App which is available in German, English, French and Dutch, people always have access to the current timetable data for the Aachener Verkehrsverbund, the Euregio Maas-Rhein and NRW. Route planner and departure monitor with real-time data (currently ASEAG, Deutsche Bahn and RVE), information on faults, tickets or CarSharing: avvconnect links mobility information and is the ideal companion to go.

As part of the European research and development program Horizon 2020, the AVV and ASEAG work together with partners from the Netherlands, Luxembourg and Germany in the project European Travelers Club (ETC). The aim of the project is the development of a solution for the interoperable use of electronic tickets across national borders. According to the "roaming" principle known from mobile communications, passengers should be able to use public transport in the neighbouring country with their domestic smart cards.

## Contact / Operator and included Stakeholders

Aachener Verkehrsverbund GmbH

http://www.euregio-mr.com/de/service/bus-und-bahn

https://avv.de/de/ueber-uns/organisation/kooperationen

## Relevance to Pilot Action 4 and 5 / added value for Peripheral Access

The cross-border activities of the AVV together with the Euregio Maas-Rhein, especially their multilingual marketing measures, have a relevance to PA5 and also PA4 in which new crossborder promotion campaigns for tourists and regional passengers are planned.

To get to know the different public relations-measures of the AVV can bring an added value to planned activities in PA. Examples of their (multilingual) use of different social media channels, app, homepage, blog or folder can bring an input for own project ideas.

Example 35: Euregioticket Maas-Rhein, Netherlands/Belgium/Germany.





#### 1 Tag, 1 Preis Entdecken Sie die **Euregio Maas-Rhein** mit Bus und Bahn



Das euregioticket machts möglich. So können Sie für nur 18,50 Euro einen Tag lang in der Euregio Maas-Rhein nahezu alle Bus- und Bahnlinien nutzen. An Wochenenden und nationalen Feiertagen – egal ob in Belgien, den Niederlanden oder Deutschland – gilt das Ticket einen Tag lang für max. 2 Erwachsene und 3 Kinder unter 12 Jahren in der gesamten Euregio Maas-Rhein. Erhältlich ist das Ticket bei den örtlichen Verkehrsunternehmen.

#### 1 dag, 1 prijs Ontdek de **Euregio Maas-Rijn** met bus en trein



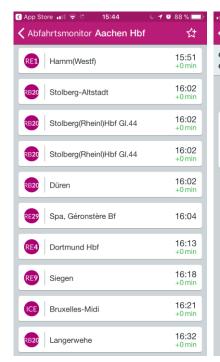
Het euregio**ticket** maakt het mogelijk. Zo kunt u voor maar 18,50 Euro een dag lang in het gebied Euregio Maas-Rijn praktisch alle bus- en spoorlijnen gebruiken. Tijdens het weekeinde en op feestdagen – ongeacht of in Duitsland, België of Nederland – geldt het ticket voor max. 2 volwassenen en 3 kinderen jonger dan 12 jaar een dag lang in de gehele Euregio Maas-Rijn. Het ticket is verkrijgbaar bij de plaatselijke vervoersondernemingen.

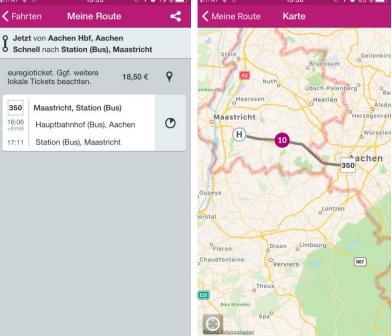
#### 1 jour, 1 prix Découvrez l'**Euregio Meuse-Rhin** en bus et en train



Avec l'euregio**ticket** c'est possible. Pour seulement 18,50 Euro vous pouvez emprunter pendant une journée entière presque toutes les lignes de bus et de trains dans l'Euregio Meuse-Rhin. Les weekends et les jours fériés nationaux—tant belges que néerlandais ou allemands—le ticket est valable pour max. 2 adultes et 3 enfants de moins de 12 ans dans la totalité de l'Euregio Meuse-Rhin. Le ticket est disponible auprès des sociétés de transport en commun locales.











#### No. 36 - Public transport services for bicycle tourists between Austria and Italy

## Location

Alpe Adria - Border region between Austria and Italy

#### Overview

Together with the Friuli-Venezia Giulia region, the province of Carinthia created a cross-border railway connection between Austria and Italy (Villach - Udine) named MI.CO.TRA.

