Project Stories from the CENTRAL EUROPE Programme Sustainable Public Transport and Logistics







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### Editorial

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The economic productivity of a region is strongly linked to efficient freight transportation. Good accessibility is crucial to participation in international freight flows. Currently, the ease of access to different places still varies greatly in central Europe: There are highly connected, central regions but also large rural and peripheral regions, where missing or neglected transport lines cause weak accessibility.

CENTRAL EUROPE projects help to improve international traffic flows, encouraging intermodal transport, and thereby enhancing access to regions. A good example is BATCo (p.18), which develops tools to visualise and remove bottlenecks, while ChemLog (p.28) prepares investments for intermodal freight services. SoNoRa (p.58) provides policy advice on green transport corridors, and INWAPO (p.46) encourages freight shift to waterways.

In addition to freight transportation, CENTRAL EUROPE projects are promoting the use of clean public transport for safer and smarter mobility. It is estimated by the European Environmental Agency that cars are responsible for 14 percent of the total CO2 emissions and 50 percent of all transportation emissions. Alternatives to private car use such as walking, cycling and public transport – need to be made safer and more attractive. Citizens also have to be offered more efficient links between the different modes of transport.

Good examples on greener mobility are INTER-Regio-Rail (p.44), which improves mobility tools and services for passengers as well as Central MeetBike (p.22), which advises on integrated urban and regional planning for cycling. The TROLLEY project prepares investments for public transport facilities (p.62) while SOL (p.56) puts safety on the roads first.

This booklet introduces you to the CENTRAL EUROPE story, showcasing 25 transport projects that were co-financed since 2007. We hope that it will serve as a valuable starting point for discussing achievements of our projects, and that it will inspire you with ideas about what can be done further and what directions should be taken in 2014-2020.



Christiane Breznik, City of Vienna, CENTRAL EUROPE Managing Authority

## CENTRAL **EUROPE** Cooperating across borders for the regions

The cities and rural regions of central Europe share a common history as well as similar social and cultural characteristics. The area covers more than one million square kilometres, stretching from the Baltic Sea in the north to the Mediterranean Sea in the south, with less clearly defined borders to the west and east. It is home to 150 million people – benefitting from transnational cooperation through the CENTRAL EUROPE Programme since 2007.

Despite their common characteristics, the regions of central Europe are marked by diverse features: Major differences are apparent in terms of climate conditions, land use, settlement and economic structures, accessibility, and ecological challenges. There are also big differences in central Europe's political and administrative structures, which are among the most heterogeneous in the European Union. The challenge is to use central Europe's diversity as an opportunity to promote more sustainable development of the area – by fostering increased cooperation among a wide range of actors from various countries and regions.

#### CENTRAL EUROPE 2007-2013

The CENTRAL EUROPE Programme has generated ample opportunities for closer cooperation among public authorities, institutions and private businesses from nine central European countries: Austria, the Czech Republic, Germany, Hungary, Italy, Poland, Slovakia, Slovenia and Ukraine. By cofinancing 124 projects, the CENTRAL EUROPE Programme has helped to improve local and regional innovation, to increase accessibility, to preserve the environment and to

enhance the competitiveness and attractiveness of regions within central Europe.

Since 2007 the CENTRAL EUROPE Programme has invested more than EUR 230 million on transnational projects supporting:



Technology transfer and business innovation



Sustainable public transport and logistics

Environmental risk management and climate change



Energy efficiency and renewable energies

Demographic change and knowledge development

Cultural heritage and creative resources



# 498 ()()()()()

Euros of investment being prepared by CENTRAL EUROPE projects

We need to build on the rich and valuable experience gathered through transnational cooperation. There is much evidence that a series of challenges cannot be tackled solely at the level of a single Member State, or even at regional level, but only in a cross-border context.

Johannes Hahn. European Commissioner for Regional Policy



Euro cents spent per citizen per year on financing CENTRAL EUROPE projects

Partners involved in **CENTRAL EUROPE** projects

#### Cooperating for citizens

CENTRAL EUROPE projects all involve joint efforts by stakeholders from different countries. This approach is designed to improve people's day-to-day lives by addressing problems that do not necessarily recognise national borders. Issues have been tackled at the territorial level where they occur, which is the regions in central Europe. Transnational cooperation allows partners to take advantage of the added value of doing things together, so they can prevent duplication and speed up developments with a higher impact.

More concretely, CENTRAL EUROPE projects:



Leverage additional money and investment

Come up with new economic strategies and involve local communities

Increase efficiency on various levels

Improve spending of public money

Support the adaptation of EU directives to regional contexts

Strengthen regional networks and involve local communities

Influence the policy agenda on all political levels

#### Contributing to Europe 2020

Transnational cooperation driven by the CENTRAL EUROPE Programme is firmly embedded in the strategic policy frameworks on the European, national and regional levels. Many of CENTRAL EUROPE's projects have already been contributing to the Europe 2020 Strategy and its mutually reinforcing goals of smart, inclusive and sustainable growth in Europe. This approach to development is expected to help the EU and Member States deliver high levels of employment, productivity and social cohesion. Concrete actions of the 2020 Strategy are designed to reach ambitious targets in five areas: employment, innovation, education, social inclusion and climate and energy.

The CENTRAL EUROPE Programme, and the transnational cooperation between actors on the ground, plays an important role in meeting these targets on the regional level even though the programme only used 0.07 percent of the total budget available for EU Cohesion Policy in 2007-2013.

#### CENTRAL EUROPE 2014-2020

In the programming period 2014-2020 the CENTRAL EUROPE Programme will continue to support regional cooperation among central European countries. Croatia is the latest country to join the programme, which also includes Austria, the Czech Republic, Hungary, Poland, Slovakia and Slovenia, as well as parts of Germany and Italy.

The overall objective of the CENTRAL EUROPE Programme is "to cooperate beyond borders to make central European

Topics like demographic change will be tackled horizontally. The focus of activities will be on policy-learning and implementation-oriented approaches at the transnational level. More concretely, actions will include the development and implementation of strategies and action plans, the development, testing and implementation of tools, the preparation of larger investment, the implementation of pilot actions - including pilot investments - as well as capacity building measures including training.

cities and regions better places to live and work". Put more precisely, transnational cooperation should become the catalyst for implementing smart solutions that answer to regional challenges in the fields of:

- Innovation and knowledge development
- Low carbon cities and regions
- Environmental resources
- Cultural resources
- Transport and mobility

More detailed information on the new CENTRAL EUROPE Programme is available online at www.central2020.eu

### **COOPERATING ON TRANSPORT** 2007-2013

### **CENTRAL EUROPE AT A GLANCE**





Data: April 2014

## ANALYSIS

### Cooperating to get transport going in a greener direction

Modal shifts in long-distance freight transport from road to rail and waterborne transport have been tackled within CENTRAL EUROPE projects. This was done through developing cooperation structures or improving access to European sea ports or through establishing strategic cooperation between and within trans-European transport corridors.

komobile, Austria

When it comes to transportation of passengers and freight, central Europe has been going in the wrong direction: The share of sustainable transport modes has been decreasing over the last decade as the number of trips taken by car has increased in many regions.

An analysis of CENTRAL EUROPE projects in the area of Sustainable Public Transport and Logistics shows how these initiatives helped to reverse this troubling trend. The projects worked to improve the "modal split", by shifting the types of transport used to more sustainable modes, like railways and waterways.

Projects targeting sustainable passenger transport promoted the goal of getting people to reduce the use of fossil-fuel cars and instead use public transports or other sustainable alternatives. Whether through encouraging cycling, promoting electric vehicles or by other means, the projects allowed for sharing and testing of best practices in this area. When it comes to freight, the analysis, conducted by komobile, found that CENTRAL EUROPE projects focusing



on Sustainable Public Transport and Logistics helped shift transportation of cargo off the road and on to railways, rivers and other cleaner forms of transportation. In addition, the analysis found, that various projects helped to improve logistics planning, as a way to reduce emissions in the freight transport chain.

While the scope of the CENTRAL EUROPE Programme was not big enough to fund major transport infrastructure investment, the komobile analysis found that these projects were able to achieve tangible progress toward sustainable transportation via sharing of information and pilot efforts that tested new solutions.

#### Forwarding efforts in transport and logistics

The komobile analysis showed that projects focusing on Sustainable Public Transport and Logistics helped to protect the environment and forwarded EU goals through a variety of approaches, especially:

- Green house gas reduction and energy-efficient transport: Several projects concentrated on promoting a shift in the modes of transportation used for passenger and freight transport. These projects encouraged energy efficient transport modes, such as non-motorised transport, public transport and use of rail or inland waterways.
- Intelligent transport systems: The use of information and communication technologies, particularly intelligent transport systems, can facilitate information exchange in multimodal logistics chains. Better communication through multimodal platforms and eLogistics solutions make it easier for diverse logistics businesses to cooperate, for more efficient and sustainable handling of freight. In passenger transport, CENTRAL EUROPE projects used real-time traffic data and other information technology tools to enhance multimodal services and improve door-to-door mobility.

• Development of the Trans-European Transport Network (TEN-T): CENTRAL EUROPE projects have participated in the process of revising TEN-T while also helping to develop its core network. Projects aimed at specific transport corridors – such as the Baltic-Adriatic Corridor, South-North Axis and Central Axis have helped to close missing links along these routes. • Improved environmental guality and reduction of transport emissions: By promoting modal shifts to more efficient transport and introducing new technologies – such as encouraging the use of zero emission vehicles - CENTRAL EUROPE projects are forwarding basic EU goals for sustainability.

process.

Overall, the analysis found, that CENTRAL EUROPE projects are well-aligned to European policy objectives, with some projects actually anticipating more recent objectives. Furthermore, the cooperation networks established through these projects help to support the European integration

In general the benefits of these projects were clear: They encouraged better approaches to the challenges of transport and sustainability through transnational cooperation. Thanks to these efforts, central Europe is being redirected toward a more sustainable route to the future.

To download the complete analysis visit http://www.central2013.eu/thematic-studies

# Sustainable public transport and logistics

Cooperating to move people in a safer and greener way

Cooperating to connect the regions and put freight on a greener track

## **PROJECT STORIES**



## - Cooperation gives a lift to airport regions

1

A well-planned airport that is integrated with the surrounding areas can provide an economic boost to an entire region. The airLED project involves four central European regions in elaborating long-term development concepts for economically isolated airport areas. The project analyses the needs of "Airport Cities" and supports bodies representing stakeholders in airport development.

As business markets become national and international in scale, airports and their adjacent areas are being seen as catalysts for local economic development. The economic advantages accruing to airport catchment areas extend well beyond their immediate location, and provide an opportunity to enhance the competitiveness and cohesion of the whole central European region.

