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Sustainable Mobility and Regional Cooperation along the Pan-European Transport Corridor III

# **Studies and results**









### Editor

Municipality of Wrocław, Wrocław Development Office ul. Świdnicka 53, PL 50-030 Wrocław

as Lead Partner of the CENTRAL EUROPE project Via Regia Plus - Sustainable Mobility and Regional Cooperation along the Pan-European Transport Corridor III

#### **Project partners**

Poland

- Municipality of Wrocław
- Municipality of Kraków
- Upper Silesian Agency for Entrepreneurship Promotion (GAPP)
- Municipality of Gliwice
- Municipality of Opole
- Marshal's Office of the Lower Silesia Voivodship Regional Bureau for Spatial Planning

#### Germany

- Saxon State Ministry of the Interior
- Thuringian Ministry for Construction, Regional Development and Transport
- Senate Department fur Urban Development Berlin
- City of Leipzig
- City of Dresden

#### Slovakia

- City of Košice
- Agency for the Support of Regional Development Košice

#### Ukraine

City of Lviv

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CENTRAL EUROPE is a European Union programme that encourages cooperation among the countries of Central Europe to improve innovation, accessibility and the environment and to enhance the competitiveness and attractiveness of their cities and regions.

CENTRAL EUROPE invests 231 million EUR to provide funding to transnational cooperation projects involving public and private organisations from Austria, the Czech Republic, Germany, Hungary, Italy, Poland, the Slovak Republic and Slovenia.

The programme is financed by the European Regional Development Fund (ERDF) and it runs from 2007 to 2013. Interested partnerships are invited to propose their projects following public calls for proposals, which will be widely publicised.



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This project is implemented through the CENTRAL EUROPE Programme co-financed by the ERDF

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STRUKTUR & UMWELT zyński, Wrocław Development Office sploatacji – Państwowy Instytut Badawczy w Radomiu,





### Preface



Via Regia is the name of a transport corridor, which refers to a historical trade route dating back to the Middle Ages. Today, as *Pan-European Transport Corridor III* or *Central Axis*, it links European cities and metropolitan areas from Erfurt, Dresden and Berlin

through Wrocław and Kraków to Lviv. The Via Regia corridor encompasses an economic area with more than 37 million inhabitants and creates a region with a great potential for development. A precondition is the strengthening of the role of the cities and metropolitan regions located in its borders as "motors" of growth. To enable these areas to fulfil their functions as regional and European centres to the full extent, it is necessary to activate and to use their potentials for the wealth of the entire region, e.g. through the creation of comfortable and efficient transport connections between and within them.

The project *Via Regia Plus*, financed within the CENTRAL EUROPE programme, provided a platform for the realisation of the abovementioned vision of a dynamic region of growth and development. As joint operation of fourteen cities and institutions from Germany, Poland, Slovakia and the Ukraine the project, lead by Wrocław, focused on activities aimed at the better accessibility of metropolitan regions, the elaboration of efficient models for territorial cooperation and governance and the creation of offers for tourism along the Via Regia corridor.

Using the name *Via Regia* for the project underlines the tradition and the integrating character of the trade route in the past, and the development corridor today.

Participation in the project Via Regia Plus gave local and regional institutions and self-

governments a unique opportunity to take part in strategic discussions on the directions of economic and spatial development along the Pan-European Transport Corridor III. Without doubt the project created an occasion for the elaboration of many useful analyses and strategic documents, which will surely generate impulses for the dynamic and coordinated socio-economic development not only of the corridor, but as well of cities and regions located in its area of influence.

Obviously a lot of work is still to be done until the Via Regia corridor will become an area of dynamic development in all dimensions, in particular regarding the quality and the standard of transport connections. Therefore the promotion of the Pan-European Transport Corridor III as European development axis will as well enable to introduce changes in many sectors of socio-economic life.

Not only the Pan-European Transport Corridor III, but as well further regions of intensified cooperation might play a crucial role for the improvement of transport infrastructure in Central and Eastern Europe. Without doubt this will contribute to the increase of attractiveness of location factors for economic subjects, as well as the facilitation of cultural exchange and the circulation of goods. Thus such initiatives may significantly contribute to the equalization of conditions of life between the different member states of the EU, as well as to the complex integration of Europe.

Taking the opportunity I would like to thank the Ministry of the Interior of Saxony for the fruitful cooperation during the continuation of the project Via Regia. Based on the created network of partners we could intensify the cooperation of cities and regions along the Via Regia, and I believe that our cooperation will as well in the future lead to the next joint initiatives.

> Adam Grehl Vice-President of Wrocław



### Keywords

Improve accessibility!

Strengthen cities and metropolitan nodes as "motors" of development!

Use potentials for tourism!





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# Improving long-distance and cross-border transport









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### Potentials of long-distance rail transport

Rail transport in Poland and Slovakia is currently at a turning point – due to decapitalised infrastructure and outdated rolling stock the conditions for rail travel were in the past subject to a continuous process of degradation. Currently first improvements are visible: national and regional railway operators are re-organised and purchase modern railcars, and infrastructure operators use the structural funds to modernise the rail network.

But what are the potentials of rail transport along the Via Regia, and what might be the perspectives of future development? To find answers to these questions, the Wrocław Development Office and the Saxon State Ministry of the Interior investigated the conditions and quality of the rail infrastructure and the available offers, evaluated the effects of planned investments and developed a vision for the possible operation of this mode of transport.

## Analysis of current conditions – Strengths and weaknesses

The analysis of socio-economic trends, the quality of road and rail infrastructure, current offers in road, rail and air transport and the evaluation of effects in terms of competitiveness leads to a comprehensive understanding of the current conditions of rail transport. The strengths might be summarised as follows:

- Dense network of rail lines, well-developed travel offer along main routes
- Favourable settlement structure with high density, leading to high potential demand
- Many agglomerations with high attractiveness for economical development and tourism
- Attractive conditions for tourism in mountain areas
- Modernisation of rail stations in large centres (Poland)



Passenger flows in rail transport 2010 per day (source: ETC)





Passenger flows on motorways 2005-2010 per day (source: ETC)

But there are as well numerous weaknesses, which unfortunately equalise the strengths:

- Limited number of connections, in particular cross-border, lack of coordination and integration of different modes of transport
- Outdated rolling stock, not adapted to the needs, continuous degradation of infrastructure without sufficient renewal (Poland)
- Lack of funds for the financing of offers, in particular in regional rail transport (Poland)
- Unfavourable framework conditions for the organisation long-distance transport (Germany)
- Lack of joint strategy for the development of offers and cross-border coordination of investments
- Emerging competition through microbus services (Poland) and threats through the planned liberalisation of long-distance bus services (Germany)

Despite these unfavourable conditions the demand for rail transport along the "core section" of the Via Regia from Wrocław to Kraków and Rzeszów is still at a considerable level. Between Opole and Katowice approx. 20.000 passengers / day travel by train, and approx. 40.000 travellers / day use the parallel A4 motorway. So there must be a relevant potential to increase the demand for rail services, if travel times would be reduced and comfort improved.

#### Partner:

Municipality of Wrocław, Wrocław Development Office

**Contact:** Jan Roga, Marek Żabiński

*External support:* ETC Transport Consultants, Berlin



### Effects of infrastructure investments

Currently large investment projects are realised along the E-30 railroad, and within few years trains may run at a speed level of up to 160 km/h from the German-Polish to the Polish-Ukrainian border. The connection from Berlin to Cottbus has been upgraded for 160 km/h in 2011, and from 2012 trains from Wrocław might be operated to the future Berlin-Brandenburg International airport.

To evaluate the effects of these measures for the accessibility of cities and regions and to assess the need for further speed increase to reach sufficient travel times, three different investment scenarios for the planning horizon until 2020 / 2030 were investigated:

- Base development scenario (scenario 1): Projects with confirmed implementation perspective (planning procedure and funding), planned to be realised within the next years
- Further developments (scenario 2): Projects within the extended planning horizon of national strategic plans and programmes. Modernisation and upgrading of additional rail lines with importance for the project area, in particular supported and promoted by partners
- Development of transnational high-speed schemes (scenario 3): Joining national highspeed networks, leading to transnational integration of corridor infrastructure. Consideration of additional lines with relevant spatial effects and economic benefits for the Via Regia corridor, in selected cases evaluation of alternative investment options

The travel times achieved in the different scenarios were compiled to an accessibility matrix for node cities, which are located along the corridor and in surrounding areas. The Polish "Y" high-speed rail project was considered in scenario 2 to assess the effects of this measure separately.

#### Need for action on cross-border sections

The results of the study have been visualised in several maps and graphics. Accordingly, the effects



Time-consuming change of locomotives due to lack of electrification – Węgliniec, June 2011 (source: IU / Martin Reents)

of investment measures might be summarised as follows:

- The most relevant reductions of travel times might be achieved already through realisation of scenario 1. So the short-term upgrade and renewal of the railway network should be of highest priority.
- Selected measures of scenario 2 might improve the accessibility of selected parts of the project area. This is in particular true for cross-border connections, which are not included in the first priority of national investment plans and programmes.

The development of high-speed rails along the E-30 seems to be not feasible. The reasons are two-fold: On the one hand, the national projects for high-speed rails in Poland and in the Czech Republic provide by-pass connections, which reduce the added-value of high-speed connections





Scope of investment measures in the second and third scenario – Further developments and integration of high-speed schemes (source: ETC)



Effects of investment measures on travel times (source: ETC)

along the Via Regia. On the other hand the spatial structure along the Via Regia with many cities and metropolitan regions reduces the benefits of a speed increase beyond a level of 160-200 km/h. Investment costs would increase significantly, but effects would be marginal. Additionally the development of high-speed rails might cause conflicts with freight transport.

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#### Partner:

Saxon State Ministry of the Interior (SMI)

**Contact:** Andreas Kühl, Jörg Kellermann

*External support:* ETC Transport Consultants, Berlin



### Integrated development of infrastructure and travel offers

To establish a vision for the efficient use of the modernised infrastructure a forecast of demand was prepared, which is based on three different scenarios with pessimistic, optimistic and "realistic" assumptions regarding the future development. The latter scenario postulates:

- A slight decrease of population and a further decrease of unemployment
- The further integration of Europe, with a growing GDP and integrating effects on border regions
- The ability of bodies of self-government to concentrate settlement areas and investments at least partly along rail lines
- A stable level of motorisation with 0,4-0,6 private cars / inhabitant, slightly increasing fuel prices and the extension of toll systems
- Balanced investments in road and rail infrastructure, with visible improvements in agglomeration transport

Still the "realistic" scenario leads to a significantly lower demand for transport services on crossborder relations, but the increasing level of integration stabilises demand even in areas with shrinking population.