The railway is also of particular importance for tourism on both sides of the border. This project is also proof of how well cross-border cooperation in the sense of "Senza Confini" works. The trains are operated by the ÖBB and the regional Friulian railway company Ferrovie Udine Cividale (FUC). Italian rail company Ferrovie Udine-Cividale provides the engine for the train, while the Österreichische Bundes Bahn (ÖBB) furnishes the carriages. The two companies jointly manage the project. Thanks to the new rail line, tourist numbers at various historic and archaeological sites across the region have risen. These include Palmanova and Venzone. The tourists also appreciate that they are permitted to travel with their bicycles, or skis in winter, on the train.

Each train has two wagons for up to 150 passengers. Each train is equipped with a luggage cart for bicycle transport and can carry up to 100 bicycles. The MI.CO.TRA trains are therefore also the ideal complement to the Ciclovia Alpe Adria bike path (Salzburg-Villach-Grado), because tourists can use this train connection as a return transportation from Grado. For taking the bike with you, the regional ticket price is also valid across borders.

Another supplementary measure on the Italian side is the Bicibus. The BiciBus - service of the public transport company SAF Autoservizi is active from April to September on the Udine - Palmanova - Aquileia - Grado line. The service with connection to MI.CO.TRA Udine-Villach at the Udine train station is intended for passengers with bicycles. The trailer can load a maximum of 20 bicycles. For bicycle transport, the rate of  $\leq$  1.25 is charged. Tickets can also be purchased on the MI.CO.TRA train.

#### Contact / Operator and included Stakeholders

MI.CO.TRA.: ÖBB and the regional Friulian railway company Ferrovie Udine Cividale (FUC), Interreg IV A Italy-Austria 07-13, <a href="https://www.oebb.at/de/entdecken/micotra">https://www.oebb.at/de/entdecken/micotra</a>

Bicibus: SAF Autoservizi, http://www.saf.ud.it/cms/data/pages/000202.aspx

Ciclovia Alpe Adria: <a href="https://www.alpe-adria-radweg.com/en/">https://www.alpe-adria-radweg.com/en/</a>, Interreg IV A Italy-Austria 07-13, Partners: province of Udine, province of Carinthia, province of Salzburg, Carinthia advertising and Salzburger Land Tourismus.

## Relevance to Pilot Action 4 / added value for Peripheral Access

This example is in accordance to pilot action 4 which focuses on train and bus services for tourists, especially bicycle tourists. New services in public transport and the support of bicycle carriage in the cross border region is the objective.

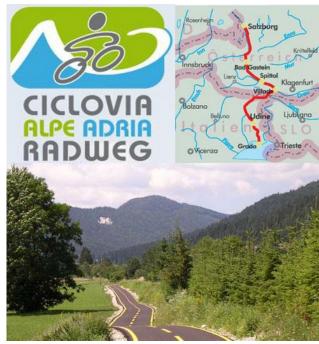
This example gives an insight on how public transport services for bicycle tourists are managed in the border region Austria-Italy. It is a good example on how different train and bus routes are combined with bicycle services and get optimally matched to each other.

Example 36: Public transport services for bicycle tourists between Austria and Italy.

















#### No. 37 - Interactive Tourist Information System (ISIT), Poland

#### Location

Pomerania Voivodeship is a province in north-central Poland with a total area of 18,293 km<sup>2</sup>. One third of the appr. 2.000.000 population is rural. The province is divided into 20 counties (powiats): 4 city counties, and 16 land counties.

#### Overview

Tourism in Poland is one of the fastest growing sectors of economy. Yearly increase in the interest of domestic tourism makes the regions face higher and higher expectations of tourists. Increasing tourism brought about the idea to create a modern interactive tourist information system for Pomeranian Voivodeship, in accordance with modern standards of information exchange and facilities offered by the modern technology. ISIT, the Interactive Tourist Information System as part of the initiative Pomorskie.travel is the largest and most modern tourist information network in Poland and Europe, using interactive technology of digital signage in public spaces. The system of LCD STANDS includes 245 screens: 170 internal screens (42-inch) and 75 external screens (46-inch). The goal of the Interactive Tourist Information System (ISIT) is satisfying information needs of recipients who are planning their stay or are currently staying in the Pomorskie Voivodeship, by using the visual capabilities of information transfer. Right from the street, tourists can easily access information on all aspects of the region's life (culture, services, public transport, tourist products, tourist activities and leisure planning). The system comprises a network of 245 interactive screens in strategic locations. Each station provides visitors with information in six languages from the area and a diverse array of tools to plan their visit.

#### Evaluation results or experiences

The first interactions of tourists with LCD STANDS proved that both the interface and ergonomics, and the construction of the device, fulfilled all the expectations, and the project itself carries out all the set targets successfully. Winner of the 2013 UNWTO Award.

