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INTERNATIONAL STUDENT WORKSHOP
TRACKING THE LJUBLJANA URBAN REGION
2012/2013



INTERNATIONAL STUDENT WORKSHOP TRACKING THE LJUBLJANA URBAN REGION 2012/2013



Univerza v Ljubljani
Fakulteta za gradbeništvo
in geodezijo



Univerza v Ljubljani
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TECHNISCHE
UNIVERSITÄT
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Vienna University of Technology

Ljubljana, Vienna, February 2013

FOREWORD

Andreas Dillinger, Mojca Foški, Petra Hirschler, Simon Kušar, Alma Zavodnik Lamovšek, Gašper Mrak, Geli Salzmann

During the winter semester 2012/13, a student workshop entitled 'Tracking Ljubljana Region' was held in Ljubljana, Slovenia, and in Vienna, Austria. The idea of the student workshop was borne out of the Alpine Space Programme project POLY5 (Polycentric Planning Models for Local Development in Territories interested by Corridor 5 and its TEN-T ramifications) where two of the project partners are the Vienna University of Technology and the Regional Development Agency of the Ljubljana Urban Region. They invited the University of Ljubljana, Faculty of Civil Engineering and Geodesy, and the Faculty of Arts, Department of Geography, Slovenia, to take part in the workshop. With great pleasure, both institutions took up the invitation. The results of this cooperation are evident in this publication.

The publication is divided into two parts. The first part is composed of the papers of the workshop supervisors and the colleagues involved in the POLY5 project. These papers represent the spatial planning processes in Slovenia and Austria at different levels, some basic data and information about the Ljubljana urban region and some wider methodological aspect of Visioneering.

The second part of the publication consists of student workshop results with a focus on the concepts and visions of the Ljubljana urban region development. The aims of the student workshop as a master project were examining the role and function of a particular planning tool – Visioneering – within the planning cycle of a major transport infrastructure project. Visioneering operates by designing comprehensive and inspiring pictures of regions in order to stimulate the political, public and professional discourse. Visioneering certainly as-

sists in grasping a region, but the role and function it has in a planning cycle are still underexposed in scientific and practical terms. This situation makes the master project 'Tracking Ljubljana Region' highly innovative, where the students got the chance to contribute to the scientific debate of planning.

As the workshop was international and it took place in three cities in three different countries, i.e. Vienna in Austria, Ljubljana in Slovenia, and Udine in Italia, it was, accordingly, divided into three acts:

In Act 1, the master project students learned how to grasp a region – the Ljubljana Urban Region – from several different perspectives by applying the Visioneering planning tool. Figuring out the right moment for the application of Visioneering in a planning cycle, by verifying or falsifying the above mentioned presumptions, makes up the key topic/focus of Act 2 of the master project. Dissemination of information is at the centre of Act 3: the students were trained in presenting and discussing the research results and then presented the outcomes of the master project at the Alpine Space – Poly5 Conference in Udine (Italy), held in February 2013.

Everyone – the students, supervisors and other participants – are grateful for the opportunity to collaborate in the 'Tracking Ljubljana Region' workshop. Despite us coming from different milieus, with different backgrounds and knowledge, the publication that lies in front of you is the result of common interdisciplinary work and cooperation among the Vienna University of Technology, the University of Ljubljana, the Regional Development Agency of the Ljubljana Urban Region and the University of Udine.

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1 GRASPING THE LJUBLJANA URBAN REGION

1.1 Spatial planning and development at different levels



Mapping and communication in spatial development on the example of the Austrian Spatial Development Concept

Sibylla Zech

In August 2011, the latest Austrian Spatial Development Concept was approved by the Austrian Conference on Spatial Planning. It is the 4th national spatial concept in a line of decades since 1981, covering the whole area of the Republic of Austria.

Austria is organised in a federalist manner. For spatial planning, this means that nine federal states (the 'Laender') have their own spatial planning regimes: planning law, planning instruments and authorities for land use management and regional development. On the local level, the 2350 Austrian municipalities are responsible for land use planning, the local building regulatory and building permits. As the daily routines of citizens – social life, economic activities and mobility – do not take place only within the administrative borders of towns and cities but within functional regions, intercommunal cooperation has become one of the main issues of regional governance nowadays. Everyday life takes place in many places – living, working, sports and cultural activities, visiting friends, shopping, fetching the kids from school, seeing the doctor etc. We cross several administrative borders per day, mostly unperceived. We make use of infrastructures and amenities which are provided by many different local and regional operators. As a fact of the matter, public services are not, and cannot be, offered in terms of a simple hierarchical system of regional centres anymore. Particularly in urban regions and agglomerations, a polycentric structure has already become the reality. In more rural areas, sharing of service functions between local centres is a challenge for regional development to ensure the financing of the services of general public interest. Above else, the breakup of the iron curtain followed by the European integration of Austria and its neighbouring countries has reshaped the image of the spatial structure. All these changed conditions are reflected by the national spatial concepts and mappings over time.

From solidarity for underprivileged regions to the European cohesion

The first Austrian Spatial Planning Concept from 1981 focused on fair and equal living conditions throughout the country. The concept pro-

moted a hierarchical structure of centres for not adequately equipped regions and addressed directly peripheral and/or structurally weak and therefore disadvantaged regions: The border regions close to the iron curtain, alpine remote areas and outdated industrial regions were mapped to be upgraded by regional funding. The increase of motorisation and the big efforts in improving roads and public transport have linked regions from the periphery closer to the central regions within Austria and to the neighbour countries. Today, no region in Austria is 'really' peripheral anymore. Services for education, health, culture and other local provisions for public goods and private services are available nationwide. The challenge of the future is how to maintain the achieved standard of social and private infrastructure under the conditions of limited financial resources, demographic change and global challenges like climate change, and unpredictable low carbon economy and life style.

The Austrian Spatial Planning Concept of the 1980's put forward solidarity for deprived regions and promoted equivalent conditions for living in the regions. The 1990's concept reflected the ecological movement: Environmental issues came to the fore of spatial planning affairs. At the same time the Austrian planning community made the first steps to the opening of a 'new' Europe. When in 2001 the third concept was launched, the first phase of building this 'new' Europe was fulfilled: Austria became a full member of the European Union in 1995, while the former Eastern bloc countries already joined or had started with the European integration process. The maps published in the 2001 concept mostly show the relations between Austria and the European Union.

The spatial development concept as a product and a process

The movements of the former decades had influenced the demands related to planning procedures, particularly to stronger and more direct and active participation of citizens in local and regional planning. Reviewing the Austrian Spatial Development Concepts (OEREK), the representatives of the federal state, the ministries, the cities and municipalities agreed quite early that there shall be three basic prin-

ciples for the new concept of 2011: implementation, concentration and cooperation. Following these principles the concept procedure involved working groups and broader 'sounding boards', reflecting interim results throughout Austria. Finally, the 'OEREK partnerships', bringing stakeholders actively together, were set up for the further implementation process. Up to the end of 2012, already 10 partnerships were working cooperatively on very concrete topics like energy spatial planning, integration and infrastructure corridors.

»Is there a new picture needed for spatial development of Austria?« This was one of the basic questions during the working process, as almost no maps were used in the 2001 Austrian Spatial Development Concept. Austria's neighbouring countries include maps in their national planning concepts, e.g. Germany shows 'Leitbilder' (visions or spatial models, literally 'guiding pictures'), Switzerland defines and maps 'Areas of Action', the Spatial Development Strategy of Slovenia shows cartographies, e.g. a settlement concept, a polycentric structure and a landscape concept. Of course, on the national scale maps have to be generalised and simplified, the cartographic language uses soft contours, shades and fuzzy boundary lines. Such maps of a possible future are not legally binding, but they make spatial targets and strategies visible. They address 'our' environment and support the communication between authorities and the participation of interest groups and citizens. The picture of the future spatial structure, strategies and actions on the national level also makes the country understandable to European and international partners and stakeholders.

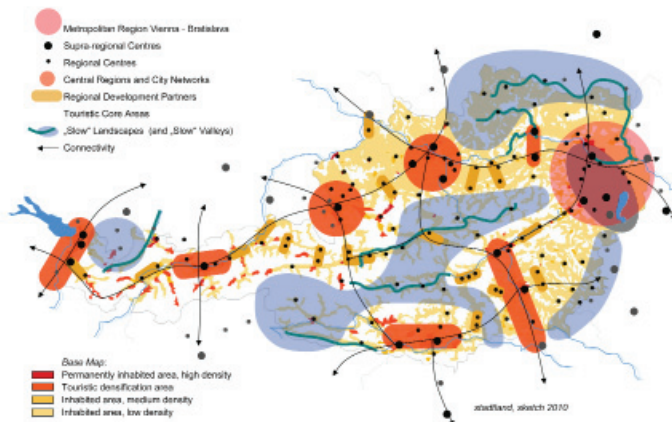


Figure 1: Sketchy outline of the spatial structure and needs for regional cooperation, stadtländ, Vienna, 2010

In the process of the Austrian Spatial Development Concept, the technical bodies turned out to be too anxious to act as cartographers of the potential future. In some workshops, mapping proved to be a very helpful communication tool and led to fruitful discussions based on sketches of spatial futurescapes. An example can be seen below.