To assist in this process, the airLED project studied the impact of airports and encouraged best practices in planning airport development.

The project used status-quo analyses in the four airLED

regions, looking at the current status of key factors that influence an airport region's future development. These reports focus on the spatial, environmental, architectural and economic character of the areas around airports, as well as the need for environmental protection. The factors are analysed according to their effect on "direct" impact zones near the airport and "indirect" impact zones a little further away. Project researchers also investigated the current financial and infrastructural position of the airports and their business partners, to determine the possible size and volume of future economic developments.

The airLED case studies of airports in different phases of their lives do not simply tell us what the critical factors are, but also throw some light on the possible solutions to problems and the various development paths that can be taken.

Krisztián Karácsony, Senior Consultant of Ecorys Hungary Kft., Budapest, Hungary

Additional research by the product included an EU stateof-the-art report, which gives some insight into the current state of European airports and the regions surrounding them. The study aims to provide an evaluation of the situation in the European airport market, taking stock of new trends, new challenges airports and surrounding regions face - and possible answers to these challenges.

#### Success factors

Using their research, project partners were able to lay down airport city criteria for determining the potential of airports. Top priorities include a good location, a gualified workforce and a favourable investment environment. But the first criteria, location, is given for each region, so the challenge stakeholders face is making the most of where they are. To help stakeholders from each region meet this challenge, the project invited them to join regional development coordination bodies and take part in regular meetings, where they can share ideas and experiences.

Using the ideas produced through these meetings, and the project's research, airLED seeks to develop clear strategic plans that can be communicated effectively. The project encourages creation of economic zones, where investors are entitled to allowances like tax breaks, good infrastructure, skilled manpower and a generally favourable economic and social environment. These zones can provide direct and indirect incentives to boost investment, and a follow-up-care policy can be adopted to keep investors in the city over the long term.

The airLED project results in an economic development plan that can be integrated into local, regional or national plans. It also provides its partner cities with databases, publications and other tools to attract the kind of investment that can help create jobs.



Billion passengers passing through Europe's airports every year

Common vision: to become an airport city



Project: airLED ERDF funding: €1 367 270 Duration: 2012 – 2014 Website: www.airled.eu

Transport is the lifeblood of the European economy. And if it does not flow smoothly, our economy will weaken and fail to grow.

Siim Kallas, European Commission, Vice-President and Commissioner for Transport

1C

## A green corridor for Baltic-Adriatic transport

The transportation corridor that leads through central Europe, connecting the Baltic and Adriatic seas, must grow to accommodate greater commerce, but it is important that this growth is green. To protect the environment and speed traffic flow in the "Baltic-Adriatic Axis", BATCo is working to ensure that an optimum rail network is allowed to keep pace with the road network in this corridor.

Since the eastern expansion of the European Union added ten member states in 2004, countries along the former border between "old" and "new" Europe have been seeking to improve connections among each other by improving infrastructure for a comprehensive road and railway network. In 2010, in view of the then still upcoming revision of the Trans-European Transport Network (TEN-T), 18 partners from Austria, the Czech Republic, Italy, Poland and Slovakia came together in the BATCo project to attempt to positively influence transport planning for the Baltic-Adriatic Axis. BATCo undertakes technical, environmental and economic

interventions to help ensure that the Baltic-Adriatic Axis the easternmost north-south railway corridor in Europe – is developed as a green transport corridor.

#### Better rail infrastructure for greener transport

Using state-of-the-art transport models to forecast future trends, BATCo demonstrated that the overall transport volume in the European Union can be expected to increase by as much as 60 percent by 2030. The projections also show that, unless something is done to alter current trends, the

share of traffic handled by rail would decrease, while road traffic in the corridor would increase significantly. This would mean a growth in lorries hauling freight and a consequent increase in air and noise pollution, road accidents and traffic congestion. To help counteract the current trend, BATCo is demonstrating the importance of improving railway infrastructure, in particular through the removal of infrastructural, operative and legal bottlenecks, to maintain or improve the current ratio of rail-to-road traffic. In order to actually increase the total share of environmentally friendly railways, it is important that the improvement of rail infrastructure is accompanied by policy measures such as higher road pricing or prohibitions on night driving for trucks – at the European, national and regional governing levels. BATCo's efforts help to support such policy measures by offering the information that policy makers need to make the right decisions.

#### Supporting the logistics sector and transnational trade

It is easier for enterprises to benefit from an improved railway infrastructure if there are more innovative transport and logistics services. To encourage such services, BATCo supported a pilot to demonstrate the special role Logistics Competence Centres (LoCCs) can have in serving as an incubator for transport and logistics businesses. A "Transnational Logistics Centre Incubator Concept" elaborated by BATCo is currently being implemented as a pilot at ALPLOG Carinthia, located in Villach/Fürnitz, Austria.

Along with encouraging greener transport in the Baltic-Adriatic Axis, BATCo is also promoting the kind of trade throughout the area that will make use of that transport. By establishing transnational contact points, the project supports international business activities that can use the corridor to fuel economic development.

### 1820 Length in kilometres of the Baltic-Adriatic Axis

European regions connected by the Baltic-Adriatic Axis

Hours less to travel from Gdansk (PL) to Venice (IT) by rail due to infrastructure measures



Project: BATCO ERDF funding: €2 802 112 Duration: 2010 - 2013 Website: www.baltic-adriatic.eu



## Cycling toward more liveable cities

As central Europe faces problems caused by excessive automobile use – including increasing traffic congestion, pollution and health problems – one obvious solution is to steer passengers away from cars and toward bicycles. That is the idea behind BICY, a project that allows diverse regions from different countries to share experience and ideas so they can devise strategies to promote bicycle use.

Efforts to increase cycling and reduce the use of automobiles have been shown to have a positive impact on community spirit and quality of life in many European cities. Explaining the benefits of a greater ratio of bicycles to cars, and showing how this ratio can be encouraged, is a big part of the work of the BICY project. For example, BICY put out a concise brochure entitled "Trendy cycling: 20 good reasons for cycling", which is translated into seven languages. Research detailed in the brochure includes a study showing that cycling is often the fastest way to move around a city centre. Statistics also show the public health benefits of

cycling: Deaths due to pollution and a lack of exercise were found to be four-to-six times higher than the number of traffic fatalities linked to bicycle use. What is more, a study in Denmark showed that cyclists are 30 percent more likely to live longer, so that every two euros invested in cycling means a five euros savings for the health system. Other research shared via the BICY project also helps prove that switching to cycling is easy. According to the transnational study elaborated by the University of Bologna for BICY partner cities, every other trip made by automobile covers a distance of less than five kilometres. This means

Cycling has so many advantages that an entire novel could be written about it.

Heidi Schmitt. Head of ARGUS Cycling NGO, Graz, Austria

50 Percentage of car trips in cities that could be done by bike because they are shorter than five kilometres

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half of those car trips could have easily been done by bike. The same study shows that cities can do a lot to encourage these bike trips: It presents research proving that adding only 10 cm of bikeway per citizen can increase the share of regular bike trips on average by almost two percent.

#### A strategy to promote cycling

BICY works to promote cycling in central European cities and regions by developing a transnational strategy to generate, share and exchange approaches that can support a widespread shift towards cycling mobility. For instance, the BICY forerunner cities of Graz and Ferrara demonstrated that city-wide speed limits of 30 km/h, or access restrictions for motorised transport, help to increase the number of cyclists.

Using BICY's transnational strategy, municipalities participating in the project have begun implementing exemplary initiatives. A Cycle Chic website established in Graz helps to make cycling fashionable, particularly among younger people. In Graz, Budaörs, Prague and Erfurt, training for children from secondary schools helps them learn how to cycle to school on their own.

Innovative services developed through BICY pilots include bicycle counters installed in Ferrara, to quantify the number of cyclists and to support strategies that help make the city more bike-friendly every day. Ravenna has opted to invest in bicycle parking facilities at train stations, in order to encourage bicycle use, especially among tourists. The cities of Graz and Velenje are implementing different bicycle rental systems, and in Budaörs a video surveillance system to prevent bicycle theft will help increase the number of cyclists.



Euros in health costs could be saved for every two euros invested in bicycle traffic

Centimetres of bike routes per citizen needed to increase the share of urban bike trips by two percent

Project: **BIC**Y ERDF funding: €1 633 693 Duration: 2010 - 2013 Website: www.bicy.it

## Cycling towards cleaner urban mobility

Increasing the number of trips that city dwellers make by bicycle can reduce pollution and traffic delays caused by overreliance on automobiles. By adapting a successful German programme to the needs of the Czech Republic, Poland and Slovakia, Central MeetBike helps regions analyse local circumstances and alter policy to encourage use of bicycles and public transport.

Bicycle transport is underdeveloped in the central European area: Although we now have a great deal of information and experience with cycling, the status quo of the central European countries remains almost the same. The countries participating in the Central MeetBike project are trying to improve the situation through a solution that involves systematic training and an integrated approach to transport planning.

The project seeks to change attitudes about transport planning and to teach politicians, officials and experts to integrate a wide range of concerns into the process. New

Czech, Slovak and German national cycling strategies ushered in a better way to handle promotion of cycling — from the government level through the regional and local one.

#### Integrated approach requires training

Comprehensive spatial design that allows safe movement of all modes of transport is not only cost-effective but also more feasible than other approaches, and it reaches more target groups. Nonetheless, measures to promote cycling often encounter problems during planning. It can be

The Czech and Slovak national cycling strategies can serve as an example for other European countries that are lacking such a government document.

Daniel Mourek. Vice-President of the European Cyclists' Federation

Government-approved cycling strategies

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difficult to ensure cooperation of all stakeholders in planning because experienced experts are needed and the communication process takes longer and is more difficult. Central MeetBike works to encourage integrated planning that balances modes of transportation by increasing the number of trips taken by bicycle and reducing dependence on motorised transport. An integrated approach to planning requires training for professionals, who need to embrace new ways of thinking and to cooperate across different departments.

To this end, expert materials prepared for a successful programme run by Technical University Dresden were transformed for use in Central MeetBike's "Bike Academy" training programme, which is used as an educational tool to raise awareness of professionals.

The goal of this approach is to make sure that people living and working in a city take part in the creation of an action plan. If they are going to understand the issues and challenges involved in planning, citizens and other stakeholders should be assisted by a mixture of e-learning, joint discussions and consultations over the actual situation in the field.