## Contact / Operator and included Stakeholders

Pomorskie.travel, Pomorskie Voivodeship, http://pomorskie.travel/en

DDS Poland Sp. z o.o., 81-810 Sopot, Poland, <a href="http://ddspoland.com/wp-content/uploads/2015/04/DDS-Poland-case-study-Pomorskie-Travel-ENG.pdf">http://ddspoland.com/wp-content/uploads/2015/04/DDS-Poland-case-study-Pomorskie-Travel-ENG.pdf</a>

This initiative is only possible due to an industry wide partnership of over 100 local self-government units and more than 20 local tourists' organizations, tourism businesses, attractions and academia.

#### Relevance to Pilot Action 4 / added value for Peripheral Access

This project has a relevance to PA4. The objective there is to develop and install modern, trilingual information boards at 30 stops of the cross border railway line Gera-Plauen-Cheb in order to increase the attractiveness of the stops for tourists mainly.

This example shows how comprehensive information for tourists can be digitally combined, made accessible and individually usable. It helps people to plan their visit or get local information in different languages. Therefore the project could bring an added value to the investment in the Vogtland border region, which has similar objectives.

Example 37: Interactive Tourist Information System (ISIT), Poland.















## No. 38 - Citizens' Rail / The beach train - a revitalized line

#### Location

The Pays de la Loire is located at the mouth of the Loire region in western France. It consists of the Loire-Atlantique, Maine-et-Loire, Mayenne, Sarthe and Vendée. The region has an area of 32,082 km² and 3,690,659 inhabitants (as of 1 January 2014). The capital of the region is Nantes, other important cities are Angers and Le Mans. La Roche Bressuire line passes through the region between La Roche-sur-Yon & Saumur, whose revitalization was the subject of the EU project "Citizens' Rail".

#### Overview

The objective of the EU project "Citizens' Rail" was to help more people to use and be part of their local train services through new and refurbished station buildings, more frequent services, volunteering, social outreach and local marketing campaigns. To revitalize the line between La Roche sur Yon - Saumur in France was one of the activities:

Despite the potential importance of the line for rural and coastal communities, services were infrequent and passenger numbers were sometimes chronically low. The response to this situation was four-pronged - consisting of: Additional services: Citizens' Rail enabled extra services, which began with the hugely popular weekend "Beach Train" in summer 2013. The "Beach Train" returned in 2014 and 2015 for an extended season. Community engagement: Citizens' Rail's local partner engaged organisations ranging from the school transport authority to the existing line forum to assess how the line can best serve local residents, visitors and the area's economy. Marketing campaigns: A big part of the success was a new stylish marketing campaign. The additional trains were backed by marketing campaigns to raise awareness about the line and get people to take a fresh look at rail travel. This included a catchy name - calling the coast-bound weekend service "The Beach Train" - and attractive retro-themed branding. The campaign also used unconventional methods to spread the word, including advertising on baguette packaging. The results saw thousands of extra journeys made and The Beach Train extended for a longer season in subsequent years. Station improvements: Several stations benefited from improvements such as bike parks, information upgrades and shelters. For example, read more about the bicycle parking installed at stations on the line (see Example 39).

## **Evaluation results or experiences**

The Citizens' Rail approach was shown to be an innovative, low cost way to boost the economy, tackle local transport needs and re-connect isolated populations (see the <u>interactive poster</u> to find out more). The marketing activities in Pays de la Loire brought 20,000 extra journeys in 2015 and 90% satisfaction rating from passengers.

The project participants of "Citizen's rail" developed a toolkit (available in English, French and German) to provide inspiration, advice and guidance on how to implement community rail projects. As relevant for PA projects the following link guides through ideas how to attract more users (printed and online marketing, promotion & events). As part of the toolkit, RWTH Aachen University and the University of Central Lancashire produced an indepth guide to evaluating community rail projects.

#### Contact / Operator and included Stakeholders

The EU Citizens' Rail project ran from May 2012 to September 2015





(<a href="http://www.citizensrail.org">http://www.citizensrail.org</a>). It worked to develop local and regional railways by involving the community. The projects spanned the UK, France, Germany and the Netherlands as part of the EU Interreg IVB NWE programme. Local partner in this example was the Conseil Régional des Pays de la Loire (<a href="http://www.paysdelaloire.fr/">http://www.paysdelaloire.fr/</a>):

http://www.citizensrail.org/pays-de-la-loire/la-roche-sur-yon-bressuire-saumur-line/https://www.youtube.com/watch?v=y9CgxD1ZVng

## Relevance to Pilot Action 4 and 5 / added value for Peripheral Access

This example has a strong relevance to PA 4 and 5 because in both activities the respective project partners want to develop and/or implement new promotion and marketing campaigns in order to attract PT.