### A model for future development

Based on the results of the demand forecast, the results of the infrastructure analysis and the available knowledge regarding the expected level of service of long-distance, regional and agglomeration transport a vision for the future system of rail transport along the Via Regia was elaborated.

Guided by the concept of integrated timetables with regular intervals of operation between defined exchange nodes until 2020 a systematic offer of interregional trains is postulated, which would use the available infrastructure most efficiently. Until 2030, with increasing progress of infrastructure renewal, these interregional trains could be supplemented by qualified interagglomeration trains, which would introduce a new dimension of comfort and travel quality.



Proposal of network and level of service in 2030 perspective (source: ETC)





Creating the prerequisites for attractive and efficient offers – Modernised E-30 rail line in Oława, renewal of Wrocław main station (sources: Mirosław Siemieniec / PKP PLK S.A., GRUPA 5 Sp. z o.o.)

At the same time the completion of crucial infrastructure investments would allow the separation of (slow) freight and regional passenger transport from (fast) interregional and inter-agglomeration transport. This concerns in particular the "core" section of the Via Regia between Wrocław and Kraków, which should enable the handling of large transport volumes in sufficient quality.

#### Partner:

Municipality of Wrocław, Wrocław Development Office

**Contact:** Jan Roga, Marek Żabiński

External support: ETC Transport Consultants, Berlin

#### Improvement of cross-border connections

Cross-border rail transport faces many barriers, which reduce its attractiveness. Different signalling systems, safety systems, systems of power supply and gauge of tracks limit the crossborder operation of railcars, and the solutions of operators (change of trains or engines at border stations) lead to longer travel times and the risk to miss connections. Additionally due to low demand often outdated rolling stock is used.

The case of the connection between Dresden and Wrocław demonstrates that these factors are highly relevant. After the introduction of dieseloperated direct trains the number of passengers has been multiplied, and connections in the morning and the evening efficiently facilitate travel for tourism and business purpose.

## A perspective for the Berlin-Wrocław connection

A study prepared by the Senate Department for Urban Development Berlin investigated the

possibilities to introduce a comparable offer between Berlin and Wrocław, using the upgraded rail infrastructure in Brandenburg (Berlin-Cottbus) and Lower Silesia (Zgorzelec/Węgliniec-Legnica-Wrocław). Since several route options are possible, five different modules were assessed:

- Module 1: Status quo, realisation of minor improvements
- Module 2: Modernisation and electrification between Hoyerswerda and Horka, change of route
- Module 3: Electrification between Görlitz and Węgliniec, change of trains in Cottbus and Görlitz
- Module 4: Electrification between Cottbus and Görlitz
- Module 5: Substantial renewal of the line between Cottbus, Forst (Lausitz) and Legnica

The results demonstrate that it will be possible to operate three pairs of trains between Berlin, the Berlin-Brandenburg International airport and





In September 2011 the modernised rail line Berlin-Cottbus returned to operation (source: DB AG / Christian Bedeschinski)

Wrocław after the modernisation of the German part of the E-30 freight line (module 2). The travel time could be reduced to less than 3:45 h, with trains being hauled with multi-system electric traction between Cottbus and Wrocław.

The offer could be introduced in few years, replacing current direct trains with timeconsuming double-change of engines or possible intermediate solutions, which could be operated by diesel units. A necessary prerequisite is the due modernisation of the freight line Knappenrode-



Arrival of the direct train from Dresden in Wrocław (source: BRW / Łukasz Górzyński)

Hoyerswerda-Horka, as it was agreed in 2003 and confirmed by the Polish and German government in June 2011.

### Developing the regional network

Once the desired mid-term investments are realised, several further options are available to reach further improvements. These include the electrification of the tracks between Cottbus-Görlitz and Görlitz-Węgliniec to reduce travel time and to strengthen the node of Görlitz/Zgorzelec.



Options (modules) for the reduction of travel times between Berlin and Wrocław (source: ETC)



But as shortest connection the route via Forst (Lausitz)-Legnica bears significant potentials, too: After an upgrade already today diesel-operated trains might provide competitive offers, and in long-term perspective the route might serve as capacity reserve in case of increasing demand.

#### Partner:

Senate Department for Urban Development Berlin

Contact: Dr. Jürgen Murach, Gerd Müller

*External support:* ETC Transport Consultants, Berlin

### Cross-border integration of tariffs and timetables

Besides technical barriers cross-border rail transport faces as well organisational barriers. Timetables are coordinated in longterm perspective, flexible adaptations e.g. due to short-term construction measures are nearly not possible. In case of delays connecting trains are missed if cross-border communication is not sufficient, and the purchase of tickets at attractive prices requires – besides language skills – often expert knowledge.

The Saxon State Ministry of the Interior and the Senate Department for Urban Development Berlin realised two studies, which are aimed at the reduction of these barriers: A proposal for

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the cross-border integration of timetables and a study on the improvement of travel conditions for passengers using cross-border trains.

### Synchronised timetables in the Saxon-Polish-Czech triangle

Due to the close relation between infrastructure and rolling stock and the need to consider the capacity of tracks rail services must be planned and developed in long-term perspective. Following the up-to-date approach of synchronised timetables, nodes in the railway network are identified and linked in certain quality and travel time. The result is an integrated offer with optimised connections.



Proposal for a system of timetable nodes in regional and cross-border transport (source: ISUP / LUB)



In the perspective of synchronised timetables the cross-border integration of networks turns out to be promising and challenging at the same time. Regional and national infrastructure policies need to be harmonised to reach the joint aim, and agreements must be thoroughly prepared to provide a reliable framework for investments.

Taking these conditions into account, the study prepared by the Saxon State Ministry of the Interior analyses the existing infrastructure in the Saxon-Polish-Czech triangle and proposes a system of timetable nodes with defined connections. The resulting investments were compiled to a strategy paper, delivering a possible framework for the preparation of joint activities. To implement the concept, it would be necessary to agree on target travel times between Dresden, Cottbus and Wrocław.

## Tackling organisational barriers in cross-border rail transport

There are many possibilities to increase the level of service for passengers travelling from Saxony and Berlin-Brandenburg to Lower Silesia:

- Through a better coordination of timetables attractive connections from Berlin and Dresden to Jelenia Góra and further to the Karkonosze mountains could be provided
- Simple catering offers could increase the experience value of the Eurocity Hamburg-Kraków in sections without a restaurant car
- Integrated tickets could reduce the risk of excess payment and improve the access to discount offers, which are not distributed through standard channels



The gate to Lower Silesia: Görlitz (source: Andreas Kühl)

• The accessibility of tourism destinations in Southern Poland could be improved, if bus timetables would be included in search engines

To pave the way for practical improvements the Senate Department for Urban Development Berlin launched a moderated process with stakeholders, which shall identify barriers caused e.g. by contradicting interests and sketch possible solutions.

### Partners:

Saxon State Ministry of the Interior (SMI); Senate Department for Urban Development Berlin

#### Contact:

Andreas Kühl, Jörg Kellermann; Dr. Jürgen Murach, Gerd Müller

#### External support:

ISUP Ingenieurbüro für Systemberatung und Planung GmbH, Dresden / LUB Consulting GmbH, Dresden

### Lower Silesia: Improving the accessibility of mountain regions

The mountain range of the Sudetes leads to a high attractiveness of the Polish-Czech border area in terms of tourism, and at the same time it limits as natural barrier the access to the border region. Accordingly the southern parts of the Lower Silesia and Opole voivodships are characterised by a peripheral location, and there is need for social and economic activation to generate growth and development perspectives.

Transport infrastructure located in these areas serves two functions: On the one hand it provides access to the internal market and improves the conditions for the development of tourism. On the other hand it delivers the prerequisites to increase trade and exchange with the Czech Republic, thus supporting economic development.



## Strategical development of the road network through coordinated investments

The Regional Bureau for Spatial Planning in Wrocław (WBU) realised a study which is aimed at the identification of a road integrating the southern parts of Lower Silesia, considering as well the improvement of North-South connections. In the first step a comprehensive regional analysis was realised, including geographical conditions and requirements resulting from the need to protect areas of high natural value.

Taking the results of the analysis three route options were identified, using sections of existing roads. To identify the priority solution, the options were compared regarding economical effects, effects on protected or sensitive areas, estimated investment costs, the degree of compliance with existing investment programmes and expected benefits for multimodal transport and the development of tourism.

The methodical approach and the results of the study have been intensively discussed with stakeholders to increase the acceptance of results. In the effect a planning document has been prepared, which facilitates the strategic coordination of decentralised investments in the regional road infrastructure.

## Paving the way for decisions regarding the renewal of rail infrastructure

The Municipality of Wrocław investigated the development perspectives of the parallel rail route from Wrocław to Wałbrzych, Jelenia Góra and Zgorzelec, which was constructed from 1843-1867. Due to lack of investments its infrastructure is subject to continuous deterioration, and travel times increase every year. At the same time the route has some relevance for freight transport through the transport of gravel for road construction.

The study focused on technical aspects, investigating in its first part the status of the rail infrastructure with speed levels reached today. In its second part three different scenarios for modernisation were investigated:





Participation of stakeholders: Regional workshop in in Karpacz (June 2010), public presentation of results in Wrocław (December 2010, source: WBU)

- Scenario I: Restoration of the rail line to the initial technical parameters
- Scenario II: Modernisation for a speed level of 120 km/h
- Scenario III: Modernisation for a speed level of 160 km/h in the Wrocław-Marciszów section (120 km/h in remaining sections)

Scenario III consists of several subscenarios, investigating the partly relocation of tracks in sections with an unfavourable alignment.

According to the results, the realisation of measures foreseen in scenario I would enable the reduction of travel times from Wrocław to Jelenia Góra from 3:23 h to 1:53 h and from Jelenia Góra to Zgorzelec from 1:40 h to 1:04 h. In scenario II a level of 1:33 h and 0:54 h would be reached, and taking into account significantly higher investments in scenario III for the section from Wrocław to Jelenia Góra a reduction to 1:03 h would be technically possible.





Route options for the road integrating the southern parts of Lower Silesia (source: WBU)



Rail line 274 Wrocław-Wałbrzych-Zgorzelec (source: PKP PLK)



A priority scenario was not identified. Nevertheless the study provides a comprehensive framework for a qualified discussion about the perspectives of development of the investigated rail line, which is of high relevance for regional development and the provision of access to the E-30 corridor.