#### National cycling strategies

Even the best cycling action plan can run into obstacles, both in terms of legislation and funding. Central MeetBike helps planners address obstacles by providing a publication on "Three Principles" to develop a national cycling strategy. This information has been tested in the Czech Republic and Slovakia, and applied in government-approved cycling strategies. The project's experience can serve as an example for other European countries that lack such a strategy. In fact, cycling strategies reflect not only the current situation in relevant states, but also trends promoted by the European Commission and Parliament.

Principles to develop a national cycling strategy defined by the project



Pilot investments creating better conditions for cycling



Project: Central MeetBike ERDF funding: €2 271 743 Duration: 2011 – 2014 Website: www.centralmeetbike.eu

# Cooperating to create an integrated region

At the intersection of Austria, the Czech Republic, Hungary and Slovakia, Centrope is emerging as a new transnational region. Since the first partners got together to initiate the idea of Centrope in 2003, a total of 16 regions and cities have been committed to strengthening cooperation in the region. The CENTROPE CAPACITY project further develops the overall framework for this cooperation and sets up lead initiatives in key thematic fields where regions can work together.

With 6.5 million inhabitants, complementary markets and cross-border mobility, the Centrope region offers a model of successful European integration. The region boasts the knowledge of 25 universities and hundreds of research institutes, the competitive edge of innovative, outward-looking entrepreneurship and the creativity of people living in a confluence of languages and cultures. The central European region of Centrope has the potential to achieve sustainable growth and high liveability through balanced development in a borderless, polycentric area.

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To help unleash this potential, CENTROPE CAPACITY organised top-level semi-annual summit meetings that have created a new political framework for forging a common agenda. Supported by a transnational agency – with dedicated offices in all four partner countries as well as a coordination office – Centrope cooperation allows the regions and cities involved to translate their leadership into a multi-faceted development programme. In the process, the agency generates ideas for new projects, develops plans, involves stakeholders and publicly promotes the Centrope concept.

In the beginning, we agreed that infrastructure and mutual accessibility should be major concerns for the Centrope region. Now we move forward with an ambitious agenda, and our citizens will soon be able to enjoy improved and customer-friendly public

transport services between our regions.

 Regional knowledge • Human capital Spatial integration • Tourism and culture



Pavol Frešo. President of the Bratislava Self-Governing Region, Slovakia

Activities focus on four areas of strategic cooperation:

The CENTROPE CAPACITY project provides the platform for

working groups, symposia and expert circles to develop a

set of multilateral lead projects ready to be implemented

selling points, brand values) and resulted in the slogan "Meet Europe. Meet Centrope". Future marketing efforts of

the Centrope partners can build on this emerging brand.

in the years to come. A professional branding process was used to define the cornerstones of a cohesive regional brand

that specifies core elements of the Centrope identity (unique

### Pilots boosting the project at large

Three large-scale pilot activities have been undertaken to encourage the development of the Centrope agenda:

- Regional Development Report (RDR) providing regular analysis and policy recommendations for a highly integrated economic area.
- Infrastructure Needs Assessment Tool (INAT) aiming to point out the most pressing bottlenecks in cross-border transport connections and to take the first steps towards an integrated public transport association in the Centrope region.
- Centrope tourism portal representing a new tool for marketing the destination to residents and visitors alike.

These pilots also support the overall political process of strengthening ties within the Centrope region. For example, results of the INAT pilot were used for a paper that calls for formulation and implementation of a comprehensive transport strategy. Likewise, RDR results will facilitate activities to strengthen cross-border cooperation in research, technology and innovation.

16 Regions and cities cooperating in Centrope

## 6 500 000

Inhabitants living in the Centrope region

Distance in kilometres between the two Centrope capitals Bratislava and Vienna

2003

Year when the Centrope region was initiated

Project: CENTROPE CAPACITY ERDF funding: €3 480 250 Duration: 2009 – 2012 Website: WWW.centrope.com

# More accessible airports for softer landings

An airport can increase the accessibility of any region, but the benefits of air connectivity will only be truly realised if it is easy for passengers to get to, or from, their plane. CHAMPIONS helps central European regions achieve the accessibility that aids economic and social development, especially by focusing on improving public transportation connecting airports with their surroundings.

The impetus for the CHAMPIONS project arose a few years ago, during planning for the 2012 UEFA Football Championship in Ukraine and Poland. The expected influx of tourists put a focus on the need for better accessibility at airports in central Europe. CHAMPIONS was designed to strengthen the cohesion of regions and cities in central Europe by making them more accessible. The project especially focuses on increasing accessibility by enhancing public transport links between airports and the regions around them – and also by encouraging new flights.

The resulting improvements in long-distance accessibility

help make the involved regions more attractive for the business community as well as for tourists. In short, better flight connections and better accessibility lead to positive regional economic effects.

#### Investments, apps and studies

The project produced a case study on "Regional Economic Justification of PSO", which provides arguments to give regional support for public service obligation (PSO) routes. PSO transportation covers government subsidised routes

EURO 2012 was as big success for Poznan and the whole country. Our airport did a great job during the football championship. With the CHAMPIONS project we now have the opportunity for a sustainable improvement to accessibility for our region.

Tomasz Gładysz, Head of the Department for Development & Investment Planning. Airport Poznan, Poland

that may not be commercially viable but are beneficial to a region's accessibility. The project's core output "Air Accessibility Guide" summarises procedures for developing new flight connections.

Because the link between both air travel and public transport is an important issue within this project, CHAMPIONS focused on the development of information infrastructure for passengers. The "Passenger Information Systems and Equipment" encouraged by the project is essential to achieve full integration of national and regional markets as well as balanced and sustainable development. Examples of this kind of system include the passenger apps and information screens that were put in place by the CHAMPIONS pilot actions in Poznan and Wroclaw airports in Poland. The applications, designed to be downloaded to a smart phone, provide a range of information and services. Needs and requirements for the functionality of these applications have been developed transnationally and could be easily replicated and used by other partners interested in improving accessibility to their regions.

For example the Poznan app not only gave access to flight timetables and schedules of public transportation connecting to the airport, but also allowed passengers to purchase flight or public transportation tickets, to check in online, to order taxis or to book hotel rooms. The app in Wroclaw provided many of these functions, as well as details of transfer times, maps, alerts of transport conditions and links to other reservation systems.

These pilot investments were conducted following SWOT analyses and pre-investment studies. Along with investigating Polish airports, CHAMPIONS conducted similar studies and analyses at airports in the Czech Republic, Germany, Hungary, Italy and Ukraine. Other initiatives considered included electronic passenger information boards that would make it easier to find transportation connections. Overall, the project shows the way for policy and technological developments that facilitate air travel in central Europe.

10 Million Euros of approximate investment following CHAMPIONS pre-investment studies



New jobs anticipated following the investments brought in by CHAMPIONS

New airline connections within central Europe now under consideration



Project: CHAMPIONS ERDF funding: €1 365 895 Duration: 2010 – 2013 Website: www.champions-project.de



The ChemLog project has contributed to improving logistics for the chemical industry in central and eastern Europe and thus strengthened the competitiveness of an important economic cluster in our regions.

Prof. Dr. Birgitta Wolff. Former Minister for Science and Economy Saxony-Anhalt, Germany

by 2025. Based on the conclusions of the study, regional stakeholders from Germany have started a discussion to develop a terminal network that creates hubs for bundling shipments to central and eastern Europe. The analysis of Corridor II served to intensify discussion between the Polish Ministry of Transport, the Polish Chamber of the Chemical Industry and important logistics service providers – all of whom are seeking better intermodal connections to Poland and also Russia.

Partners from the Czech Republic, Hungary, the Province of Novara in Italy and Slovakia have analysed the improvement of intermodal transport alongside TEN-T Corridor V. They have identified a lack of bi-modal cleaning stations, which can address the needs of both truck and train containers for chemical transport along this route. Together these partners have begun a discussion about the creation of a European Cleaning Station Network, and they are promoting plans for building new cleaning stations in Zahony (Hungary), Novara (Italy) and Cierna (Slovakia).

#### Better access to Russia and Ukraine

The chemical industry in central Europe has a special interest in improving access to the growing markets in Russia and Ukraine. To help address this challenge, ChemLog partners organised a Policy Advisory Group Meeting in Moscow in June 2010, and a site visit to border controls and terminals in the border region of Slovakia, Hungary and Ukraine in June 2011. The partners' cooperation in this area will continue, and will involve the Russian Chemist Union, Russia's National Logistics Association, and Russian terminal operators and logistics service providers. Themes for this future cooperation include further development of transport infrastructure, building of intermodal terminals adapted to the needs of the chemical industry, harmonisation of standards and improvement of safety and security.

The final ChemLog Strategy and Action Plan contributes to the implementation of the High Level Group follow-up process as an integral part of the EU2020 Strategy for industrial policy.

## Improving transport of chemicals in central Europe

ChemLog is a European cooperation project that seeks to strengthen the competitiveness of the chemical industry by improving conditions for chemical supply chain management in central and eastern Europe. The project brings together regional authorities, chemical industry associations and scientific institutes from Austria, the Czech Republic, Germany, Hungary, Italy, Poland and Slovakia.

The ChemLog project was initiated in 2008 by the European Chemical Regions Network – with strong support from the European Commission – within the framework of the High Level Group for the competitiveness of the chemical industry in Europe. Chemical-producing locations in central and eastern Europe suffer from several transport infrastructure bottlenecks, especially when it comes to west-east transport, which constitutes a strong disadvantage for the industry. The project partners wanted to change this situation, in particular by reducing the high share of road transport of dangerous goods through a shift to other modes of transport.

#### Improving intermodal transport of chemical goods

The project partners implemented several feasibility studies analysing the potential to improve intermodal transport of chemical goods in central and eastern Europe by increasing the proportion of non-road transport. The Ministry of Regional Development and Transport in Saxony-Anhalt analysed the potential for a shift in transport modes along the Trans-European Transport (TEN-T) Corridor II, from Berlin to Warsaw and Moscow. The study identified the potential to shift 4.3 million tons of cargo to intermodal transport

28

8

Cleaning stations under preparation for bi-modal transport alongside TEN-T Corridor V

Feasibility studies implemented, with EUR 430 million of investments prepared

## 4 300 000

Tons of chemical goods that could be shifted from road to other modes of transport along TEN-T Corridors II and III by 2025



Project: ChemLog ERDF funding: €1 664 392 Duration: 2008 – 2012 Website: www.chemlog.info

## Keeping tabs on dangerous cargo during transit

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The deadly accident in Viareggio, Italy in June 2009 showed the risks of transporting hazardous goods. We can reduce these risks if we know where dangerous cargo is at all times. ChemLog T&T develops a transnational platform for real-time tracking of dangerous goods throughout the transport chain, while also seeking to involve businesses and public authorities in this vital work.