But even such very general cartography, not showing a final, normative picture, but opening up spatial cooperation tasks, did not find enough support in the responsible board to be continued and worked out. Notably, in Austria there is no national institute or office for spatial development or a similar administrative and technical institution with sufficient resources and planning staff. Of course, experts were being consulted, bringing in expertise and accompanying the working groups, but within a very tight financial corset, not leaving much space for in-depth mapping.

A more provocative cartography was brought into the planning procedure by the students of planning at the Vienna University of Technology. The students presented portraits of the Austrian space in a critical and witty way, using the 'visioneering' approach, i.e. the combination of visioning and engineering. Below, there is an example of a student's map portraying Austria as a human body, interpreting regions as bodily organs. Such images may give impetus to the understanding of spatial structures and needs. Why does 'Austria' have only one eye, looking westwards? Is the capital region the brain of the country? Are the Alps really a stable backbone or rather fragile?



Figure 2: 'Visioneering' Austria by the students of planning, Vienna University of Technology, Centre for Regional Planning, Vienna, 2010

The Austrian Spatial Development Concept (OEREK 2011) builds on four strands:

- ▶ Regional and national competitiveness

- ▶ Social diversity and solidarity
- ▶ Climate change, adaptation and resource efficiency
- ▶ Cooperative and efficient handling structures

As an illustration for strand (4), the published concept shows a puzzle (see Figure 3) of different tasks and levels of cooperation: cooperation with neighbour countries, European perspectives, intercommunal cooperation, regional cooperation, urban–regional cooperation, nationwide perspective, urban–rural partnership, cooperation across borders and sectors (reading the puzzle pieces from left to right). Even there, more specific maps were elaborated, addressing the question: Who should cooperate more with whom and where? However, just this very general image was published. On the other hand, several 'OEREK partnerships' for the implementation have been formed meanwhile. The cooperation is lively and we may expect that the Austrian map on spatial cooperation could, as a result, be elaborated.

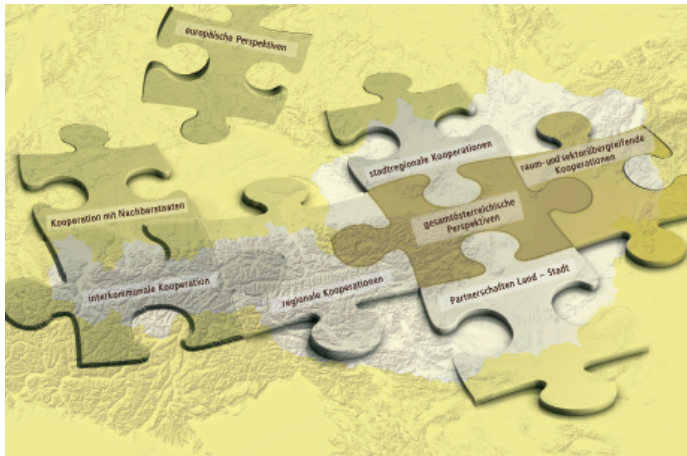


Figure 3: Space for Cooperation and new Perspectives, OEREK, 2011, p. 82, Vienna, 2011

Planning without maps?

The process of information, consultation and participation for OEREK 2011 has certainly brought a higher public perception than the former nationwide planning documents. On the other hand, it is not easy to make spatial planning interesting and understandable without using spatial mapping. When reviewing the history of mapping in the Austrian Spatial Development Concepts, we could see that maps, in particular those on future scenarios, are rarely introduced into the official documents. There is an anxiety to define the spatial needs, and, finally, territorial land use claims for public interests, as clearly as possible and needed. Planning departments and boards have some provisions with regard to locating and showing an idea or a future perspective on a map. They anticipate the attitudes of politicians who like to shy

away from conflicts, without committing or restricting themselves. At the same time, planning bodies and planners as well as planning councillors are often disappointed that media and the public in general do not show much interest in planning issues, particularly in strategic spatial planning. However, the maps on future scenarios showing sites, areas, regions and networks of national significance, could be published easily, e.g. in newspapers, magazines, exhibitions or in study and school materials. We often recognize that the public – whether individually, in informal meetings or as organised groups – are interested in maps. People want to see what is going on and how the story continues, they like to reflect on maps and bring in their own mental maps. Maps in strategic spatial planning are no more a normative picture of the future, but should be used as a communication tool in the steering process of spatial development.

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Spatial planning system in Slovenia

Lenča Helena Šolar

Summary

The article explains the spatial planning system of Slovenia with an emphasis on the siting of spatial arrangements of national significance in the physical space. Legislative framework, responsibilities and competences are presented generally and the preparation procedure of national spatial plans is presented in detail.

Introduction

The field of spatial planning lies within the competences of the Ministry of Infrastructure and Spatial Planning. The ministry is responsible for the preparation of legislation, strategic spatial planning documents, coordination of preparation procedures of national spatial plans and supervision of local spatial plans.

Operative tasks are within the jurisdiction of the SPATIAL PLANNING DIRECTORATE, which consists of the sector for national planning, the sector for local planning and the sector for building and housing.

The responsibilities and tasks of the Directorate are the preparation of spatial development goals and guidelines at the national level together with the legal framework in the field of spatial planning, building and housing, planning of spatial arrangements of national importance, oversight of local spatial plans and issuing of building permits for structures of national importance. Through these responsibilities and tasks, the Directorate takes care of the implementation of EU policy: territorial cohesion and urban development. Last but not least, maintaining of GIS is the crucial condition for an effective implementation of the aforementioned tasks.

Legislative framework and competences

In Slovenia, there are two important laws which regulate the field of spatial planning, i.e., the Spatial Planning Act (2002) and the Act regarding the Siting of Spatial Arrangements of National Importance in Physical Space (2010). The Spatial Planning Act regulates the system of spatial planning in general while the Act regarding the Siting of Spatial Arrangements of National Importance in Physical Space regulates the procedure of preparation of national spatial plans.

The competences in the field of spatial planning are divided between the state and the local communities. The state is competent for:

- ▶ target setting for spatial development of the state,
- ▶ guidelines for spatial planning at all levels,
- ▶ planning of spatial arrangements of national importance and
- ▶ supervision of spatial planning legality at the local level.

The municipalities, on the other hand, are competent for:

- ▶ guidelines for spatial development of the municipality,
- ▶ determining the use of space and conditions for spatial planning,
- ▶ planning of spatial arrangements of local importance.

According to the competences, the spatial planning documents are prepared on both levels. National spatial planning documents are the NATIONAL STRATEGIC SPATIAL PLAN and NATIONAL SPATIAL PLANS. Municipal spatial planning documents are MUNICIPAL SPATIAL PLANS and MUNICIPAL DETAILED SPATIAL PLANS. The system allows also for the inter-municipal spatial planning document, the REGIONAL SPATIAL PLAN. Despite all the advantages of the REGIONAL SPATIAL PLAN, the municipalities seldom use it.

The siting of spatial arrangements of national significance in physical space

Spatial arrangements of national significance are the spatial arrangements which are important for the spatial development of the Republic of Slovenia due to their economic, social, cultural and conservational features, while taking into account the goals of spatial planning. They are therefore planned by the State.

Spatial arrangements of national significance are spatial arrangements from the fields of road infrastructure, railway infrastructure, air transport infrastructure, maritime and river transport infrastructure, border crossings, transport terminals, energy industry infrastructure for electricity supply, energy industry infrastructure for natural gas and oil supply, nuclear facilities, mining, public communication network and State authorities' communication network, environment protection, meteorology, water infrastructure, defense of the State and protection against natural

and other disasters. Spatial arrangements of national significance are also spatial arrangements in the area of coastal fringe land, protected areas for nature conservation and protected areas of cultural monuments.