#### Partners:

Regional Bureau for Spatial Planning in Wrocław (WBU); Municipality of Wrocław, Wrocław Development Office

#### Contact:

Rajmund Nowicki, Aleksandra Sieradzka-Stasiak; Jan Roga, Marek Żabiński

#### External support:

EKKOM Sp. z o.o., Kraków; ARCADIS Sp. z o.o., Biuro Infrastruktury Kolejowej, Wrocław

# Eastern Slovakia / Ukraine: Increasing spatial cohesion through road and rail connections

The external border of the EU influences the development perspectives of the regions located in Eastern Poland, Eastern Slovakia and the Ukraine significantly. Trade and exchange are highly regulated and subject to intensive border controls, and the "border economy" is limited to activities creating rather marginal added value.

Road transport from/to the Ukraine is possible, but long waiting times in uncomfortable conditions with a high level of psychologic pressure makes the journey not attractive. Local trains have been abandoned due to devastation of rolling stock (smuggling of alcohol and cigarettes), so travel by rail is limited to long-distance night trains. In the effect air transport remains the most attractive option.

## Cross-border links in the Slovak-Polish border area

The quality of accessibility of Eastern Slovakia depends on the direction – from Bratislava and Budapest connections are well-developed: motorways are already available or under construction, and regular train services provide comfortable connections to Prague, Ostrava and Vienna. But travel to Poland, Romania and the Ukraine remains difficult – the road network is limited to national or regional roads, and rail connections are nearly not existent.



Košice rail station (source: IU / Martin Reents)

Therefore the development of a multimodal corridor from the Baltic states through Poland and Slovakia to South-East Europe is of high priority, by road from Białystok through Lublin, Rzeszów and Košice further to Miskolc and Bucharest, and by rail through the nodes of Warsaw and Kraków.

On regional and local level a multitude of cross-border connections provides access to Eastern Slovakia. Transnational cycling routes are in process of development, and rail lines from Rzeszów and Tarnów to Košice improve the accessibility of mountain regions. But it is necessary to revitalise cross-border passenger transport, since currently no regular services are operated.



A breakthrough could be the planned renewal of the rail line from Kraków to Zakopane with the construction of a new track between Podłęże and Piekiełko, since new perspectives for the joint marketing of potentials could emerge. In the effect the visibility of Eastern Slovakia on the tourism map of Northern and Western Europe might be significantly increased.

## Developing Lviv as intermodal node and hub for the EU-Ukraine relations

In the case of the Ukraine the future perspectives depend mainly on political developments. If the relations between the EU and the Ukraine improve, the regulations for the exchange of people, services and goods could be simplified, leading to an increase of trade and welfare in particular in the border region.



Night train to Lviv ready for departure in Wrocław (source: IU / Martin Reents)



With increasing welfare the character of crossborder transport could change, facilitating as well the realisation of more ambitious perspectives. Lviv could be developed in mid-term perspective as hub of trade, commerce and tourism, linking the cultural and economical space of Western and Eastern Europe. The construction of a European gauge track towards the Polish-Ukrainian border would support this vision and improve the possible gateway functions, which today are heavily limited.

**Partners:** Agency for the Support of Regional Development Košice; City of Lviv

**Contact:** Ján Dzurdženík, Jaroslav Tešliar

# Upper Silesia: Small aircraft transportation and development of local airfields

The development of small aircraft transportation (SAT) may improve interregional mobility and local accessibility in regions where transport networks are underdeveloped. Through the introduction of a system of scheduled and nonscheduled flights with small-size aircrafts an additional component may be added to the transport system, which fills a niche between surface and scheduled air transport. Furthermore it promotes local airfields and its surroundings as focal points of economic development.

### Potentials of small aircraft transportation

To investigate the feasibility of a SAT system in Poland and its neighbouring countries the Upper Silesian Agency for Entrepreneurship Promotion (GAPP) contracted a study on the possible directions of development of local airfields. In the study the network of airfields in Poland was analysed, including an evaluation of their current use and the needs and potentials for air-based business tourism.





Conference on the development of modern air services and small airports (September 2009, source: GAPP)

The results demonstrate that – taking into account the insufficient quality of road and rail infrastructure – innovative transport solutions are needed for business travel in a range of 200 – 1.400 km, in particular on routes with limited demand. SAT may satisfy this need, if an adequate system of airfields, a suitable fleet of aircrafts and an efficient system of route management are implemented.

To increase the feasibility of the system an intensive cooperation and coordination with neighbouring

countries is inevitable, since its economic success depends on a sufficient number of flights on distances of several hundred kilometres. During the project first contacts with Ukrainian partners were established, but it is expected that only a broad implementation in European scale would generate sufficient demand.

## Strategies for the revitalisation of local airfields

To provide the prerequisites for the introduction of a SAT system and to create new development perspectives as well for economic development GAPP prepared in cooperation with local stakeholders a set of four concepts for the modernisation of local airfields in Silesia. The activities, which supported the regional policy regarding the modernisation of airports, lead to the preparation of technical projects for the following facilities:

• Rybnik-Gotartowice: Currently used as sports airfield, extension to local business airport and commercial development of surrounding areas



Concept of extension of the Rybnik airport, including the development of neighbouring industrial areas (source: Susuł & Strama Architekci)





Modernisation of Rybnik airport – Visualisation (source: Susuł & Strama Architekci)

- Częstochowa: Reconstruction and modernisation of post-military airfield to serve e.g. charter flights, development of multimodal logistics centre
- Czechowice-Dziedzice: Development as special-purpose airport to serve the aviation industry, equipment with research, laboratory and navigation devices
- Bielsko-Biała: Extension to local business airport, supplementing use as location for events and concerts

The identification of specific functions of each airport increased the added-value of the elaborations as well as the preparation of concepts for the use of surrounding areas. To prepare subsequent decisions regarding further implementation and financing of investments the economical feasibility of the proposed measures needs to be assessed, taking into account the number of expected operations and possible restrictions caused by conflicts with neighbouring uses. Furthermore solutions for the financing of continuous operation need to be identified, since local airfields with more advanced technical equipment cannot be operated without external support.

**Partner:** Upper Silesian Agency for Entrepreneurship Promotion (GAPP)

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### Gliwice / Košice: Strategies for the activation of local airports

The Municipality of Gliwice realised an indepth study, which prepared through legal and economic studies a comprehensive framework for a decision regarding the future status of the local airport. In the case of the Košice airport an attempt was made to identify the perspectives of the regional airport, which depends on regular airline services.

## *Evaluating the possible effects of airport redevelopment*

Main user of the Gliwice airport, which is owned by the municipality, is the local airsports club. Each year approx. 7.000 starts and landings are observed, and currently not more than 15 % of these operations are targeted at tourism or business purpose. Additionally the airport hosts an air rescue station.

The concept prepared within the project describes the conditions to change the status of the airport from non-public to public use. It is estimated that the modernisation of the airport to the required standards would cost approx. 15 mln EUR, with yearly operation costs being estimated at a level of approx. 750.000 EUR. Investments would include a runway, hangars, a control tower and service facilities for the handling of small passenger and freight aircrafts.





Current use of Gliwice airport and concept for extension (source: Municipality of Gliwice / EMA projekt)

To investigate the economic environment and the possible level of income a complementary analysis was prepared, which includes an estimation of the expected demand and possible relations, the resulting number of passengers and operations and an analysis of related markets: air taxi services, private business flights, training flights and services connected to airport operation. The results demonstrate that the economic success or failure of the airport depends as well on the ability to define a network of regional airports, which complies with the expected demand.

## Strengthening the airport as regional gateway

Since the failure of the low-cost airline SkyEurope in 2009 the airport of Košice faces a sharp decline in the number of passengers. Besides several daily connections to Prague, Vienna and Bratislava the airport is predominantly used for charter flights, and its potential as gate to Eastern Slovakia is not used. To achieve a more active marketing approach and to gain new carriers and airlines the Agency for the Support of Regional Development Košice prepared a study, which compared the airport with competing facilities in Slovakia, Poland, Hungary and Ukraine. Considering the expectations of public and private stakeholders recommendations for further development are proposed, which shall strengthen regional accessibility and improve the utilisation for tourism purpose.



Bus transfer from Budapest airport to Košice (source: IU / Martin Reents)

Partners:

Municipality of Gliwice; Agency for the Support of Regional Development Košice

#### Contact:

Anna Włodarczak; Jozef Sulak, Jaroslav Tešliar

#### External support:

AD NOTAM Kancelaria Prawna, Warszawa / intelligent aviation, Warszawa / Instytut Lotnictwa, Warszawa

Sustainable transport in agglomeration areas









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### Kraków / Gliwice: Investigation of needs and expectations of passengers

With increasing level of income citizens are free to decide about preferred means of transport. Therefore the success of collective means of transport depends increasingly on the degree of satisfaction of passengers. Adequate travel times, high frequency of service and sufficient comfort – if these conditions are missed, only passengers without choice, often with limited income and reduced fares, will remain in public transport.

In the effect due to lack of income the level of service will be reduced to a minimum level, and negative effects of increasing individual transport through pollution, noise and congestion will prevail in the urban landscape. Urban space will become less attractive, and quality of life will decrease.

Nevertheless due to limited funds decisions must be made, which elements of public transport should be improved in first priority. Towards this aim the cities of Kraków investigated the needs and expectations of passengers in rail and bus transport.

## Potentials for the shift from road transport to rail transport

In Kraków agglomeration a system of fast rail transport (Szybka Kolej Aglomeracyjna – SKA) shall be introduced, which will improve the conditions for public transport significantly. To investigate the current modal split, the functionality of actual offers and possible effects of the SKA system a questionnaire was carried out, which focused on inhabitants of areas located within the main railway corridors.

It turned out that current offers of rail transport are weakly known and used at a low level. Respondents could not answer to questions regarding the duration of travel and the frequency of service, and the quality of offers is evaluated at a significantly lower level than in the case of the remaining means of public transport.

In case of remarkable improvements through the SKA system a relevant share of respondents declared to be ready to use rail transport in future. This shift would concern mainly existing bus and





microbus services, but individual transport as well. An important condition for change would be the information about the provided services and the improvement of access to rail stations. Currently the users of rail transport live mostly in a distance of up to 1 km from a railway station.