A few years ago, chemical industry associations, regional authorities and other stakeholders concerned about safe transport of hazardous materials began cooperating in ChemLog, a CENTRAL EUROPE project that ran from 2008-2012. The ChemLog T&T project is a continuation of this work with a very practical focus: The project tests and promotes tracking and tracing technologies that provide real-time information about the status of shipping containers, which can be transported by road, rail and water. Tracking and tracing cargo carried by intermodal transport is a challenge. In road transport, the truck driver is an impor-

30

tant source of information. But shipping containers that are carried by several modes of transport are unaccompanied for much of their journey. A typical container can move from a ship, to a storage dock and onto a train – possibly ending its travels on the back of a truck. In this situation, automatic solutions are needed.

The ChemLog partners agreed that the main requirements for a tracking and tracing tool should be that it is attached to an individual shipping container, so that the container can be followed throughout its journey, regardless of what form of transportation it takes.

The increased use of tracking and tracing technologies for dangerous goods transports, with a focus on the single container, helps to improve the safety of intermodal transport and enables better organisation of the supply chain.

Wolfgang Schnabel, Senior Supply Chain Director, Dow Chemical, Germany

#### A sophisticated tracking and tracing tool

Along with giving the precise location of a container, via GPS, partners agreed the tool should also contain sensors that provide information about irregular movements, such as accidents. Temperature sensors allow the device, called an Onboard Unit, to give alerts in cases of fire. Like any mobile phone, the information from the Onboard Unit would be transmitted via the GSM network. And to make sure the information is up-to-date, the device would transmit frequently, perhaps as often as every two minutes. The Onboard Unit has its own energy supply, with long-lasting batteries, and the possibility of energy harvesting is being explored. The partners also agreed that the tracking and tracing technology must provide the necessary information while still being easy-to-use and functional.

After selecting the appropriate parameters for the tracking and tracing tools, the partners in the project implemented pilot initiatives to give practical tests to these solutions. The pilots focused on four important transnational transport corridors: From Germany to Poland and Russia; from Italy to Slovenia, Hungary and Ukraine; from Austria to Slovakia and Hungary; and from Germany to the Czech Republic, Slovakia and Ukraine.

Along with testing the results, project partners promote their findings through a Regulatory Policy Advisory Group, where participants discuss the legal framework for transportation of dangerous goods. These meetings allowed partners to establish contacts with the national ministries for transport that are active in UN bodies shaping regulation of dangerous goods. Partners have also agreed to deeper cooperation with a special informal working group on telematics. The objective of this cooperation is to see tracking and tracing technologies covered by international regulations from 2019 onwards.

Pilots based in transnational transport corridors running from west to east Europe

Tracking and tracing systems under practical testing by the project

11720

Kilometres of transport tracked and traced by the project



Project: Chemlog T&T ERDF funding: €1 530 318 Duration: 2012 - 2014 Website: www.chemlog.info

## **Better land-use makes** cities more competitive

A continuing trend toward urbanisation leaves central European authorities challenged by swelling city populations, urban sprawl, new transport needs and limited space – for businesses and housing. The City Regions project brings together authorities from cities and suburbs, to identify best practices for networking and to negotiate land-use management structures and new transport schemes.

As people continue to migrate to cities, economic activities, social infrastructure and cultural life are increasingly concentrated in urban agglomerations, which are already home to about 70 percent of the population of central Europe. The growth in urban populations puts space at a premium: While the amount of undeveloped land decreases, there is an increase in the need for territory dedicated to different uses – housing and social infrastructure, commercial space, and space for industry. And there is also a growing need for improved transportation, to carry the larger urban populace and the goods that they consume and produce.

City Regions helps urban areas to meet these needs by establishing cooperation between urban centres and settlements located in their hinterlands. This networking between municipalities within one metropolitan region helps to forward the project's main aims: To strengthen the competitive advantage of urban regions in the eyes of external investors; to promote the attractiveness of regions for residents; and to maintain the environmental guality of natural open spaces.

The partners involved in the project's transnational network produce a position paper and recommendations about the

Better positioning and profiling of the entire region of Halle/ Leipzig in national and international competition might be possible through inter-communal commercial management.

Dr. Michael Schimansky, Head of the Department for Economic Affairs, City of Leipzig, Germany

effectiveness of taking a macro-regional and peri-urban perspective when creating European strategies for development of urban regions.

### Pilot projects create partnerships in urban regions

To achieve durable agreements in the field of land use management the partners implement different regional pilots:

- In Halle/Leipzig, partners established joint management of commercial areas using a network that capitalises on the comparative advantages of municipalities located within the urban region.
- In Wrocław and Lower Silesia, various municipalities cooperate in the protection and development of green areas, management of pre-school education and development of park-and-ride strategies.
- In the Graz urban region, public transport offerings are improved, so that the principles of "gentle mobility" are extended to rural areas.
- In Prague, strategies are developed to handle the impact that road investments throughout the greater metropolitan region have on the specific district of Prague 9.
- In the Torino metropolitan area, the project launched a process of strategic planning to introduce a new quality of metropolitan cooperation between the core city and surrounding municipalities.

#### Developing agreements for joint land-use management

After identifying suitable best practices, the partners elaborate and test innovative approaches based on voluntary cooperation by stakeholders from various municipalities within each metropolitan region. In the end, parties will negotiate agreements to support the durable establishment of joint land use management structures. Project partners also formulate detailed recommendations and help to prepare decisions regarding implementation of these recommendations.

## 340 000

Daily commuters entering the Leipzig/Halle metropolitan region

103

Municipalities involved in the project

Transit stops can be reached by means of 10 000 kilometres of public transport lines in the Graz metropolitan region



**Project:** City Regions ERDF funding: €1 252 900 Duration: 2012 - 2014 Website: www.city-regions.eu

# Seamless travel planning in central Europe

Sophisticated travel-information services that cover several modes of transport help citizens of central Europe achieve greater mobility. But most systems only provide information within a local or regional area, and little cross-border information is available. EDITS is changing this, encouraging transnational cooperation to implement cross-border travel information for all modes of transport.

On March 15, 2013, a Hungarian national holiday, extreme winter weather paralysed roads in the country and parts of Slovakia, and motorists coming from around Europe had to stop at the border. While people in Hungary were aware of how the bad weather and the holiday created the problem, most motorists coming through Austria did not receive sufficient information about road closures, how long they were expected to last and/or what alternative routes there were. The resulting traffic jams around the borders were a huge inconvenience that could have been avoided with better cross-border sharing of travel information.

The EDITS project has already been working on means for improving such situations, by creating travel information services that work across borders. As the EU continuously enlarges, and job mobility increases, the idea of an integrated transport system to facilitate cross-border mobility grows in importance. A good system provides information about various modes of transportation, including warnings about temporary changes to the situation that might mean it is a good idea to shift to another transport mode. While systems like this are in place, most of them only provide information to a single city or region, within a single country.

Why can't I yet plan or book my journey through Europe – switching from air to rail or sea, to urban or road transport in one single go, and online?

Siim Kallas, Vice-President of the European Commission

#### Information exchange across borders

To provide cross-border information that better meets the needs of today's travellers, 13 partners from around central Europe united in the EDITS project. Rather than develop a centralised travel-information platform, the project focuses on creating a harmonised environment for exchanging information - so that data can be used across borders. EDITS develops the definitions necessary for exchanging data related to public transport and geographical information systems (GIS). The cross-border exchange also allows for transnational traffic management.

Development of the EDITS system involved an analysis of the existing data and design of a new system that harmonises the data. This work was followed by pilot testing in three demonstration areas. The project collected the opinions of travellers affected by these pilots, to determine passenger needs, and this input was reflected in recommendations for further platform development.

#### From pilots to real European journey planners

The pilots helped develop actual multi-modal cross-border services, which are to be put in place in parts of Austria, the Czech Republic, Hungary, Italy and Slovakia by the end of 2014. Passengers in these areas will be able to receive realtime information on multiple modes of cross-border travel - all in their own language.

Traffic and transit monitoring services are being put in place around Europe. It only makes sense to connect those services through the kind of bilateral data exchange agreements arranged through the EDITS project. The result would be sustainable, high-quality services for all travellers planning a iourney in Europe.

Demonstration areas where the opinions of travellers about the EDITS system were collected



Percentage of the income that average European household spends on the transport

Common definition for EDITS services



Project: EDITS ERDF funding: €1 907 599 Duration: 2012 - 2014 Website: www.edits-project.eu

# Making freight move faster and cleaner

As central Europe's markets grow, and EU trade with Asia increases, the transport corridor linking Baltic and Adriatic ports becomes more important. By encouraging multiple modes of transport, especially via rail and water, EMPIRIC seeks to speed freight traffic in the corridor while lowering environmental impact. And by seeking better access between ports and inland central Europe, EMPIRIC supports new business.

The Baltic-Adriatic transport corridor (BAC) has been a major European trading route since the Middle Ages, and it is growing in importance today. Supported by research and analysis, EMPIRIC works with major stakeholders in this north-south axis through central Europe to develop more efficient, reliable and sustainable forms of transportation of goods. The project helps policy makers, market actors and others ensure that more of the freight moving through the BAC travels via railways and inland waterways. The idea is to shift cargo onto these more environmentally sustainable means of transport and take it off the road.

When the European Commission revised the Trans-European Transport Network and established the dual-layer TEN-T concept, the BAC was named a vital corridor in the TEN-T Core network. That's why the work of EMPIRIC is so important. EMPIRIC uses analysis of freight flows, logistics services and market incentives - in Austria, the Czech Republic, Hungary, Italy, Poland and Slovenia – to provide technical and policy recommendations for increasing utilisation of greener cargo transportation along the corridor. EMPIRIC also promotes economic development of BAC regions by seeking better connections between remote areas and major ports.

EMPIRIC supports the startup and improvement of multimodal service connections from/to Nord Adriatic multiport gateway with the central European markets through a strong hands-on and market oriented approach, involving operators and matching incentives' needs with possible opportunities for modal shift.

Paolo Costa, Acting NAPA President

### Feasibility of greener transport

Through a transnational approach, the project is able to analyse and compare the existing logistics sector practices used by different countries. The project also helps increase the understanding of preconditions that various stakeholders consider crucial for the implementation of economically viable and environmentally friendlier freight transport solutions. Key factors that are believed to affect the feasibility of the multimodal concept include:

- Enhancement of railway links within the area, using European Train Control System technologies where economically justified
- Development of regional freight hubs and multimodal nodes, and provision of sufficient port and terminal capacity
- Provision of a quality, reliable and interoperable infrastructure network to serve more remote parts of the corridor;
- Investments in information-communication technology systems to support just-in-time logistics
- Harmonisation of loading units and packaging sizes
- Pro-active cooperation and networking of local and regional authorities with market players

#### Network for multi-level cooperation

In addition to providing crucial analysis, EMPIRIC has created an active community of project partners, local authorities, transport operators and logistics providers, who meet regularly to discuss various aspects of multimodal transport solutions. Because early involvement of freight market players from all levels is vital to successful implementation of new multimodal solutions, EMPIRIC brings together stakeholders through "Business Cafés", local dissemination events and transnational seminars. Participants can address challenges and expectations from the perspective of the actual beneficiaries of the project.