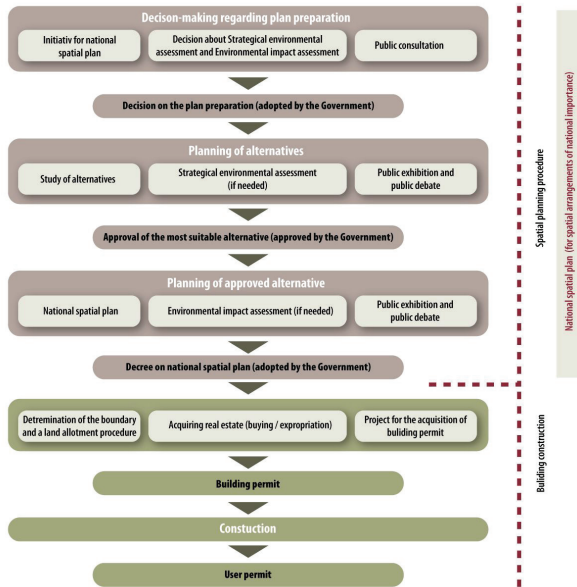


Figure 1: The Plan Preparation Procedure

The General Provisions in the Plan preparation procedure are:

- ▶ the Plan shall be the basis for the issuing of permission for the siting in physical space,
- ▶ the ENVIRONMENTAL IMPACT ASSESSMENT should be carried out for the planned spatial arrangements,
- ▶ the INVESTMENT DOCUMENTATION must be prepared parallel to spatial planning documentation and the results of both must be consistent each with the other,
- ▶ PUBLIC PARTICIPATION must be ensured in the planning procedure and
- ▶ the zone of the Plan shall be the area intended for the implementation of individual spatial arrangements.

The most important participants in the Plan preparation procedure are the INITIATOR, the CO-ORDINATOR, the INVESTOR and the PRODUCER. The initiator is the ministry, responsible for the planned spatial arrangement. The coordinator (Spatial Planning Directorate of the Ministry of Infrastructure and Spatial Planning) takes care of the legality and

appropriate content of all documents, elaborated in the Plan preparation procedure. The investor is the managing authority of the planned spatial arrangement. The producer is a licensed spatial planner who is responsible for the elaboration of all the needed documents in the Plan preparation procedure.

NATIONAL SPATIAL PLANNING STAKEHOLDERS in the Plan preparation procedure are ministries which participate with guidelines, data and expert bases, directions and data from their own strategic plans and with opinions and potential conditions for detailed planning or with project conditions.

LOCAL SPATIAL PLANNING STAKEHOLDERS in the Plan preparation procedure are the municipalities whose area is covered by the zone of the Plan.

Crucial phases of the Plan preparation procedure are THE INITIATIVE PHASE, the COMPARATIVE STUDY PHASE and the PLAN PREPARATION PHASE (see Figure 1).

The initiative phase

The initiator, who may also be the investor (the ministry responsible for the planned spatial arrangement), prepares the INITIATIVE for the National Spatial Plan and the PROJECT IDENTIFICATION FICHE. The ministry responsible for the environment issues the decision about SEA and EIA and the coordinator organises the public presentation of the project. The phase ends with the GOVERNMENTAL DECISION ON THE PLAN PREPARATION.

The comparative study phase

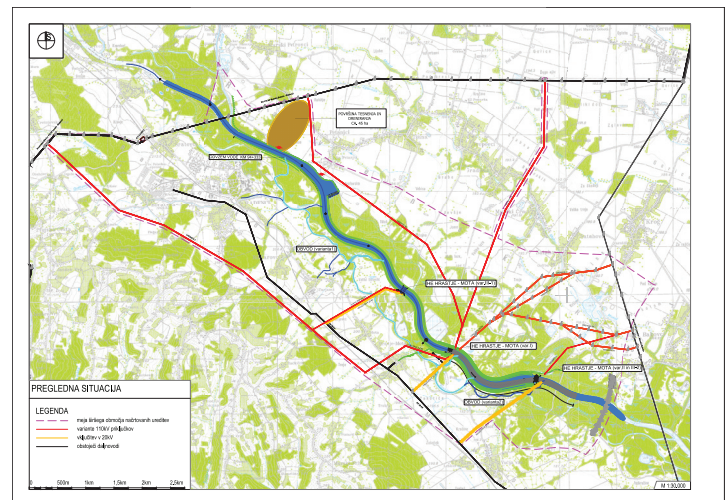


Figure 2: Comparative study

The feasible alternatives of the planned spatial arrangement are evaluated and compared within the COMPARATIVE STUDY. The PRE-FEASIBILITY STUDY and STRATEGIC IMPACT ASSESSMENT are prepared. Public exhibition and public debate(s) are carried out at the end of this phase. The phase ends with the GOVERNMENTAL APPROVAL OF THE MOST SUITABLE ALTERNATIVE.

The Plan preparation phase

The NATIONAL SPATIAL PLAN, FEASIBILITY STUDY and ENVIRONMENTAL IMPACT ASSESSMENT are prepared. Public exhibition and public debate(s) are carried out at the end of this phase. The phase ends with the GOVERNMENTAL DECREE ON THE NATIONAL SPATIAL PLAN.

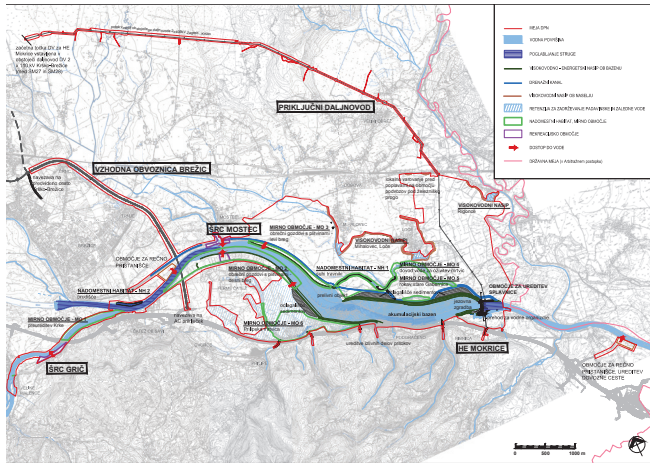


Figure 3: National Spatial Plan proposal

Follow up

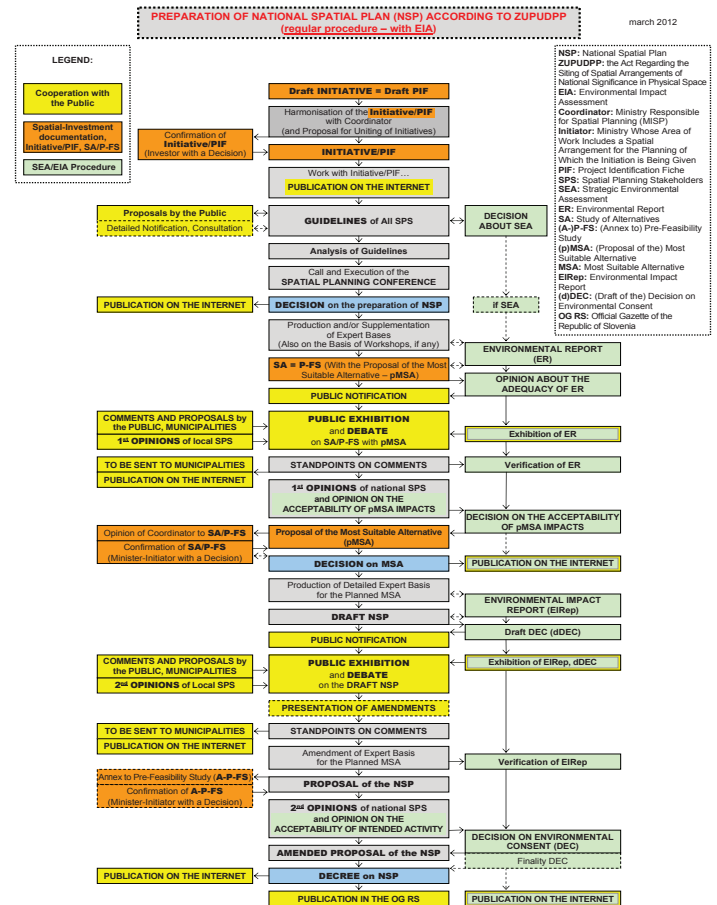
The jurisdiction of the Spatial Planning Directorate ends with the adoption of the National Spatial Plan. All the following activities (preparation of detailed documentation, obtaining of the building permit, ensuring the financial sources and construction) are under the jurisdiction of the investor.

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APPENDIX

Figure 4: Scheme of the National Spatial Plan preparation procedure



Spatial (regional) Planning in Austria

Thomas Dillinger

Spatial Planning in Austria – a multi-level governmental system

The paper gives a comprehensive overview of the Spatial Planning System in Austria, concentrating on the legal framework and the formal (legally binding) instruments. Informal instruments and approaches which play a significant role in the Austrian Planning system are not discussed.

The constitutional and legal framework – a complex matter

A multi-level governmental system defines the framework for spatial planning in Austria. The Austrian Constitution (article 2) identifies Austria as a federal state, which is divided into nine federal Länder (sg. Land).

The Austrian Constitution (articles 10–12 and 15) regularizes the distribution of competences between the national (Bund) and the Länder scale for all affairs within the state. All affairs that are not stated explicitly to the national scale through the Constitution (articles 10–12), like forestry, mining, cultural heritage protection, water supply, fall into the remit of the Länder (article 15), like spatial planning, environmental protection, construction laws, kindergarten issues.