## *Investigating preferences to prepare investment decisions*

In the case of Gliwice the revitalisation of areas in the city centre creates an opportunity to review the strategies for the development of urban transport. Accordingly the questionnaire realised among inhabitants and passengers investigated mobility habits, the level of satisfaction with public transport, needs, expectations and opinions regarding the need for action. It turned out that approx. 35 % of inhabitants use the local bus system regularly. The most relevant reasons for using public transport are the lack of possibility to use a private car, low travel cost and short travel times. Need for action is stated regarding the frequency of service, waiting time at interchanges and punctuality.

In the mid-term perspective more comprehensive measures are postulated: purchase of modern buses, modern bus stops, bus-lanes, introduction of ticket vending machines. Interestingly 65 % of respondents support the idea to limit car traffic in the city centre.

The study launched a process of analysis and investigation. Its results shall be used to identify and specify the hierarchy of needs, paving the way for necessary decisions regarding the directions of development.



Weight (left) and evaluation (right) of service factors of public transport in Gliwice (source: PBS DGA)

Partners:

Municipality of Kraków; Municipality of Gliwice

#### Contact:

Włodzimierz Zaleski; Anna Włodarczak

#### External support:

Jan Friedberg – Projektowanie i doradztwo w zarządzaniu, Wieliczka / Stowarzyszenie Inżynierów i Techników Komunikacji Rzeczpospolitej Polskiej, Oddział w Krakowie; PBS DGA Sp. z o.o., Sopot



### Kraków: Towards fast and integrated suburban rail transport

A comprehensive system of public transport in agglomerations requires the integration and networking of all modes: Rail, metro, tram and bus, taxi and car sharing, cycling and walking. In particular the activation of rail transport is of high relevance: It delivers high capacity and creates efficient transport corridors, which shape the development of settlement areas and provide excellent conditions for the creation of intermodal nodes at stations.

Accordingly in all major cities networks of fast suburban rail transport are operational or in process of creation. In the German part of the Via Regia area the Berlin system is most advanced (including as well regional trains), and the systems in Halle/Leipzig and Dresden are in the stage of significant improvements. But in Polish cities implementation is still at the beginning, maybe with the exception of Warsaw.

#### Facilitating access to the railway system

The challenges that need to be tackled are enormous: Huge railway nodes with an outdated infrastructure must be redeveloped, changing the structure of tracks and adapting the technical systems to the needs of the 21<sup>st</sup> century. Massive investments are required, which reach far beyond the actual renewal and modernisation of station buildings e.g. in Wrocław and Katowice. Bottlenecks need to be removed, and at the same time the awareness of stakeholders for the expected benefits must be increased to justify these interventions.

A crucial task is the creation of an adequate network of access points, which are located near sources, destinations and interchanges of passenger flows. Towards this aim conceptual and technical studies were prepared for the following stations:

 "Złocień" and "Prądnik Czerwony" – located close to the city borders near existing and planned housing and commercial areas with unsatisfying public transport services.



• "Bronowice Nowe" located in the neighbourhood of existing housing estates and large areas planned for commercial use. This station will also be a part of the Park & Ride system.



Rail station Kraków-Bronowice: Functional spatial study and visualisation (source: ALTRANS)



• "Sanctuary" – to be used mainly by pilgrims arriving to the Sanctuary and the new John Paul II centre as well as users of a large shopping centre.

The studies specified the location and technical framework of platforms and relations to surrounding areas (access paths, desired land use). All works were done in close and thorough cooperation with the Małopolskie voivodship as organisator of rail services and PKP PLK as infrastructure operator.

### Introducing a system of integrated tariffs

The activities aimed at the creation of railway stations were supplemented by a study on the integration of tariffs in Kraków agglomeration. Taking the experience of joint monthly tickets for urban and rail transport, the possibilities and effects of a comprehensive system of integrated tariffs are investigated. The study includes the design of the tariff system, organisational and financial aspects and possible models of cooperation with municipalities and service providers. Considering as well the expected economic effects, it shall provide the necessary basis for negotiations and agreements with stakeholders.

#### Partner:

Municipality of Kraków

*Contact:* Włodzimierz Zaleski

#### External support:

Pracownia Planowania i Projektowania Systemów Transportu ALTRANS - Stanisław Albricht, Kraków

### Wrocław / Gliwice: Revitalising rail stations as intermodal hubs

Throughout history rail stations were subject to a complete change of functionality: As part of the technical infrastructure, station buildings were inevitable for the organisation of rail transport and used completely for this purpose. Today their function is mostly reduced to access to rail transport and – if still operated – ticket sales. In major stations sufficient passenger flows may vitalise the buildings through related services, but minor stations are often subject to deterioration. So a place which once had an important role in urban life may become a problem.

## Perspectives for the Wrocław Nadodrze station

The discussion about the future of the Nadodrze station started in 2007 within the project ED-C III Via Regia with a first rough study on possibilities for the revitalisation and extension of the station building. Due to the encouraging reaction of the public it was decided to prepare an in-depth study, which includes the station surroundings and considers to a greater extent its strategic location in the city structure.



Wrocław Nadodrze – Site plan and visualisation (source: AA Studio)





Social consultations (source: AA studio)

A public workshop on the directions of further development was organised, and a draft design of the park and the square in front of the station was prepared. The extended concept provides now a comprehensive guideline, which is suitable to shape the process of revitalisation and modernisation. So in case of increasing awareness and pressure for action a socially accepted concept will be ready for implementation.

In the effect the rail station could regain the role of a connecting element in the Nadodrze district, which needs complex interventions and dedication of stakeholders for revitalisation. Additionally the successful transformation of the station building would be a pilot for comparable projects, since feasible models for cooperation between the state railways PKP, public authorities and interested stakeholders in case of stations with limited potential for commercial use are urgently needed.

### Redevelopment of the Gliwice main station

The need for revitalisation of the Gliwice main station and its surrounding areas lead in 2010 to an agreement between the Municipality of Gliwice and PKP state railways regarding the elaboration of a joint concept for spatial development. It should specify the functions and land use of particular areas and support the spatial integration of the station surroundings. Starting with areas located near the railway station, in the end the agreement covered an area of 40 ha.

The "heart" of the new communication centre is an intermodal interchange facility with the historical rail station and a new building, which integrates different means of transport and provides areas for commercial uses. Through these interventions a new quality of public space shall be created.

It is expected that in the effect a useable floor space of approx. 160.000  $\text{m}^2$  might be developed. In this process the joint concept shall serve as guideline, enabling the realisation of all necessary measures in close cooperation – and to the mutual benefit – of the Municipality of Gliwice and PKP state railways.

#### Partners:

Municipality of Wrocław, Wrocław Development Office; Municipality of Gliwice

**Contact:** Jan Roga, Marek Żabiński; Andrzej Karasiński

*External support:* AA Studio, Wrocław; P.A. NOVA S.A.





Visualisation of the concept for the redevelopment of the surroundings of Gliwice main station (source: Municipality of Gliwice / P.A. NOVA S.A.)

### **Opole:** Integrated system of city transport (mobility management)

Opole is among the European cities that have undergone numerous historical changes. In the transport sector, the excessive growth of the use of private cars puts new challenges to urban development. To keep the high level of quality of life and to increase the attractiveness of public space new solutions for the management of transport are required. Public transport must be prepared for the future, and the potentials of an advantageous spatial structure should be used to promote walking and cycling as eco-friendly modes of transport.

To change the approach to transport management and to evaluate possible options of future development a comprehensive programme for an integrated system of city transport (mobility management) was prepared, and a process of discussion with the interested public was launched.

## A set of measures for more sustainable urban transport

The study follows a systematic approach. Based on the spatial analysis certain areas of preference were identified, which divide between the city centre with priority areas for pedestrian and public transport, areas with high density of housing, where a high quality of public transport is desired, and remaining areas of lower density, in which might be used by private transport without restrictions.

For each mode of transport a set of measures was defined:

- Walking and cycling: Pedestrian and cycling routes in the city centre, possibilities to increase the use of bicycles for commuting purposes
- Bus: Introduction of a comfortable system of high-capacity bus transport, bus lanes,





Proposed system of pedestrian routes and changes in the bus system (source: TRAKO)

transport for persons with reduced mobility (PRM), design of bus stops, integration of tariff system and support of intermodality

• Private transport: One-way lanes and parking restrictions in the city centre to increase the share of space for cycling and walking, parking policy including Park & Ride system

All measures were adapted to the needs of Opole, and where applicable, the possible spatial implementation was visualised. After the relocation of stops, the regional railways could support the system of public transport with regard to suburban and regional connectivity. Options for the development of a tram system were investigated as well.

## *Implementation needs an institutional framework*

For implementation of the programme a preferred scenario was identified, which could be realised through step-by-step measures. To facilitate the realisation, quantified indicators were listed which are suitable to evaluate the progress.



Expected development of the modal split as result of the proposed measures (source: TRAKO)



area	ratio	2010	target
PEDESTRIANS	length of pedestrian zones [km]	1	2,5
	length of walkways with repaired pavement [m]	0	1620
	number of overpasses for pedestrians and cyclists [pcs.]	2	3
BICYCLES	length of marked cycle routes [km]	20.8	100.6
	number of advanced bicycle stop lines [pcs.]	0	15
	number of B+R parking lots [pcs.]	0	3
	number of raised junction tables [pcs.]	0	15
	number of speed control humps in the form of an island [pcs.]	0	42
	number of cycle crossings with high kerbs [pcs.]	56	0
	number of new bicycle racks [pcs.]	0	1000
TARIFF	share of regional lines with integrated tariffs in Opole [%]	0	100
BUSES	length of bus lanes [km]		6.17
	share of junctions with traffic lights used by the public transport with priority for buses [%]	0	100
	number of new buses purchased [pcs.]	0	70
	share of low-floor buses in the number of buses in the records [%]	53	100
	number of integrated transfer stops [pcs.]	0	1
	number of modernised stops [pcs.]	0	40
	number of stationary ticket vending machines [pcs.]	0	20
	number of electronic boards with dynamic information for passengers [pcs.]	0	40
CAR PARKS	number of garages [pcs.]	1	4
	number of P+R car parks [pcs.]	0	3
MODAL SPLIT	share of public transport in travelling within the city [%]	36	46
	share of bicycles in travelling within the city [%]	1	7
	share of cars in travelling within the city [%]	63	47

Proposed set of indicators and possible target values (source: TRAKO) Additionally it was proposed to create a board for traffic management, which should coordinate all activities and realise tasks of monitoring and supervision.