# 194

Companies involved in "Business Café" meetings to enhance multimodal competitiveness in central Europe





Interviews with private stakeholders to elaborate a common position paper on incentives for multimodality

## 180

Analysis of new railway services connecting the North Adriatic area with central European hinterlands

Project: EMPIRIC ERDF funding: €2 308 226 Duration: 2011 – 2014 Website: www.empiricproject.eu

The ESSENCE platform is a dynamic starting point for improving the flexibility and the personalisation of eServices in order to avoid waste of time and resources. The platform may be the base for an alliance between businesses involved in a network able to do more with less.

### productivity and competitiveness, while at the same time reducing the negative environmental impact of the transportation of goods.

### Services customised for each SME

Giampaolo Colletti, Freelance Journalist, Italy

Using the eServices established by the ESSENCE project, SMEs will be able to access a general collaboration framework to customise individual models for coordinating their own logistics network. These custom networks can facilitate the logistics and communication needs of SMEs. The SMEs will be free to enter and leave the system with no constraints. While they are in the system, they can select and use the eServices of interest to them. By establishing platforms for logistics cooperation in different regions, the project allows for SMEs in those regions to take advantage of the kinds of logistics services that can help them be less wasteful and more competitive. The project's knowledge base is a common repository, shared and fed by user SMEs, and it includes a multilingual catalogue, multilingual business documents and a set of upto-date performance indicators. This database adds to the tools provided by the project's networks in offering support for SMEs that need assistance with logistics.

Pilot projects implemented under ESSENCE were designed to explore the way the eServices can be customised to give logistics support to individual SMEs. The SMEs participating in the project were able to improve their competitiveness and increase their international performance using the ESSENCE network.

The project held several events to disseminate its results, so they can be of assistance to other regions in central Europe and beyond. Using this support, even small SMEs can take a state-of-the-art approach to handling logistics.

## **SMEs** can handle logistics like the big

To remain competitive and energy-efficient, small- and medium- sized enterprises (SMEs) need access to the kind of sophisticated logistics systems that global corporations use. But such systems are usually beyond the resources of SMEs. ESSENCE seeks to establish a free ICT network that lets SMEs manage logistics and optimise their supply chain by designing their own business networks.

If businesses agree to cooperate in an open network, the supply chain can be simplified. Even smaller firms can drop into this network when needed, so that they can handle logistics with greater efficiency.

That is why ESSENCE seeks to create a common information and communication technology (ICT) platform that helps all its participants cooperate on logistics matters. It offers SMEs the kinds of logistics services they could never establish by themselves.

The project builds on existing initiatives aimed at developing ICT capacity, by helping to establish a network of these ini-

tiatives, so that SMEs and the regions can take advantage of them. Then the project adds to these initiatives by offering several eServices to improve the capacity and competitiveness of SMEs. The eServices offered by the ESSENCE project assist in the areas of: Communication, cataloguing, business network planning, operation, document management and performance evaluation.

The objective of these services, and the project in general, is to offer the kind of ICT support that allows SMEs to handle their supply chain more efficient. This support should help them improve their economic performance with enhanced

Internet-based software platform created by ESSENCE

Business facilities offered on the platform

## 600 000

Road freight transport companies enabling people to travel and exchange goods in the EU



Project: ESSENCE ERDF funding: €1 292 789 Duration: 2012 - 2014 Website: www.essence-project.eu

### Faster, greener connections to southeast Europe

The corridor linking central Europe with southeast Europe and the Black Sea is a vital connection between more recent Member States and candidate countries. To improve the flow of imports and exports in this corridor, FLAVIA encourages better logistics, so that more freight moves off the road and on to ships and trains, which are more environmentally friendly and less prone to traffic backups.

Too much of the freight moving between southeast Europe and central Europe travels on the road. A more even transport mix, or better "intermodal split", involving a greater share of rail and water transport, will have a bigger capacity to grow. The economies and environments of new European Union (EU) Member States and candidate countries will benefit from such an approach. By addressing the current intermodal split, FLAVIA encourages greener, more efficient freight transport and reduces congestion on the roads. The effort to increase the use of non-road transport involves action on several fronts. It includes reducing delays

www.hanjin.com

of freight trains at borders, replacing obsolete terminal techniques and overcoming mental barriers that many people involved in shipping seem to have against intermodal transport.

Making these changes does not require development of new transportation connections. Rather than focusing on new infrastructure, the FLAVIA project seeks to address logistics processes to improve intermodal cargo flows. By taking a harder look at logistics approaches, the project developed new and innovative measures that will be implemented to provide better interconnectivity of the regions,

resulting in economic growth on both sides of the current EU border.

#### Reliable connections increase intermodal split

One undertaking by the project was a survey to analyse missing national and transnational liner services within the corridor between central and southeast Europe. Liner services, or shuttle trains, are regular transport connections offered by transport operators that connect different shipping terminals. If these trains run predictably and frequently, they increase reliability for shippers, so that shippers have more confidence in using existing rail connections. In addition, the FLAVIA project carried out more than 20 pre-feasibility studies of new intermodal connections to encourage businesses that deal in freight to initiate and use more intermodal transport relationships. These new connections should help market players to make their business more efficient, and in keeping with the goals of the FLAVIA project, they should increase the relevance of the whole corridor. They will also help the corridor develop in a more environmentally sustainable way. Green transport and logistics are already a priority within the EU, and the project helps extend this efficient approach into the Black Sea countries. To encourage progress in the future, FLAVIA establishes national pro-rail and terminal alliances that will continue promoting and developing intermodal transport and help formulate any necessary legal and infrastructure changes. Reducing organisational, technical and administrative barriers in order to improve logistics flows among the involved regions contributes to the integration of markets in the enlarged European Union. Through FLAVIA, cooperation with adjacent European and non-European regions can move to a higher level.

This project offers the possibility of better cooperation. Existing corridors provide sufficient infrastructure – but they have to become more secure, reliable and cost efficient.



Zoltán Doór. President of the Hungarian Logistics Association 1()

Major road transport flows are in the FLAVIA countries

14 Partners are participating in the project

Countries are involved



Project: FLAVIA ERDF funding: €1 433 245 Duration: 2010 - 2013 Website: www.central2013.eu

## Taking urban transport on a green journey

Public transport can relieve pressure on the environment by reducing the use of individual automobiles, but not all public transport is equal: Some systems are more efficient than others. In European cities, where road traffic accounts for 40 percent of all CO2 emissions and 70 percent of other air pollution, GUTS undertakes initiatives to promote public transport that uses cleaner energy.

The GUTS partnership understands that developing cleaner public transport systems can play a direct role in creating an attractive environment in urban areas, while also contributing to the health and quality of life of inhabitants. The project therefore investigates green public transport solutions, especially for municipal bus fleets. GUTS sees the need for cities to develop a shared view regarding the nature of transport policy objectives. The project analyses and compares state-of-the-art technologies based on partner cities' pilot feasibility studies to find the most adaptable solutions for their public transport, taking into

account local development needs and the need to minimise the local carbon footprint.

#### Helping cities to form action plans

The project's focus is on hydrogen and biofuels, both proven means for powering energy-efficient buses, but GUTS also studies solutions using solar energy and compressed natural gas. When promoting public transport that uses alternative fuels, the project looks at everything from technical parameters to financing models for each suggested solution.

The challenge is to remove cars and trucks from cities while at the same time improving mobility and reducing its total costs.



Domenico Casellato, Department of Territorial Planning, Mobility and Energy, Province of Ferrara, Italy

The results of the project's initiatives are gathered into a transnational strategy on clean public transport systems. The goal of this output is to give policy makers knowledge that they can use when forming their own urban planning strategies. Partner cities develop specific action plans that are ready to be put to use immediately.

To ensure technical support for the strategy, the GUTS project produces two master studies that give public authorities and transport operators guidance on concrete implementation of clean public transport systems. These studies cover the governance perspective, such as management and public procurement models – along with monetary and technological considerations, like financing models, return on investment, payback periods, a survey of available funding sources and more. In its analysis of possible investments in cleaner public transport, the project investigates the challenges of financing the high initial costs and maintenance, as well as seeking ways to reap the benefits of introducing alternative fuels in the short- and medium-term.

#### Jointly preparing investments

In order to prepare targeted future investments in green public transport, GUTS shares the knowledge it produces via the Public Transport Resource Centre (PTRC). This online platform reaches beyond the project partnership and lasts beyond the project's lifetime, offering a key tool for sustainable and institutionalised transnational cooperation. It assists all stakeholders with networking, exchanging expertise and disseminating results, and helps regions to share the findings of GUTS on a European level. Using PTRC, other stakeholders and municipalities around Europe should be able to develop their own action plans for cleaner public transport systems that are as efficient as possible.

31.7 Percentage of energy consumption used up by the transport sector in the EU27 in 2010

Millions of tonnes of CO2 emissions from transport in the EU27 in 2010

Transnational strategy on clean public transport systems



Project: GUTS ERDF funding: €1 671 860 Duration: 2010 - 2013 Website: www.gutscentral.eu

# Making the railway the easy way to travel

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As urban sprawl changes commuting patterns, and leisure travel takes in a broader range of destinations, Europe's railways face new challenges in enticing passengers to use a greener alternative to automobiles. INTER-Regio-Rail seeks to help regional rail adapt to demographic and economic changes in order to better meet the needs of today's travellers – and reduce reliance on road transportation.

Traditionally, regional railways focused on moving large groups of passengers, such as commuters and tourists, between a limited number of key destinations. With settlement structures and places of employment dispersing, and leisure activities diversifying, regional rail must adapt its offerings to passenger groups that are more difficult to attract and have often been neglected. INTER-Regio-Rail focusses on increasing ridership among senior citizens, interregional travellers and those who may use several modes of transportation. It does this with pilot initiatives designed to reduce barriers that prevent passengers from using rail transport.

The results of the pilots are two-fold. On the one hand, they encourage fruitful investments in participating regions. On the other, they make it possible to draw joint conclusions about the conditions needed to increase regional rail ridership. The project also reaches out to other stakeholders involved in rail transport – including decision makers on the regional, national and European level – to encourage better organisation, legislation and financing for rail transport in Europe.