In the 1960's and early 1970's, the nine Länder passed building regulations and spatial planning laws, which were amended several times. Vienna has only just approved the building regulations. The content and structure are naturally very similar. In addition to (general) spatial planning objectives, they set the legislative framework for regional and local planning policies.

Municipalities are enabled by the Constitution (article 118) to fulfil all affairs, which are in the exclusive and predominant interest of their own local territory, like local planning and local building inspections. In those matters, Austrian Municipalities are only the subject of control of higher level institutions, but not the subject of higher level directives (Bundes-Verfassungsgesetz, as amended).

Thus Spatial planning in Austria is a complex matter, where Bund, Länder and Municipalities make space-relevant decisions. But what does this fragmentation and inconsistency of planning powers mean in practice?

The Austrian Conference on Spatial Planning – where co-ordination takes place

Due to the complex constitutional framework and the absence of an Austrian National Planning Law, the Austrian Conference on Spatial Planning (Österreichische Raumordnungskonferenz, ÖROK) was founded in 1971 to coordinate spatial development at the national level. Under the chair of the Federal Chancellor, the members of the executive body with policymaking powers include all federal ministers and heads of the Länder, the presidents of the Austrian Association of Cities and Towns and of the Austrian Association of Municipalities as well as the heads of the social and economic partners. This platform enables and supports position making and agreements as well as information exchange between political and administrative authorities. ÖROK decisions have to be made unanimously and are legally non-binding recommendations.

Beside this political decision-making body, the ÖROK uses the services of the Commission of Deputies as well as several committees and working groups to execute its tasks at the administrative level, made up of representatives of the territorial authorities and the social and economic partners. The work of the different bodies is co-ordinated by the ÖROK Office at the Federal Chancellery.

Drafting the Austrian Spatial Development Concept is one of the main activities of the ÖROK. Since 1981, every 10 years a new updated development concept has been published. Also, this concept is a legally non-binding recommendation for Bund, Länder and Municipalities. But because the concept is adopted by all relevant stakeholders (executive body, members, see above), it has a significant importance for spatial planning policies in Austria (Austrian Spatial Development Concept 2011, 2011).

Besides, ÖROK publishes reports and studies, like the periodical Report on Spatial Planning, ÖROK Recommendations for various thematic issues and the ÖROK Atlas to document spatial development on the territory of Austria. Since Austria joined the European Union, ÖROK also serves as the coordinating body between the internal and the European levels. In the area of EU Cohesion Policy and Rural Development, the Partnership Agreement for the period 2014 to 2020 (under the working title STRAT.AT 2020) is integrated into the organisation of ÖROK. ÖROK has served as the Coordination Platform and joint secretariat for the monitoring committees of the regional structural fund programme and, for several years, as the National Contact Point for the transnational and network programmes of the Objective European Territorial Cooperation (ETC) in which Austria participates (Internet).

The level of the Länder – where we find a hierarchical system of Spatial Planning

As mentioned, the Spatial Planning laws of the Länder define the principles and objectives for spatial planning and introduce a hierarchical system of planning instruments on the scale of the Land (as a whole), the Region (as a part of the Land) and the Municipality.

The most important formal (legally binding) instruments are Spatial Planning Programmes for the Land (see example Figure 1), for parts of the territory of a Land (Region) (see example Figure 2) and Sectoral Planning Programmes.

These programmes are adopted by the government of the Land as general, abstract rules (regulation). They are addressed to the Land itself and to the municipalities. One of the main criticisms of these in-

Formal Planning Instruments	Content / Nature	Function
Landesentwicklungsprogramm (Land Development Programme) Regionales Entwicklungsprogramm (Regional Development Programme)	Land and regional development concepts have to identify economic, social, ecological and cultural development perspectives of the planning area, settlement boundaries, the future demand of areas for enterprises and industry and for free open spaces, and the localisation of risk zones.	Strategic; Regulative; binding for Land and local authorities
Sektorales Entwicklungsprogramm (Sectoral Development Programme) for the Land and / or regional planning scale	Sectoral development concepts have to identify economic, social, ecological and cultural development perspectives regarding a specific sectoral matter, e.g. tourism, natural resources, business sites. Further on, they can define the binding standard and limiting levels for all lower planning scales.	Strategic; Regulative; binding for Land and local authorities
Örtliches Entwicklungskonzept (Local Development Concept)	Local development concepts have to identify local planning objectives and activities for the next 10 years on the basis of the actual economic, social, ecological and cultural situation.	Strategic; binding for local authorities
Flächenwidmungsplan (Land Use Plan)	Land Use Plans have to divide the whole area of a community into building areas, green areas and areas for transportation (and all their subcategories as defined by the law).	Regulative; binding for local authorities and land owners
Bebauungsplan (Regulatory Plan)	Regulatory plans define binding conditions for all building areas.	Regulative; binding for local authorities and land owners

Table 1: Formal instruments of Spatial Planning on the level of the Länder

struments is their predominant regulatory function. Active planning impulses or development measures are often missing.

In addition to these 'traditional' instruments, regional planning is done through planning associations. Basically, we can differentiate between two different approaches: According to the Salzburg Spatial Planning law of 1992, the foundation of regional planning associations became binding. The Municipalities as members of these associations develop – in cooperation with the authorities of the Land – a Regional Development Programme on their own. However, such a programme is legally binding only by the regulation of the Government of the Land Salzburg (Salzburger Raumordnungsgesetz, 2009).

In Lower Austria, a completely different approach has been elaborated. The Land promotes the creation of the so-called 'regional development concepts' by regional development associations, a voluntary group – represented by municipalities – as opposed to the Salzburg model. These concepts are legally non-binding and are the framework for the local planning of the Municipalities (Wollansky, 2001).

Albeit with a different approach, both models accelerate inter-municipal planning (regional) and cooperation. This is very significant, because only on the level of the Municipalities a nationwide planning takes place, massively influencing the settlement pattern of Austria (Schindegger, 1999: 118).

Municipal Spatial Planning is defining land use

Besides the local development concepts the land use plan is still one of the most important instruments for spatial planning. It is adopted by the municipal council as a general and abstract rule (regulation) and regulates the allowable land use for the entire municipality. It essentially consists of the zoning categories, building land, traffic areas, and green land. According to the legal provisions of the Land given in the spatial planning law, these categories are differentiated in sub-categories, such as residential areas, industrial areas, core areas, areas for agriculture.

The land use influences the future use options of the landowner. In reality, the existing uses are not touched, but the landowner has to organize changes in the future, according to the land use plan. In the planning practice, it often happens the other way round, i.e. land use changes on the basis of upcoming construction projects often determine the everyday planning.

The land use plan is subordinate to the regulatory plan. It is also approved by the Municipal Council as a general and abstract rule (regulation) and governs how buildings have to be built, hence determining the urban shape. The issuance of a building permit is only obtained in compliance with the requirements of the regulatory plan. It is certainly one of the most frequently criticized instruments of spatial planning, because it causes personal building restrictions for individuals. After decades of continuous over-regulation of building regulations, we now find a trend towards deregulation.

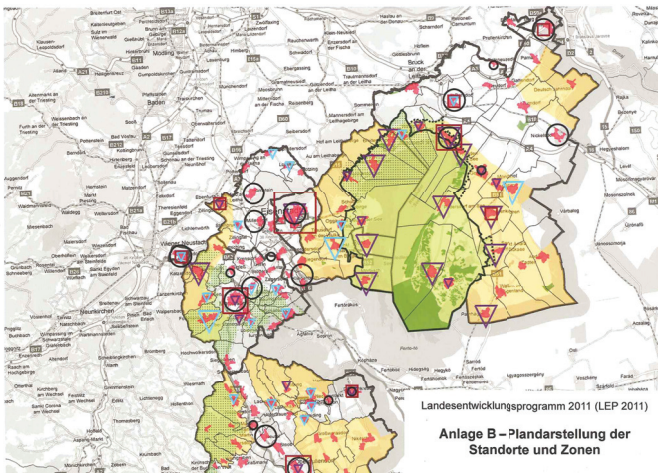


Figure 1: Detail of the plan Land Development Programme Burgenland, Source: Landesentwicklungsprogramm 2011

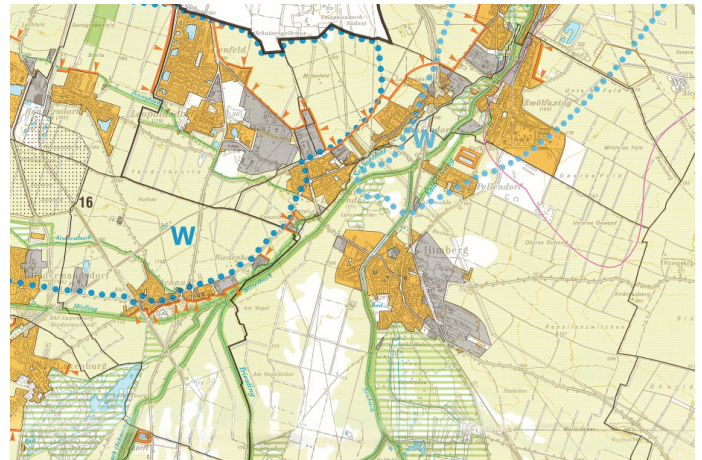


Figure 2: Detail of the plan Regional Development Programme Lower Austria south of Vienna, Source: Regionales Raumordnungsprogramm südliches Wiener Umland 2009

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Cooperation in the city-region of Vienna

Nina Svanda

Introduction

Urban agglomerations with a dynamic development face great challenges like urban sprawl and dense traffic flows resulting in high consumption of resources. Further aspects are the occurring imbalances within urban agglomerations and especially between the core city and its surrounding municipalities concerning e.g. employment and demographic structures as well as disparate fiscal developments. Therefore, in a dynamic urban region like the agglomeration of Vienna the development of the peripheral urban areas as well as attractive hinterlands plays an important role.