If the "core set" of measures would be realised, the experts preparing the study expect a shift in the modal split from motorised individual transport (63 %  $\rightarrow$  47 %) to public transport (36 %  $\rightarrow$  46 %) and cycling (1 %  $\rightarrow$  7 %), increasing the sustainability of urban transport significantly.

Partner: Municipality of Opole Contact: Danuta Wesołowska, Krzysztof Początek External support: TRAKO Marek Wierzbicki, Wrocław

### Wrocław: Flexible solutions for public and private transport - Bike & Ride

It is not yet visible in statistics, but it is visible in the urban scenery – cycling is already today an important part of urban transport in Wrocław. And its role shall grow – the city intends to increase the share of cycling from currently 1-2 % to 15 % in 2020. Important steps towards this aim were the nomination of a bicycle officer as coordinator of local activities and the recent launch of the city bike rental.

To support this policy and to extend the use of bicycles for commuting and leisure purpose in the entire agglomeration, the Wrocław Development Office prepared a study aimed at the development of a Bike & Ride (B&R) system at railway stations.

## Analysis of potentials and technical framework conditions

In the first step a questionnaire was realised to identify the railway lines where passengers show the highest interest in a B&R system. Supplemented by a spatial and infrastructural analysis three railway lines were identified, where the highest demand for the use of B&R might be expected. In the second step each station at the selected lines was analysed in detail. The access to platforms, the available equipment, the intensity of use, investment perspectives, the planned offer of services and access by local roads and dedicated cycling paths were investigated and evaluated. Finally for each station solutions for the future functionality with regard to B&R were elaborated, including site plans with access routes and proposals for the installation of parking facilities.

## Bike & Ride is more than parking facilities for cyclists

The study proposes two options for implementation: The minimum variant, which would focus on the construction of parking facilities and the target variant, which would include supporting investments on roads and access paths, too. It turns out that the costs of parking facilities are comparably low, but relevant funds are needed to create an adequate cycling infrastructure. Without these investments, it is doubtful if the B&R system would be accepted by the users.





Area of analysis and rail lines with high potential for Bike & Ride (source: TRAKO)



B&R station and city bike rental (source: Municipality of Wrocław)

Therefore the challenges are two-fold and closely interconnected: Citizens need to be motivated to include cycling into their choice of transport modes, and local authorities must realise the necessary investments according to a joint strategy and well-defined quality standards to make this happen. In case of success a B&R system could contribute to a more flexible and cost-efficient system of public transport in the Wrocław agglomeration.

Partner: Municipality of Wrocław, Wrocław Development Office

*Contact:* Jan Roga, Marek Żabiński

External support: TRAKO Marek Wierzbicki, Wrocław



### Dresden / Wrocław: Reducing the negative impact of freight transport

Road freight transport is a burden for each city: Noise, emissions, the risk of accidents and increased expenditures for road maintenance make it necessary to develop strategies, which reduce the impact of freight transport on the urban environment. At the same time an increasing division of labour and just in time production generate transport needs, which require a good accessibility of urban areas. To handle this dilemma, the cities of Dresden and Wrocław developed different approaches towards solutions.

## Support of freight transport management through efficient routing

In the Dresden agglomeration a truck guidance system is implemented, which is based on several elements:

- A city truck map, which shall guide freight transport through the city.
- A system of road signs, guiding trucks to important transport hubs and industrial estates.
- Interactive offers, providing information by the Internet.

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Freight transport on urban roads (source: City of Dresden)

These tools shall influence long-distance freight transport as well as local freight transport and direct the vehicles to routes which are adapted to heavy transport and have a limited impact on the urban environment.

Within the project a routing tool was developed, which uses the information included in the truck guidance system and might be distributed as part of navigation systems. The benefits are evident: Since most drivers use navigation systems, such an IT tool could influence their behaviour



Translating the concept of truck guidance to routing tools: Example sheet of the truck city map (source: City of Dresden)


immediately – without any language barrier. At the same time the quality of navigation would be improved, since standard systems lack attributes relevant for truck drivers (e.g. information regarding the height of tunnels or bridges).

A key measure for the dissemination of this very innovative approach would be the introduction of European standards and methods for the preparation and provision of truck-related data, which serves as well the aim of efficient guidance. Would the data be published in open databases, even an obligation to use these systems could be feasible.

# A regional dialogue about the needs for infrastructure development

Transport volumes in the Wrocław agglomeration are heavily growing, and in particular the road infrastructure is in a continuous process of renewal and modernisation. Even after the motorway bypass will be opened, relevant amounts of goods need to be carried inside the agglomeration from and to production facilities.

In this situation more effective coordination of transport routes and infrastructure investments and better coordination transport businesses could significantly improve the quality of life and the economical attractiveness of the region. To investigate the current situation, two studies were prepared:

- Investigation of bottlenecks in transport infrastructure and analysis of investment programmes of all modes of transport
- Investigation of size changes of cargo transport (im- and export from the agglomeration, focused on international corporations)



Study tour to Dresden, Leipzig and Halle to visit best practices and to share experience (source: Municipality of Wrocław)

To improve communication between stakeholders and public administration the Wrocław Agglomeration Logistics Forum was established as advisory, non-formal body. It includes representatives of public administration, transport infrastructure operators, logistic and transport organisations, business chambers and higher education in transportation.

#### Partners:

City of Dresden, Office of the Dresden City Region; Municipality of Wrocław, Economic Development Office

#### Contact:

Matthias Mohaupt; Witold Wiński, Tomasz Stefanicki

#### External support:

PTV Planung Transport Verkehr AG, Karlsruhe; Międzynarodowa Wyższa Szkoła Logistyki i Transportu we Wrocławiu, Wrocław / Wrocław Agglomeration Development Agency, Wrocław

# Efficient land use management and regional cooperation







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## Halle/Leipzig: Commercial land use management in city regions

The Halle/Leipzig region developed very well during the recent years. A main European logistics hub emerged around the joint airport, and huge production facilities were set-up in particular in the automotive sector.

But despite large resources of unused and derelict land (approx. 2.000 ha) a certain mismatch has been observed between a high quantitative supply and the current demand, which has specific qualitative requirements. Even though the future demand is hardly predictable it is estimated that in terms of quantity and quality within the next 10-15 years nearly each request of investors for areas suitable for commercial or industrial use can be answered positively – at least from regional perspective.

In this situation a lack of efficient structures for day-to-day cooperation of cities and surrounding municipalities might lead to an allocation of land use that is economically inefficient and ecologically not sustainable. Therefore the cities of Leipzig and Halle (Saale) decided to launch a dialogue of stakeholders to initiate a coordinated development of commercial areas.

# An evidence-based process of voluntary cooperation

To establish a joint approach in land use planning two main issues had to be addressed:

- The organisation of the cooperation had to be set up, taking into account that the area of interest covers the intermunicipal level as well as the area of two federal states (Saxony and Saxony-Anhalt) with certain differences in administration.
- Information about quantity and quality of commercial areas was compiled in a regional database, allowing the assessment of the available portfolio.



Area of investigation (source: IÖR)



From the very beginning the relevant stakeholders and decision-makers were involved through regional workshops, which provided a platform for cooperation at equal levels. Thus substantive research and the process of dialogue were carried out hand in hand. The activities were guided by a regional steering group, which turned out to be an efficient body for exchange of information and coordination.

### Perspectives for future activities

In November 2010 a joint declaration was signed, which confirmed the will to continue the cooperation. With the joint framework for the evaluation of commercial areas a tool has been prepared which is suitable to facilitate the discussion about the development perspectives of selected locations. Main tasks are now the continuous update of the regional database and its integration into the website "Wirtschaftsregion Leipzig/Halle", the organisation of regular meetings of the steering group and annual highlevel conferences to discuss directions and aims of further cooperation.

With the process realised in the field of commercial land use management a remarkable input for the institutionalisation of regional cooperation in the



After the signature of the joint declaration (November 2010, source: City of Leipzig)

Halle/Leipzig region could be achieved. If the stakeholders succeed to maintain the structures created so far, it might be possible to tackle as well further fields of interest, thus increasing the competitiveness of the joint city region.

#### Partners:

City of Leipzig, City Planning Office; City of Halle (Saale), City Planning Office

Contact:

Reinhard Wölpert, Peggy Sacher; Karsten Golnik, Wolfgang Besch-Frotscher

External support:

Leibniz-Institut für ökologische Raumentwicklung e.V., Dresden (IÖR)

## Wrocław / Kraków: Coordinating land-use planning and transport systems

L and-use planning may lower traffic volumes through the reduction of transport needs, and it may create better conditions for the use of public transport through the concentration of areas with housing or service functions along infrastructure axes. This is especially true for rail transport – due to the need for high demand rail stations should be surrounded by densely used areas and serve their catchment area as intermodal nodes.

Within the project two different options have been investigated to increase the demand for rail transport in agglomeration areas:

- The reactivation of a local railway line (Wrocław)
- Coordination of spatial planning along a transport corridor (Kraków)

### Case study: Reactivating a local railway line

Based on a comprehensive evaluation of the rail infrastructure in the Wrocław agglomeration area the line no. 285 was chosen for an in-depth analysis. It connects Wrocław with Sobótka and Świdnica, and passenger rail service was abandoned nearly ten years ago.

The study includes a description of the technical status of the infrastructure, a functional-spatial analysis and scenarios for the modernisation and revitalisation of the railway line. A possible standard for reconstruction is identified, and sets of measures are defined which would need to be implemented by the different stakeholders involved.





Successful revitalisation: Rail line Wrocław-Trzebnica (source: GRAD)

# *Case study: Coordinating spatial planning along a transport corridor*

The study investigates the possibilities for the intensification of land use along the rail line no. 8 Kraków-Kielce-Warszawa in the section from Kraków to Miechów, which is currently being modernised. It shall initiate a discussion among local stakeholders, which options should be realised to create a more efficient system of agglomeration transport.

Besides recommendations aimed at a harmonised investment policy, possible adaptations of the system of public transport are analysed as well. These include the organisation of bus transport, the introduction of Park & Ride and/or Bike & Ride systems and the possible relocation of railway stations. Finally the effects of possible measures in terms of travel times, the resulting transport work and the modal split are investigated.

# Conclusions: Efficient rail transport requires efficient regional cooperation

The results of the case studies underline the relevance of local self-governments for the success of strategies aimed at more sustainable urban transport. Of course operators of rail infrastructure and passenger rail services play an important role e.g. through the decision to modernise or reactivate a railway line or not. But without sufficient support from local authorities through the harmonisation of their spatial policies and an integrated approach towards public transport significant improvements will be difficult to achieve.