Examples of pilot initiatives undertaken by INTER-Regio-Rail include:

#### One ticket for the Legnica - Głogów Copper Area

A pilot in the Polish municipality of Lubin investigated tariff cooperation by developing a uniform tariff for all buses and trains in the area. If passengers only have to buy one ticket, it makes public transport easier to use. Along with reducing barriers to public transport use in and around Lubin, the pilot serves as an example for other regions in Poland that are considering similar cooperation on transit fares.

#### Stuttgart serves seniors

The Verband Region Stuttgart, which is responsible for regional rail transport in the Stuttgart area, was involved in an INTER-Regio-Rail pilot to research how rail transport can be adapted to the needs of the elderly. This effort is important because senior citizens comprise a growing proportion of the population and of potential customers of regional rail transport. The study identifies and describes possible information and support services for older passengers and outlines the effect of these services on people's mobility habits. The results of the study will help to define a network of partners who can work together to support older rail transport users.

#### Updating infrastructure in Liberec

A backlog of maintenance by the national infrastructure operator means that the northern Czech region of Liberec is facing a decline in the regional rail network. As a result, travel times by train today are the same as they were 70 years ago, and railway services find it difficult to compete with road transport. An INTER-Regio-Rail pilot is helping the regional authority responsible for rail transport to develop a concept for modernising the network and its passenger services.

The network of partners and local authorities who worked in the INTER-Regio-Rail project will share experiences and the results of these pilots with other regions - in a continuing discussion to further develop regional rail transport.

By 2030 the Liberec region can have a modern system of public transport, with railways as its backbone. All citizens of the region,

as well as the economy, will benefit from this.



Martin Sepp, Deputy President of Liberec Region, the Czech Republic

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## 226 000

Kilometres of passenger rail lines in Europe

Billion kilometres of passenger travel on regional rail lines in Europe per year

196 Passenger rail authorities in Europe who can benefit from INTER-Regio-Rail



Project: INTER-Regio-Rail ERDF funding: €1 504 145 Duration: 2010 - 2013 Website: www.interregiorail.eu

The rationalisation of transport and the strengthening of multimodal logistics are crucial for central European regions, territories and communities.

Roberto Ciambetti, Regional Minister for Budget and European Cooperation,

Veneto Region, Italy



## Floating freight is sustainable and efficient

Central Europe's inland waterways offer economical, environmentally friendly freight transport, but this potential is not sufficiently exploited. INWAPO increases the attractiveness of waterborne transport by helping improve the efficiency of river ports and seaports fostering freight traffic on waterways, and assisting in better integration of ports with connections to the hinterlands.

Freight carried in large quantities by river barges and trains moves more efficiently and sustainably than freight hauled on the road by a fleet of individual trucks. That is why one of the main objectives of the EU sustainable development strategy is to shift at least 50 percent of middle-distance freight transport from road to railways and waterways. Achieving this shift would reduce the carbon footprint of freight traffic, thereby preserving the environment in keeping with the EU 2020 Strategy for smart, sustainable growth, while also improving competitiveness.

### Market studies of waterways

INWAPO seeks to help in this effort by jointly taking the challenge, believing that going beyond the "historical" competition among ports and logistics actors was possible. The research provided by the project's 13 partners helped support decisions to shift more freight onto the water. One key output of INWAPO was research to verify the assumption that there is a significant demand for sea and river freight transport services in central Europe. To do this, project partners investigated main waterway systems:

The Northern Adriatic ports, the Danube ports and the Elbe, Oder and Visla ports. They conducted market-based surveys with the direct involvement of logistics operators and clients and produced 12 studies and one environmental impact analysis to give an updated picture of the potential supply and demand of waterway services and infrastructure in central Europe. The results of this research have been presented to the port communities involved, and also to most of the companies that represent the potential market for these waterways.



As part of the project, INWAPO partners produced eight market-review analyses, focusing on commodities with a higher potential to be shifted from road to inland waterways and railways. These analyses were then used to investigate the feasibility of new intermodal links.

The project kept logistics operators informed of the business opportunities produced by the activation of new services, providing hands-on assessments – through large-scale events, like the June 2013 Transport Logistics Fair in Munich, and through more specific business-to-business meetings. The project also defined common benchmarks for inland and seaports. This information combined with the needs assessment allowed INWAPO partners to make proposals to logistics operators in terms of investment plans. INWAPO's work allowed three infrastructure investments, in the ports of Vienna, Budapest and Bratislava.

An environmental analysis produced by the project investigated the impact of increased transport volumes. Furthermore, the project defined environmental sustainability benchmarks, so that it will be easier to integrate environmental assessments in future investment plans for other ports.

Ports in seven countries cooperating on sustainable alternatives to road transport

Market studies focusing on new services and investments presented to companies and port communities

Infrastructure investments supported in Vienna, Budapest and Bratislava



Project: INWAPO ERDF funding: €3 047 282 Duration: 2011 – 2014 Website: www.inwapo-project.eu

# Efficient transport for efficient SMEs

With limited resources to address logistical needs, small- and medium-sized enterprises (SMEs) often use transport inefficiently. As a result, SMEs pay more to ship freight, and haulers make more runs with empty containers. By coordinating the hauling needs of SMEs with the capacity of logistics firms, KASSETTS helps all sides save money and increase efficiency.

SMEs, which generally have much smaller shipping needs than larger enterprises, often lack the potential to optimise their own distribution management. Without an in-house logistics department, SMEs end up paying more than they need to for transport of goods. Meanwhile, small logistics service providers find it hard to use the full capacity of their vehicles, so that lorries often end up "transporting air". The resulting increase in empty or half-empty vehicles not only burdens SMEs with additional costs; it also makes the traffic situation worse and contributes to higher CO2 emissions.

### The solution

Operating out of regions in the Czech Republic, Germany, Hungary, Italy, Poland, Slovakia and Slovenia, the KASSETTS network of logistics brokers were able to improve efficiency by facilitating better communication between manufacturing SMEs and logistics service providers. The brokers, often project partners using the KASSETTS information and communication technology tools, operate as neutral "middlemen" and improve the coordination of requests and offers between participating firms: Daily transport orders

**KASSETTS** helps our manufacturing and transport industries to find new cooperation and business models, improving transport efficiency from the economic and environmental points of view. This is a win-win scheme to be further promoted by us policy makers.

Graziano Prantoni, Local Minister for Productive Activities. Bologna Province, Italy

of manufacturing SMEs are collected and aggregated, thereby allowing for economies of scale. The delivery of these orders is then optimised in terms of vehicle routes and use of transport means at the regional and transnational level. Each broker can plan optimal transnational transport routes on the basis of factors like: Different local groups of manufacturing SMEs; the guantities to be transported; the frequency of transport; origins and destinations. After the routes are planned, brokers assign transport missions to carriers from of a pool of different logistics service providers that cooperate in the broker system. The result is a win-win situation, where carriers are more efficient and SMEs can reduce transport costs.

#### Practical application

KASSETTS successfully put its system into practice, bringing together SMEs and logistics operators to demonstrate financial savings and a reduced environmental impact. Pilot activities handled by KASSETTS broker offices involved four main transport axes: Germany-Italy-Slovenia, Germany-Hungary-Poland, Poland-Czech Republic-Slovenia and Hungary-Italy-Slovenia. The efficiencies allowed by the network provided the following average savings without having to compromise on the result:

- 37 percent reduction in transport kilometers run by vehicles, thanks to optimised routing
- 39 percent savings on fuel, thanks to optimised routing and cargo aggregation
- 34 percent reduction in transport costs

To help businesses continue to realise these savings, the project partnership has foreseen to maintain the service network and devised ways to keep KASSETTS sustainable after the project end. Under the future model of the broker network, economic savings on transport activities will be used to cover the costs of the brokers.

11 071

18



## 158

SMEs and logistics operators testing or using the KASSETTS software for brokering activities

Transport orders by SMEs entered into the KASSETTS system

Percentage of calculated reduction in CO2 emissions reached during the KASSETTS pilot tests

Project: KASSETTS ERDF funding: €1 801 040 Duration: 2008 – 2012 Website: www.kassetts.eu

# Cloud computing empowers SMEs in logistics

As central European markets expand, there is a huge potential for growth in logistics. But logistics firms need to be able to cooperate with one another, passing information between companies and across borders. With the understanding that cloud computing offers an answer to this challenge, LOGICAL is developing an ICT tool that will speed up communication, and thereby logistics, in central Europe.

Because they are located between old Member States and emerging markets in the East, logistics firms in central Europe have enormous potential for growth and increased employment. Realising this potential requires the ability to overcome challenges, like rising demands for just-in-time delivery and increasing environmental costs of cargo transport. In such a market, logistics hubs that want to remain competitive require interoperability of logistics businesses. Applied research has demonstrated that cloud computing offers a potential solution to allow a group of actors at one logistics hub to share operability. Furthermore, a central

European cloud concept could support transnational collaboration in logistics and enable the use of sustainable collective cargo transport – for example by facilitating the use of trains instead of individual road transport.

#### LOGICAL objectives

By developing a transnational cloud computing tool, the LOGICAL project seeks to enhance the interoperability of logistics businesses of different sizes. The output of the project will improve the competitiveness of central European

Using our applications in the LOGICAL cloud, small- and medium-sized logistics companies are able to use software in a whole new way, to collaborate better with their customers and partners, especially in transnational context.

Jan Daske, Head of Business Development, SALT Solutions GmbH, Germany

logistics hubs by reducing transaction costs while promoting collective use of more sustainable transport. The cloud tool that LOGICAL produces will be tested and made fully operational. This common cloud computing system will help to strengthen the logistics sector's penetration and reduce transaction costs of business-to-business cooperation. Ultimately, it will help logistics hubs develop "digital logistics ecosystems" and support a bottom-up economy. The users of the transnational cloud computing tool are small- and medium-sized logistics enterprises that are limited by the high costs of licensing software systems. These enterprises can be more flexible and competitive if they can take advantage of pay-per-use pricing for logistics software.

#### Beneficiaries of the cloud

There are several groups benefitting from LOGICAL's activities. Central European logistics operators of various sizes that offer services like freight transportation and cargo handling can use "software-as-a-service" (SaaS) applications to cooperate with logistics partners in other European countries. The SaaS applications are offered by software providers, who have the opportunity to develop internetbased logistics software and to promote existing "platformas-a-service" offers. Logistics infrastructure providers benefit from improved support of logistics companies in the region. In addition to physical logistics infrastructure (roads, railways, airstips), these providers can also offer digital infrastructure with "infrastructure-as-a-service" products. And promoters of regional economic development can market the existence of a regional logistics cloud as an advantage of their location.