In the surroundings of Vienna, spatial development follows mainly property prices, the availability of land and transport infrastructure as well as regional connections. This leads to the emergence of hubs of high accessibility and increasingly urbanised areas in the hinterland, which are converting into 'in-between cities'. Steering this development with the existing planning tools needs a revisit of urban and regional planning and new forms of inter-communal cooperation.

SUM – The urban–rural management Vienna-Lower Austria

To improve the regional cooperation between the city of Vienna and the surrounding communities in Lower Austria, the city hinterlands management SUM Vienna-Lower Austria was created. The agglomeration of Vienna is characterized by the specific situation that two provinces, the province of Vienna and the province of Lower Austria, with different planning laws and instruments, decide and act. Therefore the administrative-political boundaries play a major role in regional development processes. The goal of SUM is to promote cross-border cooperation, especially concerning settlement development and locational issues, transport development as well as natural and recreational areas. SUM is a communication and discussion platform for the peripheral districts of Vienna, Lower Austrian municipalities, small regions and existing organisations dealing with the development in this area. Its main task is the coordination and information of these authorities and organisations and also subject-related cooperation

with interest groups. The urban–rural management SUM brings together all relevant partners and initiates and promotes cooperation in various fields. To be more flexible to react to different challenges in the region, SUM has no rigid zoning and orientates its activities according to functional relationships. Although the urban–rural management Vienna-Lower Austria has no legal power and the cooperation works on an informal level, it influences the development of the agglomeration of Vienna by intensive information activities and networking of key players.

Potentials for cooperation

In the framework of the study Spatial Development in Austrian Urban Agglomerations: Need for Action and Steering Options, conducted by the Department of Spatial Development, Infrastructure and Environmental Planning of the Vienna University of Technology in 2007 and 2008, innovative approaches for steering spatial development in urban agglomerations were analysed and recommendations for actions to meet the different challenges in city-regions elaborated. One of the selected Austrian regions was the agglomeration of Vienna. A special focus was given on the cooperation potential in the fields of settlement development, business and traffic development.

Settlement development

As the steering of the settlement development is seen as one of the core elements of local politics, this is one of the most sensitive areas in the field of cooperation for communities. Nevertheless, especially in growing agglomerations, an integrated and coordinated development protecting and managing the resource land is the success factor for the future development.

Regulatory planning by the provinces shows significant shortcomings in this area. On the one hand, spatial planning instruments in Austria are equally designed for all regions, with no differentiation between rural, peripheral regions, and central regions and are often used in the same way, not taking into account the specific problems of agglome-

rations. Whereas in the Viennese suburbs, the determination of the borders of the settlement area can hardly contribute to controlling the development, in the case of lagging regions it is a rather unnecessary instrument for local planning. On the other hand, the existing planning tools are often under-utilised in their application. Binding regional guidelines are mostly limited to landscape protection and borders of the settlement area. More detailed steering instruments for settlement development like the setting of priorities in dedicated or already built-up areas are not included.

But particularly in dynamic regions with a variety of demands on the limiting factor land, the communities cannot be left alone and control the settlement development themselves, with cooperation being seen as the sole instrument for solving development problems. Clear targets for the communities have to be set by a higher level building of a framework in which the communities can adapt their housing policies and needs. For the active control of the settlement development in agglomeration areas, the communities need innovative tools, e.g. an intercommunal land fund. Raising awareness of the long term environmental, social and economic consequences of land consumption in the communities and planning authorities as well as the public could lead to an increased willingness to cooperate and the implementation of a more sustainable urban development. In fact, only very few communities pursue active land management policies.

For sustainable settlement development a set of measures is needed. Through a combination of already existing planning instruments with new innovative ones a fair benefit and burden-sharing within the agglomeration avoiding negative economic and social consequences should be possible. Collaborative tools can make an important contribution.

Marketing of business locations

Generally, also in this field of cooperation the communities have serious reservations, though especially in the last years, cooperation is more likely when it comes to the establishment of a business location than for example in the development of settlements.

In particular, the designation of large-scale commercial areas is only possible in very few locations in urban agglomerations, already often sharing plots in more than one community. So the existing land pressure leads to coordination and cooperation among the actors. Generally, it is easier for the communities to operate an intercommunal business location if they already have their own commercial site.

Serious obstacles for further cooperation are parish-pump politics of the communities and the fear of losing revenue, not being aware of the added value. Furthermore, the number of businesses and jobs is a crucial factor in the municipal budget as well as in the community's image. This makes it easy for investors to pit the communities against

each other, as the portfolios of the sites are often very similar besides the global competition between urban agglomerations.

The attraction of new businesses plays only a subordinate role, as the business portfolio management, which means retention and expansion of the stock of businesses currently located in the urban agglomeration, is the main political interest. The core cities focus on the service sector and the manufacturing companies are dislocated in the suburbs, as even small extensions of the existing businesses in built-up areas are a challenge.

Besides the distribution of the earnings of the intercommunal business locations, the communities should also aim at equitable distribution of benefits and burdens. Although the provinces are interested in an integrated and coordinated business development, they are often lacking detailed information on potential locations. The main problem is the availability of plots. Nowadays the provinces often care for the development and marketing of business areas in the context of provincial development agencies.

Traffic development

In the field of transport associations for public transport, linking the hinterland with the core cities, large-scale cooperation has a long tradition. Although communities and regions have only a limited influence in transport planning – as authoritative decisions on infrastructure investments are taken on higher levels – there are also many projects on the intercommunal level like mobility centres or the public transportation concepts.

Improved availability and lowered costs show the common added value for each community easily. The benefit is visible to all citizens and politicians can sell these positive effects of cooperation. However public transport in sprawling areas is an extremely costly task and municipalities are often not able to finance the traffic infrastructure alone. Cooperation in the field of transport is attractive and improves the image of the community.

Recommendations for action

Based on the analysis of the cooperation models in selected urban agglomerations, the following recommendations for action were developed:

- ▶ Establishment of urban agglomerations as a relevant planning and action level by e.g. strengthening bottom-up processes, development of cross-border cooperation models for urban agglomerations, overcoming province and community borders by setting up common projects or intensified use of public relations instruments communicating urban challenges
- ▶ Shaping planning tools for urban agglomerations, especially

for shopping malls, subsidized housing and cooperation of provinces

- ▶ Improved coordination between hard and soft planning instruments to develop effective strategies and measures to steer urban growth
- ▶ Participation and enlargement of cooperation from local authorities to e.g. economy and regional initiatives as well as concerned and dedicated citizens
- ▶ Professionalizing and managing informal cooperation by development of methods and processes

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Vienna's urban development with a special focus on transport infrastructure

Petra Hirschler

Vienna's urban development with a special focus on transport infrastructure

In Vienna, the strategic land use and traffic planning are integrated at the institutional level. The directions for the urban development and the development of the city's transportation system are set by two main instruments: the Transport Master Plan Vienna 2003 and the Urban Development Plan Vienna 2005 (STEP05). The spatial planning strategy of the city of Vienna aims at the compact city and a polycentric urban and regional structure to generally reduce the generation of traffic. People shall be enabled to manage their daily ways with little time, effort and preferably without a car.

Historical Background

The city shape is almost circular with two main natural borders – the river Danube in the North and the Wienerwald in the West. The first settlements in the Vienna Region date back to the late Bronze Period. In the mid-11th century, Vienna gained importance, as it rose from an insignificant border fortress to a ducal residence. In the mid of the 19th century the city of Vienna enlarged by space and doubled its inhabitants (up to 430 000 people) through the incorporation of 34 former suburbs by a municipal charter. Furthermore, the city walls were demolished in 1860 and the first big urban development project – the Ringstraße – was started. Within the Habsburg Empire Vienna gained more and more importance as well as growth, so by 1900 the metropolis had 1.6 million inhabitants and was the fourth largest city in Europe. To secure and preserve the landscape in the city, the Vienna green belt was laid down in 1905.