This example provides inspiration, advice and guidance on how to promote and implement rail projects. The toolkit can give an added value for PA's activities in the questions of how to attract existing lines, to create better stations, to get people involved or to evaluate success, which are all very important questions for PA 4 and PA 5 too!

Example 38: Citizens' Rail / The beach train - a revitalized line, France.







## No. 39 - Citizens' Rail / Cycle parking at rural stations in Pays de la Loire

#### Location

Region Pays de la Loire is working to revitalise rural stations and enhance the La Roche - Bressuire line as part of Citizens' Rail project. The latest step is the installation of bicycle parking at a number of stations. The Pays de la Loire is located at the mouth of the Loire region in western France.

#### Overview

The objective of the EU project "Citizens' Rail" was to help more people to use and be part of their local train services through new and refurbished station buildings, more frequent services, volunteering, social outreach and local marketing campaigns. Several stations benefited from improvements such as bike parks, information upgrades and shelters. Region Pays de la Loire was working to revitalise rural stations and enhance the La Roche - Bressuire line as part of Citizens' Rail. One step was the installation of bicycle parking at a number of stations. Bicycle parking bays have been installed at Boussay and at La Mothe-Achard and Olonne-sur-Mer on the La Roche - Bressuire line.

They installed the so called "Cyclo-block" at the above mentioned stations. With the Cyclo block a modal Shift is promoted by the installation of special equipment. A special metal structure that is surmounted by a cap ensures the safety of the bikes in three ways: Fixation of the wheel in a rail, blockading the front wheel with a chain and padlock (not included), protection of the saddle from precipitation. The frame can be painted or galvanized as desired. Cyclo-blocks ensure a safe bike-storage at train station.

## Evaluation results or experiences

The project participants of "Citizen's rail" developed a toolkit (available in English, French and German) to provide inspiration, advice and guidance on how to implement community rail projects. As relevant for PA projects the following link guides through ideas how to <u>create better stations</u>. As part of the toolkit, RWTH Aachen University and the University of Central Lancashire produced an <u>in-depth guide</u> to evaluating community rail projects.

### Contact / Operator and included Stakeholders

The EU Citizens' Rail project ran from May 2012 to September 2015 (<a href="http://www.citizensrail.org">http://www.citizensrail.org</a>). It worked to develop local and regional railways by involving the community. The projects spanned the UK, France, Germany and the Netherlands as part of the EU Interreg IVB NWE programme. Local partner in this example was the Conseil Régional des Pays de la Loire (<a href="http://www.paysdelaloire.fr/">http://www.paysdelaloire.fr/</a>).

https://www.youtube.com/watch?v=UwXaj1FqqpE&feature=youtu.be (how to use Cyclo-block); http://www.quadria.eu/produit/cyclo-bloc/

#### Relevance to Pilot Action 3 and 4 / added value for Peripheral Access

This example has a strong relevance to PA 4 because in their activities the project partners want to think about new bicycle infrastructure at railway stations.

This example provides an idea of how to equip railway stations with suitable bicycle infrastructure. The toolkit can give an added value for PA's activities in the questions of how to create better stations in order to include new bicycle services, which is a very important for PA 4! Also for the PA 3 which is the conceptual development of an





intermodal regional railway station in Lubin region this toolkid can bring an added value.

Example 39: Citizens' Rail / Cycle parking at rural stations in Pays de la Loire, France.









## 5. Summary & Conclusion

EU wide and beyond 39 good-practice examples could be collected which more or less address all activities in the project and thus serve as benchmarks for Peripheral Access. The degree of innovation both in examples of city-regions and cross-border regions is very high. Especially in times of internet-based, interactive solutions, public transport - even in peripheral regions - can benefit because never before such flexible and low-threshold mobility services could have been created in order to make public transport more attractive. Not only the practical view on mobility topics but also the relevant strategic EU policy frames show that Peripheral Access is within the most forward-looking topic in the field of an integrated regional development and addresses exactly the therein identified challenges and trends. The project seeks to benefit from this situation and wants to improve rural mobility infrastructure, services and behaviour through its innovative activities in the three fields of multimodality, ICT / ITS solutions and new governance / marketing approaches. The benchmark examples helped all project partners and stakeholders on how to better align their regional analysis and pilot activities.

Under the following link all collected good-practice examples are located along their numbers in order to share a summarizing overview:

https://www.google.com/maps/d/edit?mid=1EOqkMnuDCvDN2vyGxiYTcYcAEZDqhnIe&ll=52.3533 4936784349%2C8.944688199999973&z=5







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Reference 7: European Commission, Transport research and Innovation: Policy - Challenges and solutions. http://ec.europa.eu/research/transport/index.cfm?pg=transport&lib=rail	11
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