Layers form a cloud: infrastructure, platform and services

160

Logistics companies already benefit from the advantages of LOGICAL's cloud software



Logistics services are represented in the LOGICAL cloud – and the number is growing



Project: LOGICAL ERDF funding: €2 363 446 Duration: 2011 – 2014 Website: www.project-logical.eu Bringing central Europe closer with regional rail

The European railway network has great potential to increase connectivity while providing sustainable transport. Although many countries have high-speed and intercity services, the rail system's full potential will not be realised until local and regional railways are also modernised. RAILHUC offers studies and strategies to help maximise synergies between existing networks and future investments.

As the places where local, regional and international transport systems meet, central European cities are the "first and last legs" of transnational transportation chains. High-speed connections among rail hubs in central Europe are already being upgraded, but regional rail and other public-transport-bound feeder lines still need to be improved, strengthened and better organised. Achieving sustainable transport requires integration of local and regional transportation with transnational systems, like the TEN-T network. The main elements of such integration are city rail hubs, which generate the majority of transportation demand and serve as an

interchange point for all kinds of transport. RAILHUC seeks to develop models, concepts, measures, harmonised strategies and concrete policy actions that aim at embedding urban and regional transport systems into the intercity rail transport within important TEN-T hubs throughout central Europe. The activities of RAILHUC are geared toward creating joint concepts for integration of rail hubs and include exchange of experiences, good practice analysis, training and peer review workshops. The project works by surveying the existing transportation situation and demands in each city, identifying bottlenecks and proposing solutions.

While high speed connections are in the course of being upgraded, rail and public transport feeder lines in general need to keep pace and be integrated into TEN-T systems.

Vasco Errani, President of the Emilia-Romagna Region, Italy

8

#### Review of current transport

As a first step in the process it was important to analyse the existing passenger flows and describe them with transport models. While some regions and hubs have such models, others do not, and the existing models do not all describe demand for all transport types - local, regional and international. To facilitate planning, RAILHUC partners established an as-is transport model for each specific hub, looking at the local, regional and EU-wide perspective. The analysis of existing transportation infrastructure and its usage in each hub summarises the information necessary for integration of different transport modes and identifies bottlenecks that hinder integration and transport service improvements.

#### **Developing new solutions**

With this analysis, it is possible to formulate options for infrastructural interventions or public transport service improvements. These recommendations come out of several rounds of public and technical consultations, which help build consensus among key decision makers, and other stakeholders affected by investments and policy changes in public transport.

The solutions are tailored to each different transportation hub: In some places, institutional and promotional activities are needed while others require studies and investment to overcome specific bottlenecks.

One common result for each hub is the completion of partnership agreements between stakeholders from different levels of administration and local governments. These agreements should ensure that the preparation and implementation of planned measures will continue after the RAILHUC project is over.



TEN-T corridors affected by the project

Different regional hubs integrated

Regions with more than one million residents served by the project



Project: RAILHUC ERDF funding: €2 282 661 Duration: 2011 – 2014 Website: www.railhuc.eu

# Driving into a cleaner future with e-vehicles

Automobiles are one of the primary producers of air pollution – including carbon dioxide, nitrogen oxides and fine dust - harmful emissions that could be reduced if more people used electric-powered vehicles (e-vehicles). Through pilots held in six central European regions, the REZIPE project encourages drivers to switch from internal combustion to e-vehicles.

In a transferability study, REZIPE established ways to best pass on knowledge and experience gained through the project and to provide support for decision makers. The study is a valuable tool for stakeholders who want to promote the use of environmentally friendly vehicles. Along with providing this kind of policy support, the project also showcases pilots to implement electric mobility (e-mobility) in the central European regions of Reggio Emilia, Bolzano, Ljubljana, Györ, Upper Austria and Carinthia. These efforts are meant to create momentum for zero-emission vehicles powered by renewable energy.

#### Raising awareness of e-vehicles

Because REZIPE is designed to expand the use of e-vehicles in the region, a key component of the work is to raise awareness, and the project does this in many ways. For instance, the high visibility of the photovoltaic charging stations for electric vehicles ensures that the concept of emobility is promoted in the areas hosting REZIPE pilots. The stations also establish the beginnings of an infrastructure that can be expanded to encourage the use of e-vehicles. Awareness of the benefits of e-mobility was also increased

Solarra

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I visited the Solar-Rally in Eferding (Austria) because I was interested in e-mobility. I was overwhelmed by the wide range of e-cars presented and the ability to test the vehicles – which I did. My opinion about the production stage of e-vehicles has changed!

Melanie Gahleitner, Leonding, Austria

95

with three different "Solar Rally" traveling exhibitions. The rallies allowed people in various municipalities and rural areas to test-drive e-vehicles. The majority of the test drivers responded very positively, and many said they would consider buying a zero-emission vehicle in the near future, a reaction that indicates positive long-term impacts of the **REZIPE** project.

Through cooperation with municipalities, the public and various other stakeholders, the project is able to attract attention to the benefits of e-mobility. Well-coordinated public relations and media work help the project reach out to key target groups.

#### Cooperation and continuation

Along with the difficulty of establishing charging installations and purchasing e-vehicles, other challenges to completing project activities include bureaucratic obstacles that slow down the decision-making and implementation processes. Fortunately, the transnational nature of the project made it possible to exchange a range of experiences in addressing common problems.

When the project officially comes to a close, the work is expected to continue. The results and experiences of the REZIPE pilots should help to create a strategy for further promotion of the usage of e-vehicles and expansion of the network of charging stations that the vehicles require. REZIPE is also expected to increase the number of e-vehicles in the regions the project serves, so that use of those vehicles should continue. For example, the project has already established a sustainable model for a business that rents e-bicycles, so that activity is likely to carry on well past the project's lifetime.



### 7.54 Tons of CO2 emissions prevented from the start of project pilots by 2011

67 822

Kilometres driven during the 2 300 trips made with electrical vehicles from the beginning of the project pilots until the end of 2011

Percentage of electric delivery vehicle test drivers who believe that the REZIPE project will influence their use of electrical vehicles

Project: **REZIPE** ERDF funding: €1 040 575 Duration: 2010 - 2013 Website: WWW.rezipe.eu

Thanks to SOL we have been able to prepare a local road safety strategy and an action plan, and to implement specific actions for children that helped us in achieving concrete and tangible outcomes within our community.



### • Strengthening institutions involved in road safety and creating effective multi-sector partnerships

- Preparing regional/local strategies and action plans and allocating internal resources to address the problem
- Implementing specific actions to prevent road accidents and to minimise injuries and their consequences; these are the pilot actions that have been developed during the course of the project
- Creating a greater level of awareness and commitment and informing decision-making at all levels
- Developing tools on specific aspects of road safety child safety, vulnerable road users, roadside workers, etc. – that can be replicated to serve central Europe and the EU
- Helping stakeholders understand that road safety policies are vital to promoting sustainable forms of mobility

Materials and tools produced within SOL will help cities and local administrations to address road safety topics and will contribute to similar action in other regions of the world.

#### The power of a strong network

In order to build up a network with both vertical and horizontal connections, SOL is designed to generate cooperation among different levels of administration and among local entities from different central European countries. The process involves top-down input, so that SOL's team of experts can reach local communities and identify the most active ones, in order to supply them with the necessary professional skills and tools. This is followed by bottom-up input: Once local communities have the necessary skills and tools, they can foster a stable connection with higher authorities, to communicate their needs, recommend changes and play a role in the development of action plans and pilot projects. The exchange of top-down and bottom-up inputs creates a vertical network that allows for permanent cooperation to share useful data and knowledge.

200 People trained by the SOL network

# Saving lives on central Europe's roads

There are more than 30 000 road fatalities a year in the EU, and a disproportionately large number of these occur in central Europe. Efforts to prevent accidents can include better planning, policy changes and public-awareness raising. SOL uses these and other tools as it seeks to help reach the European Road Safety Charter goal of cutting the number of accidents by 50 percent.

SOL, Save Our Lives, works to strengthen the measures that local and regional stakeholders take to prevent death and injury caused by road accidents in central Europe. SOL is based on a grassroots, bottom-up approach and seeks to assist communities in implementing the best practices for improving road safety. These practices include an overall increase in political commitment, developing activities based on evidence of real needs, creating strategies and action plans, allocating resources to address the main road safety risks, implementing projects - and monitoring and evaluating their impacts.

### A comprehensive strategy for central Europe

The SOL approach treats improved road safety as an essential part of ensuring sustainable mobility. The project connects some of the most competent road safety organisations and a multi-sector partnership from eight countries, to develop a strategy that supports central European regions in catching up with the highest EU standards in road safety by:

• Assessing problems, policies and institutional settings related to road safety

### 30 500 Lives lost on European roads in 2012

Communities that benefitted directly from the SOL project



Project: SOL ERDF funding: €2 817 409 Duration: 2010 - 2013 Website: www.sol-project.eu

## **Connecting seas brings** the EU closer together

As European plans for transportation are taking shape, regions between the Adriatic and Baltic Seas have a historic opportunity to ensure the creation of a sustainable and efficient transport network in central Europe that will support the single market in the whole EU. The SoNorA project seeks to make the most of this opportunity by investigating the best ways to keep the region moving.

**Ensuring an efficient** transportation network is a vital part of addressing issues such as market integration, globalised commercial flows, increased freight and passenger traffic and environmental concerns. SoNorA investigated different scenarios to guide development of the underexploited transport corridor between the Adriatic and Baltic seas by involving 25 partners from six EU countries – Austria, the Czech Republic, Germany, Italy, Poland and Slovenia. Following thorough analysis, SoNorA recommended ways to update the Trans-European Transport Network and elaborated case studies of specific infrastructure projects that are

intended to close gaps in regional networks. SoNorA studied possible directions for central Europe's transport network while taking regional development into consideration, thus seeking synergies and investigating ways in which transport growth can assist in overall regional development.

A main objective of the project was to make the South-North Axis (SoNorA) a true intermodal transport network, served by various types of transportation – rail, waterway, road, etc. – which can encourage more economically efficient and environmentally friendly transport solutions.

Within SoNorA we looked into the possible development of a shuttle train between the Port of Koper and EDC Sežana. The results of the case study are encouraging: It shows that there is potential for the establishment of such a regular train service.

Dimitrii Pucer. Director of Adria Terminali d.o.o., Slovenia

The SoNorA project sought to ensure exploitation of all access points of the network using the most environmentally sustainable transportation possible.