The most important construction period in Vienna was the so called 'Gründerzeit' which until today shapes the structure. In this period 70% of the existing buildings were demolished and replaced by an urban development with higher density. Furthermore, an extensive tramway network for faster transportation and a hierarchical system of shopping streets were implemented in the period. At the end of the monarchy in 1918, the population raised up to 2.2 million. Besi-

des other structural problems, this fast growth resulted in a huge lack of housing. However, after World War I, many inhabitants returned to their ancestral countries, resulting in a decline in the Viennese population. At the height of the immigration, about one third of the people living in Vienna were of Slavic or Hungarian descent. During the term of the so called 'Red Vienna' 64 000 flats were built by the City of Vienna for 220 000 persons. Some of these municipal estates are still the landmarks of Vienna's architecture like, for example, Karl Marx Hof or Rabenhof.

After World War II and the establishment of the Iron Curtain, with limited cultural and economic exchange with the neighbouring countries, the population decreased continuously. This trend changed with the opening up of the border in 1989 and especially with the enlargement of the European Union. Nowadays the population is growing again and, according to the population forecast of Statistics Austria, it will reach around 2.2 million again in 2075. Today, based on the historic development, the hierarchically graded system of shopping streets and small centres within the city is supplemented by a ring of 5–6 new main centres at the edge of the high density building areas. This development is supported by a radial subway system connected to the city centre. This polycentric model of settlement development shall offer a 'town of short ways' and compact structure.

Urban Development Plan Vienna (STEP05)

The Urban Development Plan Vienna is an instrument used in strategic urban planning and urban development defining, in general terms, the further orderly expansion of the city. "It lays down the distribution of building land and green land, and delineates development areas and defines their relationship to the overall transport infrastructure (subway, rapid transit lines, tramway lines and high-capacity railway and motorway routes)." (Vienna City Administration, Municipal Department 18, 2005: 14) Additionally, it illustrates the spatial/functional relationship between the city and the region.

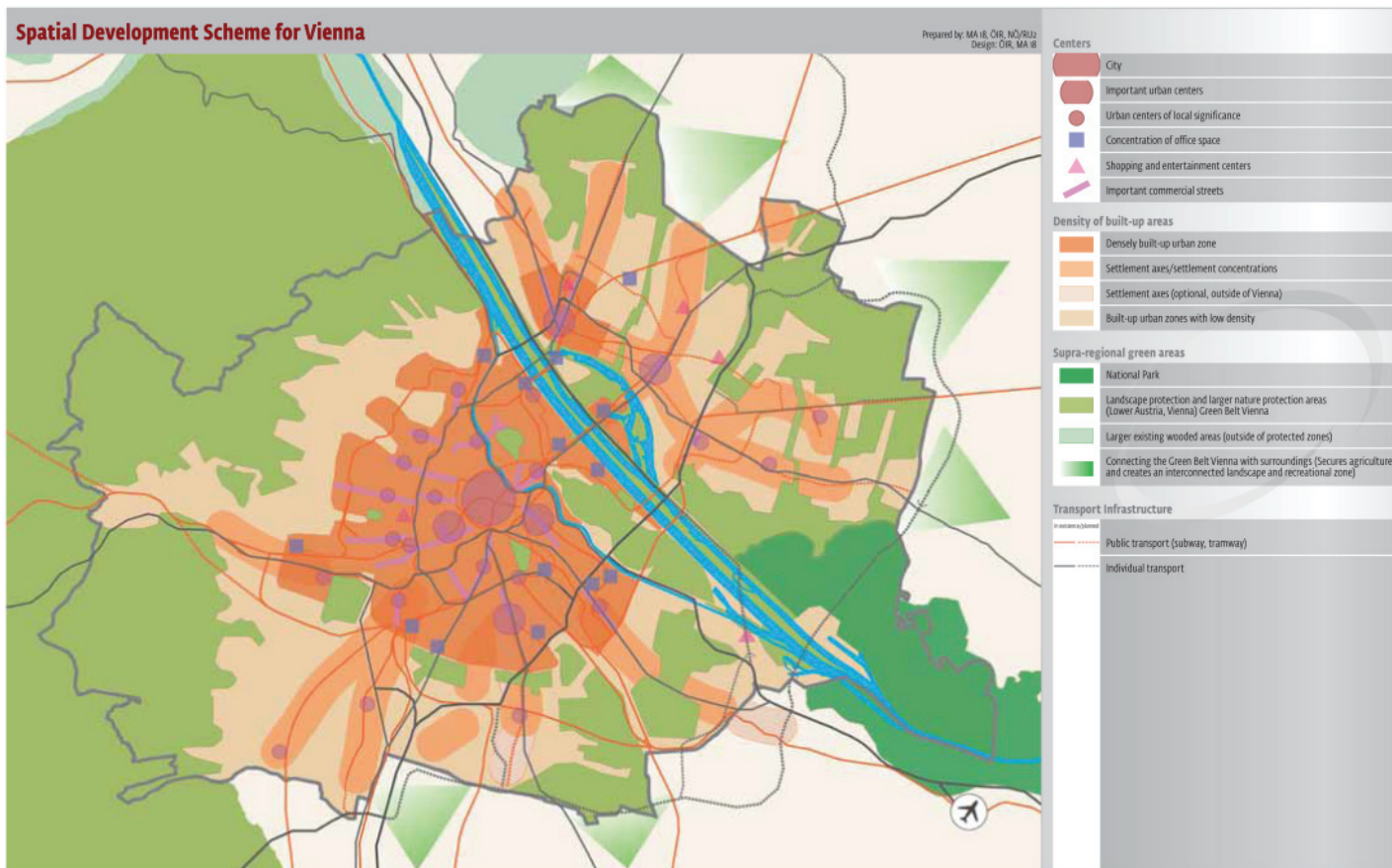


Figure 3: Spatial development scheme for Vienna. Source: Stadtentwicklung Wien (MA 18): STEP 05 – Urban Development Plan Vienna 2005. Short Report. Vienna 2005. Page 63.

STEP05 addresses urban development in regional dialogue – the functional integration of relationships of the city with the region – and pursues amongst others the goals:

- ▶ to concentrate settlement development along high-capacity public transport means,
- ▶ to prudently use the resource of land,
- ▶ to encourage the vertical mix of uses and prevent functional and social segregation.

The spatial planning strategy of the city of Vienna aims at the compact city and a polycentric urban and regional structure to generally reduce the generation of traffic. People shall be enabled to manage their daily ways with little time and effort and as possible without a

car (Stadtentwicklung Wien, 2005). STEP 05 also defines 13 target areas that have special potential and a key function for the city's further development. The urban development plan is revised every ten years. The process for STEP 2014 started in autumn 2012, discussing topics like 'the growing city', 'urban green', 'public space' and 'energy and mobility'.

Urban development and mobility

Urban development and mobility are interlinked and have affected each other not only today, but also in the past. In the historic evolution of Vienna the changing use of transport played an important role. In the industrial age, while walking was still the main means of transport, public transport started to develop upon introducing the omnibus (horse-drawn vehicles with fixed routes, journey times and fares).