#### Partners:

Municipality of Wrocław, Wrocław Development Office; Municipality of Kraków

**Contact:** Jan Roga, Marek Żabiński; Włodzimierz Zaleski

*External support:* WYG International, Warszawa

# Lower Silesia: Enhancing cooperation through exchange of spatial information

The technological progress facilitates the creation and the management of spatial data. Today, geographical information systems (GIS) are used in many fields of life, but of course in particular in the field of spatial planning.

The broad application of GIS tools creates potentials, which might be used as well for efficient land use management. A lot of work is currently being done by different agencies and stakeholders to prepare and actualise spatial data for their well-defined, but individual purpose. If this effort would be bundled, the currentness, quality and spatial coverage of data could be significantly increased.

The most relevant prerequisites for such an approach are two-fold:

- Data must be prepared according to widely accepted standards, which enable the efficient exchange of data.
- The use of GIS tools needs to be intensified, and the awareness of the benefits of GIS-based planning methods has to be increased.





Elements of the regional node for spatial data infrastructure (source: WBU)

### Developing tailor-made technology

Taking into account these challenges, the Regional Bureau for Spatial Planning in Wrocław (WBU) developed the prerequisites for a regional node for spatial data infrastructure, which provides a platform for the coordination of land use management in the functional area of the Wrocław agglomeration. A key activity was the creation of a GIS tool for the processing of data in line with the INSPIRE<sup>1</sup> directive as well as ISO<sup>2</sup> and OGC<sup>3</sup> standards.

The tool is based on open source licenses, which allows its free use and the independent improvement through interested communities. In parallel a process of collection and compilation of data from different spatial levels has been started, creating the necessary resources for the regional node for spatial data infrastructure. The combination of both elements (software development & data compilation) in line with European standards is a unique and highly innovative feature of the activity.

# *Increasing the awareness for the benefits of GIS-based planning methods*

The challenge is now to disseminate and to encourage the application of the tool. It will be necessary to convince public authorities and private planning offices to skip individual approaches towards mapping and to introduce harmonised methods of data management. Here the open source approach might be helpful, since it efficiently reduces the cost of market entry.



Discussion during the public presentation of results (April 2011, source: WBU)

<sup>&</sup>lt;sup>1</sup> Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community

<sup>&</sup>lt;sup>2</sup> International Organisation for Standardisation, www.iso.ch

<sup>&</sup>lt;sup>3</sup> Open Geospatial Consortium, www.opengeospatial.org



An important step towards the implementation has been made through the launch of cooperation with public authorities and institutions of higher education. Additionally it is planned to use the results for the coordination of an inter-regional spatial study, which investigates the Polish part of the German-Polish border area. In perspective this activity may create an opportunity even for the cross-border application of the tool.

### Partner:

Contact:

Regional Bureau for Spatial Planning in Wrocław (WBU)

Przemysław Malczewski, Aleksandra Sieradzka-Stasiak *External support:* GISPartner, Wrocław /

Kon-Dor GIS Konsulting, Wrocław

## Saxony: Increasing the competitiveness of small and medium-sized centres

Trans-European transport corridors connect logistic hubs, node cities and metropolitan areas. At the same time they influence the areas in-between, which bear the costs of transit traffic (noise, emissions) in exchange for better accessibility. But which factors decide about the future perspectives of these areas? Should they focus on cooperation with large corridor nodes, or should they create their own, independent networks?

# Difficult situation of rural areas affected by demographic change

Within the study the region between Leipzig and Dresden was analysed, which is part of the Central Germany metropolitan region. It is characterised by a weak economical structure, and the results confirm that the influence of the corridor on regional development is rather limited: "Spillover" effects of the centres of Leipzig and Dresden



Marketplace of Oschatz, located between Leipzig and Dresden (source: Steffi Pelz / pixelio.de)

remain within their vicinity, and relevant economic activities are concentrated on mediumsized cities and selected transport nodes.

In fact the perspectives are rather determined by challenges resulting from demographic change and a shrinking population: Declining revenues of public budgets and decreasing capacity of public administration, loss of purchase power and lack of perspectives for well-qualified employees. So there is a need for the development of new solutions for local and regional development.

# Supporting a dialogue culture for integrated regional strategies

It is evident that the activation of the existing potentials will not be possible without intensified cooperation of local self-governments. The study proposes to create regional partnerships, which might be aimed e.g. at the consolidation of public finances, the stabilisation of public services or the development of strategic locations for investments.

Through a regional strategy dialogue the mutual information and support of stakeholders could be facilitated, creating as well a platform for the intensification of cooperation with neighbouring centres and metropolitan areas. To support these developments, the following principles should be applied:

- Openness for different development paths of regions
- Strengthening of integrating and interdisciplinary solutions





Proposal for a regional strategy dialogue (source: isw Institut)

- Problem-related connection of bottom-up and top-down approaches
- Strengthening of the regional level and intermunicipal cooperation
- Support of small and medium-sized cities with important functions for the provision of public services

A relevant resource are the funds for the support of rural development (ILE / LEADER regions), which might serve as well as incentive for regional cooperation.

#### **Partner:** Saxon State Ministry of the Interior (SMI)

**Contact:** Dr. Ludwig Scharmann, Christian Glantz

*External support:* isw Institut für Strukturpolitik und Wirtschaftsförderung gGmbH, Halle (Saale)

# Tackling demographic change and attracting human capital

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Tackling demographic change and attracting human capital



# Wrocław, Lviv and Dresden: Work migration and cross-border integration of labour markets

Throughout the centuries migration processes have been observed along the Via Regia, which are – at least in peace time – part of a steady flow of people from the poorer to the wealthier regions of Europe. In the age of globalisation these trends are still in place, as the mobility of European citizens even increases. But the dynamics and the patterns of economic migration are subject to continuous change.

To extend the knowledge regarding this issue the Office for Economic Development of the Municipality of Wrocław analysed the attitudes towards work migration in the agglomerations of Wrocław, Lviv and Dresden in a comparative study, which was partly based on quantitative research<sup>1</sup>. Besides regional profiles of migration (see below) the study delivered the following results and knowledge, which are of relevance in the transnational dimension:

- The young and active parts of the population migrate, and to influence their choices and decisions it is important to address them through targeted policies.
- The language and the different employment conditions are still relevant barriers between the German and the Polish labour market. In particular in Germany good language skills are a "must" to take a qualified and well-paid job. To achieve further integration these barriers must be reduced.
- Exchange programmes aimed e.g. at the organisation of internships for graduates may reduce the risk of depreciation of qualification, which is still apparent in the Polish case.



Education and qualification as assets in global competition (source: Municipality of Wrocław)

<sup>&</sup>lt;sup>1</sup> CATI (Computer Assisted Telephone Interviews), June-July 2009, approx. 1.000 respondents in each agglomeration in the age of 18-64.



### Profiles of migration – Selected results of empirical research

### Wrocław

In general the occupational and territorial mobility of the Polish labour market is quite low due to the educational system, housing problems and an insufficient public transport and road infrastructure. In the effect migration abroad might be in some cases even easier than regional migration.

The "typical" economic migrant is young and without children, relatively well-educated, but usually taking jobs which do not require high qualification. Most migrants work abroad (United Kingdom, Germany) and mainly short term (high share of seasonal work). Since a shortage of qualified employees is not noticed, "brain drain" is not regarded to be a problem.

### Lviv

The situation in the Ukraine can be compared to Poland. Most migrants work abroad, carrying out work below their skills. Economic migration is often short term, and the "typical" migrant is young and well-educated. In contrary to Poland, "brain drain" is considered a problem, since many highly qualified persons leave the country for higher salaries and appropriate jobs. Furthermore the estimated share of illegal work is significantly higher than in Germany and Poland.

### Dresden

The dynamics and reasons for economic migration are quite different from the cases of Wrocław and Lviv. The level of mobility is higher, but migrants stay in Germany and work in jobs that correspond to their qualification. Migration is mostly long term, and besides the search for better jobs the willingness to learn, easy access to education, culture and health care are at least equally important.



Reasons for economic migration within the last 5 years (source: PBS DGA Sp. z o.o.)

Partner: Municipality of Wrocław, Office for Economic Development

**Contact:** Janina Woźna, Małgorzata Golak

*External support:* PBS DGA Sp. z o.o., Sopot / Human Capital Business Sp. z o.o., Sopot



## Halle/Leipzig: The impact of demographic change on skilled labour

n the region of Halle/Leipzig, which is significantly affected by demographic change, the level of education and qualification decides among other factors - about the ability to cover the future demand of qualified employees. It is expected that on regional level until 2025 the population at employable age between 20 and 65 will drop from 1,17 mln to 0,94 mln (- 19,7 %). Accordingly the number of qualified employees will diminish despite a continuously high demand. To investigate the effects of this development the City of Leipzig contracted a study for the Halle/ Leipzig region, which analysed the expected supply and demand of skilled workforce according to economical sectors and different scenarios of development. Through the regional approach the study delivered new knowledge about the joint labour market, which is covered by the administration of two federal states.

### A mismatch of supply and demand

The current situation is in general characterised by high requirements and qualification standards for jobs and a shrinking demand for low qualified employees. The results are increased problems for staffing and a risk of unemployment, which is accompanied by a high demand for skilled employees.



Population forecast for Halle/Leipzig region (source: isw Institut) The scenarios for the years 2020 and 2025 demonstrate that – besides the current deficit of physicians and IT professionals – a critical situation might arise in particular in technicalscientific professions. In general an above-average need for medium-level qualification is observed, which is caused by the economic structure with an under-average disposition of management functions.

### Possibilities for action on local level

The influence of local authorities on the supply of skilled workers is limited. But local selfgovernments have an important function for mediation and coordination, which might influence the local position in the increasing competition between cities and regions for qualified employees. This concerns in particular two fields of action:

- School-leavers, trainees and students should be attracted and kept in the region, strengthening the regional potential of labour force.
- Already at early stages of education targeted action is necessary to motivate and to activate the youth, e.g. through joint projects of schools and enterprises.



qualified job training





Job starters at a fair for training offers (source: Halle Messe GmbH)

For Halle/Leipzig region these conclusions might be amended by the need to intensify the regional networking of related projects and initiatives. Administrative borders should be no barriers to education and qualification, taking into account the need for a broad dissemination of successful approaches and practices.