The project encouraged the creation of logistics services, by detailing the preliminary infrastructure investments needed for the development of new services. As part of this work, the project provided a software tool that presents intermodal routing information for logistic services and is available at the project website.

#### Facilitating regional cooperation

In an effort to encourage the creation of a transport network that benefits the whole central Europe area, SoNorA facilitated the development of transregional joint action plans for future projects. This work gave the various regions within the corridor an opportunity to agree upon common development actions.

Awareness of the project and its results was guaranteed at the local and transnational levels through events and activities that allowed for an exchange of ideas and the merging of different skills and expertise, providing fertile ground for the birth and growth of new ideas.

### 52 000 Kilometres of relevant road network in the SoNorA area

Corridors of the Trans-European Transport Core Network crossing the SoNorA area

2030

Year planned for achieving a fully functional multimodal transport core network



Project: SoNorA ERDF funding: €4 156 442 Duration: 2008 – 2012 Website: www.sonoraproject.eu

## **Remote medical** monitoring means better care

Innovations in telemedicine offer patients the possibility to enjoy better monitoring of their health and safety while reducing unneeded trips to the doctor. The SPES project helps encourage use of this technology by implementing a tele-health platform that serves people dealing with respiratory problems, dementia, disabilities and social exclusion in four central European cities.

Geographical isolation can be a problem for anyone, but it is especially difficult for those who have chronic illnesses and need frequent medical care. As they seek to bridge the gap between patients and care givers on the regional and local level, health service providers need to be able to test and adopt e-health instruments. Working in cooperation with a transnational team, and some of the most advanced technology providers within each region, SPES helps encourage innovative and shared solutions in the field of telemedicine. The result is that patients and caregivers have better communication, an improvement that amounts to enhanced

geographical integration of the regions involved. The SPES project implements an information and communication technology platform that is connected to different medical devices and installed in a patients' home. The platform creates a link with medical care providers and a system that is able to monitor the patients' health status. The SPES platform can also connect other patients and can serve as social communication channel. The platform is based on a low-cost personal computer and offers a userfriendly graphic interface. It provides the patient with a user entertainment system; it interacts with the health provider's

She is delighted to find songs in her memory book that she liked listening to in her youth. I can see that from her smile.



80

Woman whose mother suffers from dementia commenting on progress made thanks to SPES brain stimulation software

> Percentage of patients in Ferrara pilot who appreciated the ability to easily visualise and store their clinical data

36

call centre through a central server; and it functions as a telemedicine system, collecting medical data through sensors deployed at the patients' home.

#### Solution enhances people's lives

By exploiting this easy-to-use telemedicine solution, patients can lower their displacement costs and reduce the time they might spend visiting care providers, such as hospitals, general practitioners or medical centres. The reduction in travel time and improved medical monitoring enhances the guality of patients' daily lives and their general well-being. For example, in Ferrara, Italy, SPES initiative provided patients suffering from breathing problems with a system that can remotely monitor their health status via a pulse oximeter and other non-invasive medical devices – all of which work while the patient stays comfortably at home. The SPES pilot in Vienna, Austria endeavours to enhance the quality of life of older persons with dementia using localisation devices that do not restrict their movements. In Boskovice, the Czech Republic, 40 mobility-impaired clients are trained in a range of registered social services, such as education and social and professional integration. And in Kosice, Slovakia, older persons are able to enrich their daily routine with various communication and social features that allow them to get involved in leisure activities or to receive psychological support.

Along with operating these pilot efforts, the SPES project contributes to better cooperation between the regions participating in tele-assistance applications. The project does this by encouraging cross-border collaboration on the highest political level, initiating dialogue on the supra-regional level and promoting innovative developments between the partner regions.



Mobility impaired seniors in Brno pilot who are trained in a range of registered social services

Million people worldwide suffering from dementia



Project: SPES ERDF funding: €1 637 464 Duration: 2011 – 2014 Website: www.spes-project.eu

## Taking the trolleybus to a better future

Thanks to well-developed trolleybus systems, many central European cities have a head start in the race to improve urban mobility while protecting the environment. While some may consider trolleybuses old-fashioned, the TROLLEY project is helping to show how these existing transit networks can play an integral role in providing green transport for well-planned cities of the future.

Trolleybuses, a time-proven, ready-to-use technology, are being recognised by smart cities as essential pieces of the urban transport puzzle. Trolleybus networks are assisting with the on-going transition from our current reliance on diesel-powered buses to highly efficient, green means of transportation.

The TROLLEY project seeks to capitalise on existing trolleybus knowledge, which is truly rich in central Europe, where trolleybus systems are more widespread. Mining this potential to support the transformation process is a key goal of the project.

Despite their advantages, trolleybuses face challenges, such as their image as old-fashioned vehicles, or the widespread dislike of the overhead wires that power them. Part of the TROLLEY mission, therefore, is to contribute to improving the way the public thinks about trolleybuses and to resolve common misconceptions that can provide political hurdles to their use. Meanwhile, the project also makes trolleybuses more appealing by presenting innovative technical solutions that have the potential to pave the way for cleaner, quieter and more efficient urban transport.

I am glad that the CENTRAL EUROPE Programme is funding a project like TROLLEY, as trolleybuses are an intelligent, efficient and environmentally-friendly transport mode. If the project can achieve an increased awareness of trolleybuses as an option for public transport in European cities, this would be a great success.

Magda Kopczynska, Director of the Directorate "Innovative and Sustainable Mobility" (DG MOVE)

#### Technical assistance and awareness raising

TROLLEY partners are working on numerous local activities, pilot actions and innovative technical investments. The project created several useful tools and guidelines, among them a trolleybus take-up guide and a handbook on how to convert a conventional diesel bus into a trolleybus. In its effort to present trolleybuses as a smart mobility solu-

tion, TROLLEY designed the free promotion campaign called "ebus - the smart way!" Employing billboards, bus-stickers, posters and a lobbying package, this is the first joint public awareness campaign created to present a positive image of trolleybuses all across Europe. Other European cities and trolleybus operators are invited to join the "ebus" initiative to help raise the profile of trolleybuses.

As a way to promote trolleybuses among passengers and citizens, the project reached out to about 75 000 inhabitants in its partner cities during the first three stagings of "European Trolleybus Day" – a public-oriented initiative dedicated to the trolleybus and established by the TROLLEY project. Today, European Trolleybus Day is a fixed annual event, taking place on the Saturday of European Mobility Week every September.

To show support among concerned stakeholders, the project developed the Declaration for Electric Trolleybus Mobility, which demonstrates awareness of the potential of trolleybus transport in European cities. The declaration, signed by 70 trolleybus advocates, highlights the intention of the transnational group of signatories to promote the vision of effective trolleybus transport and to support sustainable urban mobility.

TROLLEY created the European Trolleybus Knowledge Centre to hold the documents that contain the project's guidance manuals and results. This information will be of value to anyone else working toward clean electric public transport in their cities.

25

312

80



Percentage of energy savings realised by using brake energy recuperation in trolleybus networks

Trolleybus cities worldwide, including 152 in Europe and 45 in central Europe

Percentage of cost savings on trolleybus infrastructure compared to trams at similar vehicle capacity

**Project: TROLLEY** ERDF funding: €3 274 112 Duration: 2010 – 2013 Website: www.trolley-project.eu



## Putting central Europe's future on track

Named after the east-west "Royal Highway" of medieval times, the Via Regia is a transportation corridor that connects eastern Germany, southern Poland and Ukraine. Cities and regions along the corridor cooperated in the Via Regia Plus project to produce studies on dynamic, sustainable development in an effort to improve connections in border regions, increase cooperation of urban areas and promote tourism.

The Via Regia, or Trans-European Transport Corridor III from Dresden to Lviv, is an important part of the European transport network and creates a bridge to the European Union's neighbours. The regions along the corridor are characterised by different conditions: Areas near transport axes develop very dynamically, while mountain areas and regions on the EU's external border face isolation. The Polish "heart" of the Via Regia has a high settlement density and a strong railway network, with good conditions for rail transport. But cross-border connections to Germany, Slovakia and the Ukraine are insufficient, and there is poor

coordination of investment in the region's transportation infrastructure. For example, the Polish part of the railway line from Wrocław to Dresden and Hoyerswerda has been modernised, but there is no clear schedule for the renewal of the German part.

Via Regia Plus sought to address the situation by preparing a transnational strategy for the harmonised development of investments and travel routes. The project evaluated the spatial effects of infrastructure investments and identified possible transport routes. Infrastructure managers and rail operators shared their views during public forums and

expert workshops, and solutions for links of high interest (e.g. Berlin-Wrocław) were investigated in case studies.

#### Joint development of cities and surrounding areas

In many cities in central and eastern Europe, unregulated growth of individual transportation may reduce the quality of life and bring traffic congestion. More sustainable urban mass transit can help ensure a higher level of mobility. In Poland for example, the project sought to address this situation by contributing to such initiatives as the creation of fast urban transport in Kraków, a programme for integrated mobility management in Opole and the revitalisation of railway stations in Wrocław and Gliwice.

Meanwhile, partners in the project conducted studies aimed at better cooperation in urban areas. The Halle/Leipzig region launched a voluntary process to encourage joint development of commercial areas, and a tool for the coordination of local spatial policies was created for the Wrocław area. Both initiatives will be continued after project closure.



Partners in Via Regia Plus also discussed strategies to tackle demographic change and to increase the attractiveness of cities and regions. The discussions focused in particular on work migration as a resource for the integration of labour markets and the need to create attractive living conditions for qualified employees and their families.

The project also supported the "Via Mobil" moving exhibition, which promoted the Via Regia as a traditional route for trade and pilgrimage, as well as an axis of cultural exchange. The exhibition, put on display in marketplaces between Santiago de Compostela and Kiev, raised the awareness of the value of the project area for tourism.

The macro-regional perspective of Via Regia Plus allows us to evaluate our priorities of spatial development, and it delivers a framework for strategic initiatives with our partners in Germany and the Czech Republic.

Maciej Zathey,

Director of the Department for Regional Development of the Lower Silesia Voivodship, Poland

Stops of the Via Mobil moving exhibition between Santiago de Compostela and Kiev

5.30

Travel time in hours between Wrocław and Berlin in 1895 as well as in 2012

1104

Length of rail connection in kilometres from Frfurt to Lviv



Project: Via Regia Plus ERDF funding: €1 950 619 Duration: 2008 - 2011 Website: www.viaregiaplus.eu

The Joint Technical Secretariat (JTS) of the CENTRAL EUROPE Programme is based in Vienna (Austria) and can be contacted at any time for queries related to finance, project management, or communication. We are looking forward to cooperating with you and can be reached by telephone or e-mail.

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