13 Key Areas of Action for Urban Development –

Special challenges and development potentials

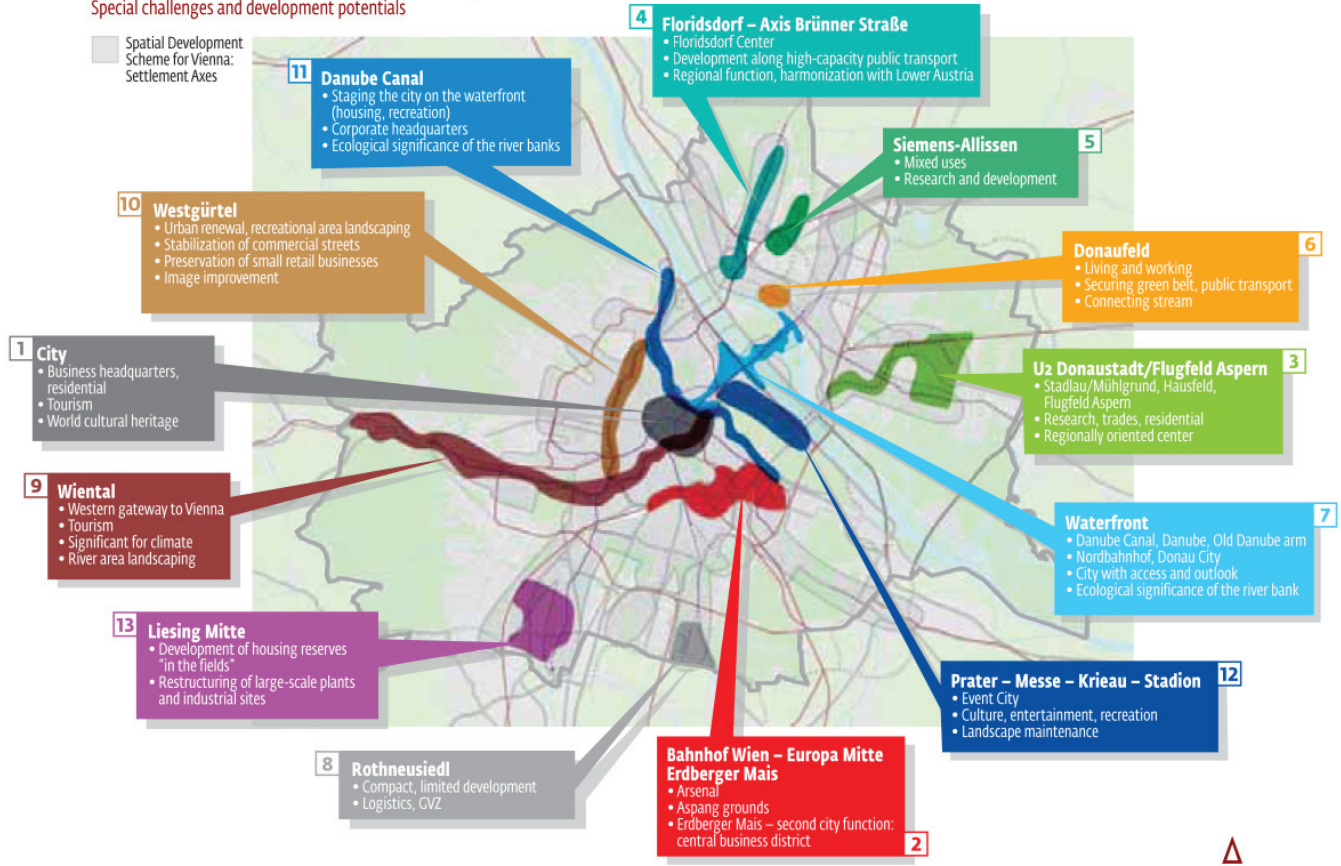


Figure 4: 13 key areas of action for urban development. Source: Stadtentwicklung Wien (MA 18): STEP 05 – Urban Development Plan Vienna 2005. Short Report. Vienna 2005. Page 68

As a fact of this, people could reach a distance of 2.5 km in about half an hour. From around 1870 until the turn of the century, the tramway drawn by horses became an efficient means of transport. Most of the suburbs were connected to the centre, but nevertheless the city kept growing in concentric circles. The development of the railway, on the one hand, had no effects on inner city transportation, as a municipal railway system did not exist at the time, but, on the other hand, led to a further spatial division of residential and economic areas as most of the industry developed along the railway lines in the east and south.

At the beginning of the 20th century, the electrification of the tramway led to the largest tramway network in Viennese history in the mid-20th century. The network was even enlarged to the north across the river Danube. The most important means of individual transport

at the time was the bicycle. The big municipal estates increased the density. The last phase of change in terms of transport started in 1960 in Vienna. The subways for the densely built-up areas and the municipal railway for the outskirts are still efficient public transport systems. The growing importance of the individual transport in the cities all over the world had also effects on Vienna. Pedestrian traffic lost importance and was reduced to the walk to the next public transport stop or parking lot; nevertheless, in comparison to other cities in the world Vienna's modal split is outstanding. However, the trend of monofunctional city development enforced by cars was also noticeable in the 1970's. Nowadays, within half an hour people travel up to 15 km – this also includes towns in the surrounding of Vienna.

Means of transport

In principle, the denser the route network and the more frequent the connections, the more people use public transport. Nowadays, in Vienna no location is in more than 15 minutes walking distance from a public transport stop. Analyses show that as early as in 1930 one third of the modal split related to public transport in Vienna, even though the situation has changed dramatically in the last 120 years. With 120 lines (subway, trams and buses) Vienna offers today a public transport network with over 4500 stops on almost 1000 km of routes. In 2010, 839 million passengers used public transport in Vienna. In 1967, a tariff association was established in Vienna, which was enlarged to the 'Verkehrsverbund Ost-Region' in 1984, including also the hinterland of the city. This transport policy made public transport more and more attractive for inhabitants and also commuters.

The Transport Master Plan Vienna – adopted by the municipal council of Vienna in autumn 2003 – sets the priorities for the future transport policy in Vienna. The Transport Master Plan Vienna pursues the transport policy model of 'intelligent mobility'. This combines the following principles and goals: Sustainability, Innovation, Cooperation, Acceptance and Effectiveness.

Vienna as a compact and polycentric city?

According to the Municipal Department 18 – Urban Development and Urban Planning, the planning model of a 'compact city' is the guiding principle for the land use and the structural development of Vienna. In the last decades until the fall of the Iron Curtain, Vienna's development was basically orientated towards the south and west. "The spatial structures that grew out of the conditions prevailing in the post-war Europe and largely oriented on the West and South are being replaced by an open, permeable region in Central Europe that has economic and cultural relations in all directions." (Vienna City Administration, Municipal Department 18, 2005: 26)

Nowadays the urban development is characterised by impulses and dynamics all over the city place. Furthermore: "Vienna will continue to pursue a policy of compact structural development, and sustainable and economically viable urban expansion." (Vienna City Administration, 2006: 15) Nowadays the hot spots of urban development are the areas of Hausfeld-Flugfeld-Aspern 'Seestadt Aspern' and the construction of the Vienna Central Train Station as well as the development of a new city district in the area of the former Vienna South/East Train Station. (Stadtentwicklung Wien, 2005)

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1.2 Tracking Ljubljana Urban Region

Step into our region: Basic information and visions for the future

Matej Gojčič, Maša Šorn

The Ljubljana Urban Region (abbreviated as LUR) is the most centrally located region in Slovenia, comprising of 26 municipalities and covering over 13% of the national territory. Named after the capital city of Slovenia embedded in the very heart of its territory, LUR is the second largest Slovenian region, hosting more than a quarter of total Slovenian population. Population increased from 483,083 (SURs, 1990) to 534,807 inhabitants (SURs, 2011) in the last two decades; the population density is the highest among all Slovenian statistical regions, i.e. 208 inhabitants per square kilometre (SURs, 2010).



Figure 1: The city of Ljubljana is the economic, cultural, educational, medical and administrative centre of the region (Photo: Maša Šorn)

However, on average, the population density in most of the settle-

ments in the LUR area is quite low, which makes it difficult to establish economically viable services within local centres. The city of Ljubljana is the economic, cultural, educational, medical and administrative centre of the region and the country, which has resulted in the surrounding smaller towns slowly transforming into a form of sleeping villages.

The natural environment in the area is still well preserved and includes various different habitats ranging from karst land to mountain meadows, forests and swampy plains. Forests cover about 57% of the Ljubljana Urban Region surface, especially the hilly and less accessible areas. The natural environment of the region is under threat due to intensive urbanisation and suburbanisation processes that took place in the past decades, land drainage and intensification of agricultural activities. It is most dispersed and fragmented in the flat parts of the region due to the densely built-up areas, infrastructure network and patches of agricultural land. The typical form of farming found in the fertile riverside plains and fields is intensive agriculture, while the terraces and the sunny slopes of the mountain areas are covered by extensive farming. The prevailing agricultural industry in the region is livestock farming; the dominant crop is maize in the flat areas. However, despite the high potentials, agriculture and forestry have no significant economic role in the region.

Two major trans-European transport corridors (V and X) running through Slovenia meet right in the central part of the region. Therefore, the main national strategic development documents see Slovenia (along with its most centrally located Ljubljana Urban Region) as an important part of a development axis at the south part of the Alps; and on the axis connecting Barcelona and Kiev. The progression of this developmental axis can be seen in a number of large, economically vital urban areas (such as Milano, Verona, Vicenza, Padua, Venice, Pordenone), which gradually expand towards the East, looking for connections with major eastern European economic and population



Figure 2: Car dependency is relatively high in the Ljubljana Urban Region (Photo: Maša Šorn)

gravitational centres. Slovenia is a vital landmark within this axis, connecting the two different cultural systems; playing the role of the doorway between the eastern and the western cultures, especially from Italy towards the eastern European countries.

From a human mobility point of view, car dependency is relatively high in the Ljubljana Urban Region. Recent transport system developments in the region were focused primarily on the improvement of the road infrastructure and consequently improvement of private vehicle users' mobility, while all forms of sustainable transport, particularly public transport, have been neglected. The effects of this development are seen as poor mobility of the non-motorized users, traffic congestion, exceeded values of emissions and noise and poor traffic safety, as well as increasing suburbanisation and urban sprawl. A high level objective for the Ljubljana Urban Region is to reduce the existing levels of emissions and noise originating from transport, to relief traffic congestion and to improve the quality of living in the region by improved mobility, reducing the use of private vehicles and inducing a modal shift to public transport and non-motorised modes of travel.