#### *Partner:* City of Leipzig, City Planning Office

**Contact:** Reinhard Wölpert, Peggy Sacher

*External support:* isw Institut für Strukturpolitik und Wirtschaftsförderung gGmbH, Halle (Saale)

## Dresden: Development of strategies on regional level

A lready during the recent years demographic change has been a topic of high political relevance in the Dresden City Region, which is a body of voluntary cooperation between the City of Dresden and its surrounding municipalities. Therefore it was decided to develop a joint action programme, which shall qualify activities and strategies realised on local level.

## Joint identification of fields of action

The preparation of the action programme was subject to extensive quantitative and qualitative research. The regional population forecast and current observations on demographic change were analysed, the participating stakeholders were interviewed and examples of good practice compiled. The result was a reliable assessment of the current situation in the Dresden City Region, taking into account the demographical situation as well as the awareness and readiness of stakeholders for action. As result of the process of research and consultation the joint regional approach was laid down in four fields of action:

- Evaluation of basic data as precondition to raise the awareness of politicians, regional stakeholders and the population.
- Quality of life as essential location factor for existing and future residents, including e.g. the elderly as well as well-qualified employees.
- Family-friendly policies to attract young families, e.g. through attractive offers in the field of leisure and recreation and good opportunities for education.
- **Regional identity** as basis for joint activities, in the internal as well as in the external dimension.

For each field of action a comprehensive catalogue of activities was identified and agreed on by the Conference of Mayors, the decision-making body of the Dresden City Region.





Regional population forecast (source: IÖR)

## Implementation of pilot measures

In parallel to the joint action programme a concept for public relations was developed to improve the internal and external perception of the Dresden City Region. So far, the knowledge about the inter-municipal cooperation was rather low, and there was no joint strategy to promote the region's attractiveness.

Based on a survey and a workshop with stakeholders a mission statement and measures for the marketing on regional level were identified. Main target groups are citizens, future inhabitants and investors, municipalities and regional stakeholders such as enterprises, associations and societies. Already during project implementation



New name and logo of the Dresden City Region

first measures were implemented, including the development of a new name, logo and slogan and the publication of a brochure on family-friendly leisure facilities.



Familienfreundliche Freizeitangebote in der Stadt-Umland-Region Dresden

Brochure on family-friendly leisure facilities



A remarkable result of the discussion on the joint communication strategy is the effect for the institutionalisation of regional cooperation, which is reflected in the mission statement. The document defines besides aims and priorities as well guidelines and principles of joint work, thus strengthening the framework for cooperation and paving the way for the extension of the network to further municipalities.

### Partner:

City of Dresden, Office of the Dresden City Region

Contact: Rolf Hermann, Petra Knothe

#### **External support:**

DISR Deutsches Institut für Stadt und Raum e.V., Berlin / complan Kommunalberatung GmbH, Potsdam / Technische Universität Dresden, Lehrstuhl für Marketing / Werbeagentur Diemar, Jung & Zapfe, Erfurt / Werbeagentur Anigrafik, Dresden

## **Opole: Development of strategies on city and district level**

ow birth rates and increasing life expectancy influence as well the development perspectives of Polish cities. Whereas in larger centres the effects of demographic change are balanced by migration processes, medium-sized cities observe already today a slight decrease of the number of inhabitants. This is true as well for Opole, and therefore the city decided to investigate its demographical perspectives and the impact of expected developments on the local labour market.

### *Exploring the demographic structure of the city*

Work migration and suburbanisation influence the number of inhabitants, but what are the effects of demographic change on the labour market, and what will be the needs of the population resulting from the trends observed? To investigate these questions a comprehensive data analysis with a population forecast until 2020 was realised, leading to a demographical image of Opole on city and district level.

In particular the small-scale analysis turned out to be very useful since it allowed to analyse the directions of demographical development of particular spatial units. According to the results, in the city centre due to the age structure the population is expected to decrease significantly. These developments will be partly balanced by an increase of the number of inhabitants of "younger" districts.

But nevertheless it is expected that the population of Opole will decrease by approx. 8 % until 2020, with a focus on the age group at employable age.



Development of age groups 2002-2020 (source: WSZiA)





Urban life in Opole (source: Sławoj Dubiel)

### **Conclusions for future development**

From the results of the analysis and a benchmarking with cities of comparable size policy recommendations were derived, which are used as input for the current revision of the city development strategy:

- Due to the low birth rate the demand for child care and offers of school education will decrease. But at the same time the resulting transformation should not lead to a reduced quality of offers – family-friendly policies supporting the increased economic activity of women must be of high priority.
- The number of young people entering the labour market is expected to decrease. To keep a high level of economic activity, the activity period of the elderly needs to be extended, and processes of early retirement should be avoided.
- It is necessary to prepare for a higher share of retired persons with an increasing need for social care.
- The development of urban space (e.g. areas for housing and recreation) should be adapted to the needs of the population living in the respective areas.

As it is the case in Wrocław, Halle/Leipzig and Dresden, the ability to attract the active parts of the population will decide as well in Opole about the perspectives for future development. Here the location could be an additional advantage, if the agglomerations of Wrocław and the Upper Silesian industrial area are seen as sources of demand for goods and services and as sources of possible inward migration in search of good conditions for living and working.





Ratio of pre-working age population to post-working population 2009 and 2020 according to city districts (source: Municipality of Opole)

#### Partner:

Municipality of Opole, Department for Planning and European Affairs

## Contact:

Krzysztof Początek, Danuta Wesołowska

## External support:

Wyższa Szkoła Zarządzania i Administracji w Opolu (WSZiA) / Public Profits Sp. z o.o., Poznań





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## Via Mobil – 135 days on tour through Europe

To promote the Via Regia as resource for cultural co-operation, sustainable territorial development and social cohesion the partners of Via Regia Plus supported the "Via Mobil" moving exhibition, which toured the historical route of the pilgrims' way from Santiago de Compostela to Kiev – the Cultural Route of the Council of Europe – during summer 2010. It announced the  $3^{rd}$  Saxon State Exhibition, which presented the history of the Via Regia as "800 years of movement and mobility" from  $21^{st}$  May to  $31^{st}$  October 2011 in Görlitz.

# Bringing the "spirit" of the Via Regia to the public

The tour was realised by the State Art Collections Dresden, the organiser of the 3<sup>rd</sup> Saxon State Exhibition. The partners of Via Regia Plus contributed to the conceptual preparation, provided the exhibition car with information materials about the project and supported the organisation of the tour within the project area from Eisenach to Lviv.

29.731.7.	Eisenach
12.8.	Gotha
36.8.	Erfurt
78.8.	Weimar
910.8.	Naumburg
1112.8.	Weißenfels
1316.8.	Leipzig
1718.8.	Grimma
19.8.	Oschatz
2021.8.	Großenhain / Königsbrück
2223.8.	Kamenz
2526.8.	Bautzen
2730.8.	Görlitz / Zgorzelec
13.9.	Lubań
45.9.	Bolesławiec
67.9.	Legnica
811.9.	Wrocław
1214.9.	Brzeg
1517.9.	Opole
1819.9.	Gliwice
2022.9.	Bytom
2326.9.	Kraków
27.9.	Tarnów
28.9.	Rzeszów
2930.9.	Przemyśl
25.10.	Lviv



Impressions from Gotha, Bautzen, Wrocław and Lviv (source: SKD)



Here the "Via Mobil" visited more than 25 cities, and more than 20.000 visitors used its information offers. The vehicle itself was equipped with an interactive media screen, and an accompanying programme of talks and public discussion events took place at several stops. The experience of the journey was documented in an interactive blog, and a documentary was prepared to create a fresh, contemporary view of the Via Regia.

The final station of the Via Mobil was the Euregia fair for local and regional development in October 2010 in Leipzig during the mid-term conference of Via Regia Plus.

### Strengthening transnational identity

The moving exhibition increased the awareness of the public and political stakeholders for the potentials of joint development. Through the concept of an exhibition car the broad public could be reached, and the term "Via Regia" was



successfully promoted as part of a transnational identity. Finally the stakeholders were encouraged to intensify their activities aimed at the promotion of the Via Regia as Cultural Route, taking into account the benefits of a joint approach and perspective.

#### Partner:

Saxon State Ministry of the Interior (SMI)

Contact: Andreas Kühl, Dr. Fritz Schnabel

**External support:** Staatliche Kunstsammlungen Dresden (SKD) INFRASTRUKTUR & UMWELT, Potsdam

## Thuringia: Marketing of city and culture tourism

To capitalise the "Via Regia" as brand for the development of tourism it is necessary to identify and to define comprehensive marketing strategies, which might be applied for the transnational promotion of potentials. But what should be the scope of these strategies? Who are the target groups, which offers might be promoted on local, regional and transnational levels, and what should be the tools to reach the target groups?

To find answers to these questions, the Thuringian Ministry for Construction, Regional Development and Transport realised a feasibility study on city and culture tourism along the Via Regia, which was elaborated in close cooperation with experts and stakeholders.

### Investigating the potentials

The approach of the study was two-fold: In the first step, a screening of offers and potentials for tourism along the Via Regia was realised. All regions were investigated, and offers with a high visibility and thus high potential for joint marketing and networking were identified. In the



Thuringian chain of cities (source: FH Erfurt)

Activating potentials for tourism



second step, for the area of Thuringia an in-depth study was prepared, defining a set of measures for the activation of potentials on regional level.

As previously expected, the transnational investigation demonstrated that the Via Regia area includes a variety of attractive offers in the field of city and culture tourism. Each region has its specific potentials, and a journey along the Via Regia leads through a European space with a unique heritage of intercultural relations, which are visible e.g. in the built environment (castles and residences, UNESCO World Heritage sites). But there are doubts if the term "Via Regia" may serve as stand-alone guiding theme, since its meaning is currently limited to the trading route, and obvious relations to its environment and character are missing.

### Developing pilot measures

Therefore the proposals made for the region of Thuringia are mainly aimed at the increase of the knowledge and awareness regarding the Cultural Route, with a focus on the cities of Eisenach, Gotha, Erfurt, Weimar, Jena, Gera and Altenburg. Audio guides, printed materials and information signs could increase the visibility of the Via Regia in public space and establish adequate links to existing offers. A harmonised visual appearance of the Via Regia would support these interventions, and through interactive city games, school exchange and class trips as well the youth and pupils could be addressed.

Part of the proposed measures and recommendations is as well the identification of a transnational cycling route, which would link attractions and destinations along the historical route and enable to experience the Via Regia at adequate speed level. From the point of view of the partnership this measure has a high potential for implementation, since it is directly connected to the issue of mobility and would close a gap in



Erfurt: Cathedral and Chandlers' bridge (source: ETMG / Barbara Neumann)

the transnational network of cycling routes. Thus further activities were launched, aimed at the preparation of a geo framework for a Via Regia cycling route.

*Partner:* Thuringian Ministry for Construction,

Regional Development and Transport (TMBLV)

*Contact:* Susan Protzel-Graube

External support: IRS CONSULT AG, München



## Experiencing the Via Regia by bicycle

A long the Via Regia several cycling routes are available, which serve eco-friendly forms of tourism and recreation. But so far no attempt has been undertaken to create a transnational offer, which would allow individual tourists to travel along the Cultural Route – despite an increasing demand for cycling tourism, attractive destinations and good geographical conditions.

The reasons for this situation are obvious, since most cycling routes emerge as bottom-up initiatives. Only few routes receive support from the regional level in terms of financing and a visual and organisational framework, and on the interregional level a route must be rather located along a river (Elbe cycling route, Oder-Neiße cycling route) to have a chance of consideration. But new opportunities are provided by modern media.

# *Platform for the networking of offers: Geo framework*

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The approach of the geo framework aims at the creation of an integrated database for a Via Regia cycling route from Frankfurt (Main) to Kraków. Information about regional cycling routes has been collected and is presented in a web portal, which is prepared to host additional information regarding the Cultural Route.



The adequate speed to experience landscape and culture (source: EKT)

As a platform for the networking of local and regional initiatives, the geo framework allows the intensification of transnational cooperation and the development of joint marketing strategies despite limited funds and resources of stakeholders. Regional routes and existing offers are not replaced, but they may be qualified and promoted to reach a higher visibility.

The main challenge for the operation and extension of the platform is the creation of a durable supporting network, further institutionalisation e.g. through joint financing and the agreement on standards regarding e.g. the signposting of



Spatial scope of the geo framework for the Via Regia cycling route (source: EKT)



the cycling route. A first crucial milestone would be the integration of initiatives from Thuringia and Saxony, which was supported by the City of Leipzig through an investigation of potentials for cycling tourism in the section Leipzig-Görlitz.

# *Creation of regional routes: St. James' Way in Lower Silesia*

A remarkable contribution to the Via Regia cycling route was prepared by the Regional Bureau for Spatial Planning in Wrocław (WBU) through the investigation of cycling paths along the St. James' Way in Lower Silesia. Four routes from Görlitz/Zgorzelec to Brzeg, Głogów, Jelenia Góra and Sobótka were identified, which provide the backbone of a regional cycling network.





Logo of the St. James' cycling route in Lower Silesia (source: WBU)

Signposts of bicycle routes near Siedlecin (source: WBU)



The proposed Via Regia cycling network in Lower Silesia (source: WBU)





Panorama near Pokrzywnik (source: WBU)

All sections were verified in terrain investigations and documented through maps, profiles with data e.g. on surface quality, GPS traces and supplementing descriptions of attractive destinations. In the effect the spatial framework for a product of regional tourism was created, which may serve for local recreation as well as for cross-border marketing of offers. Already during the elaboration first contacts to stakeholders were established to prepare further realisation through local self-governments and interested associations.

#### **Partners:**

Thuringian Ministry for Construction, Regional Development and Transport (TMBLV); Regional Bureau for Spatial Planning in Wrocław (WBU); City of Leipzig, City Planning Office

### Contact:

Susan Protzel-Graube; Wojciech Maleszka, Aleksandra Sieradzka-Stasiak; Reinhard Wölpert, Peggy Sacher

#### External support:

Europäisches Kultur- und Informationszentrum in Thüringen, Erfurt; Geoplan, Wrocław

## Eastern Slovakia: Regional cultural routes

Up to now, the development of tourism in Eastern Slovakia is focused on highlights like the "Slovak Paradise" or the Tatra mountains. The knowledge about further destinations in this region with a rich cultural heritage is rather limited – on the one hand due to the peripheral location in Europe, but on the other hand as well due to the lack of a coherent vision for the development of ambitious and qualified thematic offers.

To change this situation and to motivate the stakeholders to realise the necessary investments the Košice Self-Government Region and the Agency for the Support of Regional Development (ASRD Košice) undertake the attempt to develop networks of offers along thematic routes. Parts of these activities were supported and encouraged by the project Via Regia Plus.

## Paving the way for the support of investments

A comprehensive analysis was realised, which provided an overview about existing offers and potentials along three routes: Gothic route, Wine route and Iron route. The aim was to describe in detail the existing situation and thereby to create suitable conditions for cultural tourism development in line with the regional development policy.

The results are used to prepare further support through the TERRA INCOGNITA programme, which shall enhance the quality of life and increase the visit rate through strengthening of the cultural background and higher awareness, capacity building, a better level of services and the improvement of infrastructure for domestic and foreign tourism. Proposals for the evaluation

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Gothic route (source: ASRD Košice)



Iron route (source: ASRD Košice)



Wine route (source: ASRD Košice)



of destinations and a system of certification introduced as well elements of a quality management system.

# *In the focus of pilot activities: Tokaj wine region*

Further steps towards implementation are made through additional interventions in a region, which already has a sufficient level of maturity to receive significant demand from abroad: the Tokaj wine region. Located in the south-east of Slovakia and in the north of Hungary the Hungarian part of the Tokaj region is a world-wide known tourist destination, while the Slovak part is merely not known.

A marketing study analysed current offers and provided a vision to develop the Tokaj region

as tourist destination, including measures and activities that should be implemented to achieve the vision. Additionally a technical documentation was prepared, defining the characteristics and requirements for the creation of a tourist information point.

Together with the analysis these measures pave the way for the introduction of a pilot region for qualified tourism in the Košice Self-Government Region, which will provide valuable experience for the development of comparable offers.

Partner:

Contact:

Agency for the Support of Regional Development Košice

Jozef Sulak, Gejza Legen, Jaroslav Tešliar

## Cross-border promotion of offers

The location of a region or a destination at a border has often two-fold effects: On the one hand, the border location makes access more difficult and limits the outreach to target groups on domestic markets. On the other hand, the border may create a unique value, since selected locations may offer a high variety of offers and the cross-border experience as additional attraction.

Two case studies in Via Regia Plus investigated the possibilities to capitalise these effects for the development of tourism.

## *Revitalising a trade route in Eastern Slovakia*

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The Minor Amber Route connects the region of Eastern Slovakia with its centre, the city of Košice, with Poland, Hungary, Romania and the Ukraine. Through the joint route a city network is created, which represents the cultural heritage of a region with a long history of cross-border exchange. During the Austro-Hungarian Empire, no borders crossed this part of Europe.

The name of the route refers to amber as evidence for activities related to trade and commerce. Within the project a brochure is created to promote





Historical centre of Košice, Abaújszanto (source: City of Košice)

Activating potentials for tourism



the route and to establish contacts between local authorities. In the context of the European Capital of Culture 2013 the Minor Amber Route might contribute to the activation of potentials for crossborder tourism.

# Promoting the asset of cross-border tourism PL-CZ-SK

The "Tripoint" marks the crossing point of the Polish-Czech and the Polish-Slovak border in the south of the Silesia voivodship. It creates with the Municipality of Istebna (PL) and the districts of Jablunkov (CZ) and Kysucký Triangel (SK) a tourist region, which is easily identifiable through its unique location. To support the further development, the Upper Silesian Agency for Entrepreneurship Promotion (GAPP) developed a marketing strategy in close cooperation with local stakeholders.



Polish, Czech and Slovak logo of the "Tripoint" area (source: GAPP)

Taking into account the potential demand and the regional opportunities to satisfy the needs of tourists, the strategy drafts an action plan towards the "Tripoint" tourism product, which is to be implemented in a multi-stage process. A mission statement, a promotional slogan ("Experience three times more") and a system of visual



"Tripoint" promotional brochure (source: GAPP)

identification complete the toolbox generated within the project.

A specific opportunity for development is provided by the dense railway network, which connects the "Tripoint" to neighbouring agglomerations. It may guarantee good accessibility throughout the year, enabling at the same time the preservation and protection of the natural landscape.

### Partners:

City of Košice; Upper Silesian Agency for Entrepreneurship Promotion (GAPP)

Contact:

Andrea Gizická, Andrea Rešovská; Zofia Stompor

*External support:* Collect Consulting Sp. z o.o., Katowice

## Discovering the Via Regia by rail and bus

Since 2008 the Senate Department for Urban Development Berlin and the VCD Verkehrsclub Deutschland (Association of transport users) publish a periodical guide for travels by public transport along the Via Regia. The first editions of the guide were published in German language, and from 2010 a bilingual version in German and Polish language is available. These travel guides are among the most popular results of the previous project ED-C III Via Regia and Via Regia Plus.

# Promoting the use of public transport through better information

Although the Via Regia developed as a road, it was transformed through the development of the rail system which today still enables travel as well in the mountain regions between Poland, the Czech Republic and Slovakia. Of course there are barriers due to insufficient infrastructure and need for revitalisation, but one of the most





Proposals for trips in the Via Regia area

important barriers is lack of information about available offers.

Therefore the travel guide includes all information which is necessary to travel by rail and bus (timetables, prices) and explains how to reach the most attractive destinations. It shows that some areas are quite well accessible, but it shows as well the work which is still to be done. Rural districts are only reached by non-regular bus services, and on cross-border lines passenger transport is sometimes reduced to one train per day.

Intermodal information and information about special discounts is difficult to obtain, and schedules of long-distance trains are sometimes not harmonised with regional trains. On the other hand the revitalisation of the rail line between Szklarska Poręba (PL) and Harrachov (CZ) demonstrates the potential of rail transport for cross-border tourism.



2011 edition of the Via Regia travel guide

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# Supporting selected offers through targeted activities

Taking into account the difficulties of crossborder transport, the promotion of existing offers like the Eurocity between Hamburg, Berlin and Kraków (EC Wawel) and the regional trains between Wrocław and Dresden is of high priority. Therefore the partners amended the travel guide by thematic folders, which present destinations and offers along selected relations. These guides deliver information for trip planning, but they increase as well the experience of travel through information about destinations along the track.

### Partners:

Senate Department for Urban Transport Berlin; Saxon State Ministry of the Interior (SM)

#### Contact:

Dr. Jürgen Murach, Gerd Müller; Andreas Kühl

*External support:* VCD Verkehrsclub Deutschland, Landesverband Nordost e.V., Berlin



Promotion flyer for the Eurocity Wawel Hamburg-Kraków



Promotion flyer for the Dresden-Wrocław regional trains