It can be observed that overall, monocentric development plays an important factor in the current traffic challenges we are faced with in the Ljubljana Urban Region. The current public transport system can be assessed as extremely underdeveloped compared to other European capitals. There is still a lack of integrating different means of transportation in terms of tariffs, timetables and infrastructure, as well as nearly nonexistent sustainable transport options. We are still

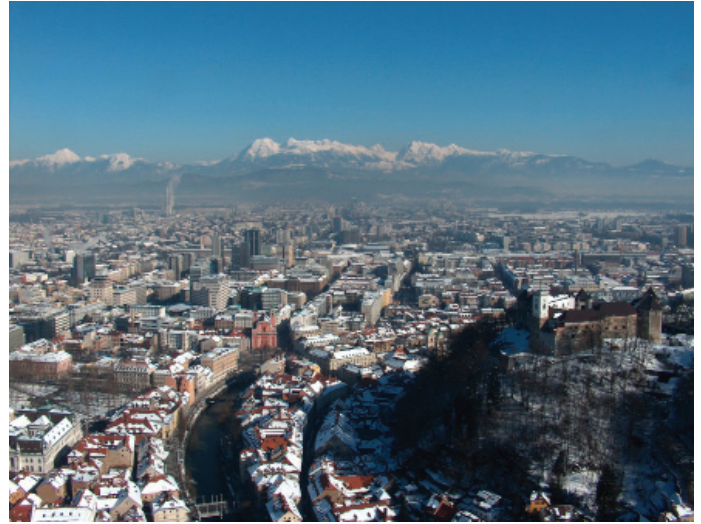


Figure 3: Alpine landscape envelops the area of the Ljubljana Urban Region (Photo: Maša Šorn)

faced with severe regulation and institutional barriers from the top down, accompanied with a very weak bottom-up public awareness of sustainable mobility and strong personal car dependency.

Dealing with problems such as the underdeveloped public transport system can be most effective at the regional level, but the absence of regional governments additionally hinders improvements. Slovenia, for instance, has established and developed only a two-level governance structure with a big gap between the two levels, i.e. the national government covering the whole Slovenia and the governments at the local level, where 211 municipalities are sometimes too small to tackle the challenges exceeding their borders. In Slovenia, political debate regarding the regional government and regional borders has been on the agenda for the last twenty years, while only statistical and development regions have been established. For improvement of the regional waste management, public transport system or strategic spatial planning and development only soft and inclusive governance tools are available.

In the field of public transport system, the Regional Development Agency of the Ljubljana Urban Region prepared a study called Expert Basis for Managing Public Transport in the Region, which became the unofficial Public Transport Development Strategy for the region. It is 'unofficial' because there is no elected body on the regional level to adopt it, and it is 'acceptable' because a wide consensus among the relevant stakeholders was achieved. Experts, local communities, state officials, public transport companies, neighbouring regions and general public all participated and agreed on the main projects for

improving the public transport in the region. The strategy, as the key project for the Ljubljana Urban Region, proposed the improvements of the regional railway system representing the backbone of the regional public transport, construction of new P+R intermodal nodes to improve the accessibility of public transport, construction of new dedicated fast lanes on all major city axes and improvement of public transport management measures and policies. Among the management measures and policies, unified ticketing, unified timetables, congestion charges, unified public transport management, parking policies, public transport financing and promotion are most important.

Besides the public transport system, there are some other relevant challenges that require the development strategies to minimise the effects of the financial crisis and improve regional resilience in order to step on the path of achieving common EU2020 goals. Although Slovenia is part of the European Union, special attention must be paid to economic independence and resource self-sufficiency in a most possible and reasonable way. Among the priorities are: reducing the dependency on imported fossil fuels with a focus on renewable resources of energy and energy efficiency, reducing import of food products and focus on quality local production, increasing the added value in wood industry and encouraging domestic production with a special focus on knowledge demanding products. Hydropower, biomass, large agricultural areas, preserved nature, quality fresh water, respected university, innovative people are some of the greatest and unexploited potentials of the Ljubljana Urban Region and, combined with improvements in governance, they can contribute toward the common goal of becoming a competitive region with high quality of living.

The Regional Development Agency is preparing the Regional Development Programme for the period 2014–2020, and this is a great opportunity to revise our vision and goals, set new strategies, propose new projects and build a common understanding of the importance of cooperation on a regional level.

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Development characteristics of the Ljubljana Urban Region

Simon Kušar

Introduction

The Osrednjeslovenska statistical region, often named the Ljubljana Urban Region (LUR), is the central and the most densely populated statistical region in Slovenia. It has the largest number of inhabitants and is the second largest in terms of territory. The essential advantages of the region are its central position, good traffic connections in all directions and the fact that the country's capital is located in it (Slovene Regions in Figures 2012).

The aim of the article is to present the basic development characteristics of the Ljubljana Urban Region, especially those related to the economy. All the data presented here are taken from the Statistical Office of the Republic of Slovenia (Internet 2012). If not indicated otherwise, the data are valid for 2010.

Economic strength of the Ljubljana Urban Region

The Ljubljana Urban Region contributed 13,037 million EUR to the national GDP. That is 37% of GDP created in Slovenia and 2.8 times more than the Podravska statistical region that contributed the second largest amount (13%) of GDP to the national overall production.

The GDP per capita values reveal that LUR is the most developed region in Slovenia. LUR had 24,519 EUR GDP per capita while the national average was 17,379 EUR per capita. The GDP per capita values of the LUR exceeded the national average by 41%. LUR was together with the Obalno-kraška statistical region (I = 110) the only statistical region in Slovenia with an above-average value of GDP per capita. On average, the citizen of LUR earned 2.14 times more GDP than the citizen of the Pomurska statistical region, which is the least developed statistical region in Slovenia. LUR reached more than 120% of the EU-27 GDP per capita. According to these data, LUR's level of economic development has been similar to that of Barcelona (Spain), Leeds (United Kingdom), Erfurt (Germany), Verona, Padova, Trieste (Italy) and Klagenfurt-Villach (Austria) NUTS

3 regions. In the last 10 years, GDP per capita increased by 64% in LUR, while in Slovenia the increase was 59%; hence, the economic development of LUR was faster than the national average. The GDP per capita had been increasing every year until 2008, with the fastest development between 2005 and 2008. In 2009 and 2010, there was a 4.5% and a 1.1% decrease of the annual GDP per capita, respectively, due to the financial and economic crisis in Slovenia.

Gross value added (GVA) of LUR was 11,346 million EUR or 37% of the national GVA.

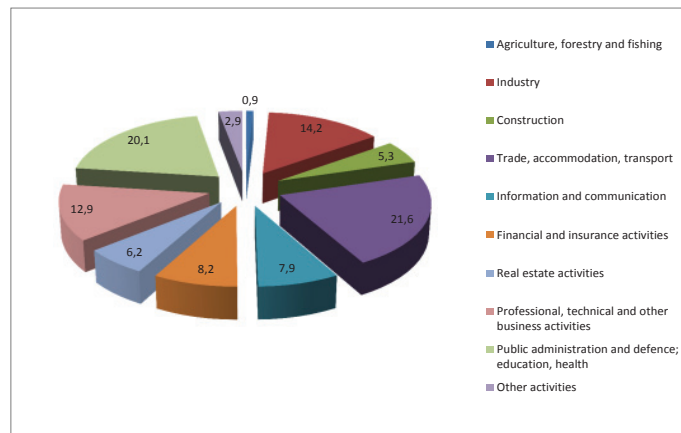


Figure 1: The structure of gross value added in the Ljubljana Urban Region by branches, 2010, Source: Internet 2012

More than three quarters of GVA (76.9%) were created by tertiary and quaternary sectors. The secondary sector contributed 19.5% of GVA, while the agriculture sector played a marginal role in the economy of LUR, with less than 1%. Compared to the national average, regional economy is marked by stronger orientation into services, because in Slovenia only 65% of GVA was produced by services in that year. More

than one fifth of GVA (21.6%) was produced by trade, catering industry and transport. The second most important branches (20.1%) were administration, defence, social security, education and health service; industry was in third place, with 14.2%.

There were 54,390 enterprises registered in LUR or more than one third of all enterprises registered in Slovenia. Their turnover was 45% of the total enterprises' turnover in Slovenia; therefore, the enterprises in LUR were more productive than those in other statistical regions in Slovenia.

The economic primacy of LUR is seen also through the analysis of the most successful companies in Slovenia. This analysis was made by the Slovenian business daily Finance in 2012. There were 32 out of 101 most successful companies with headquarters in LUR, while 30 of them were situated in Ljubljana. The number of companies from service activities is slightly larger (53%) than the number of industrial companies (Top 101, 2012).

In the Ljubljana Urban Region, 403 million EUR were invested in R & D. That was 3.1% of the regional GDP (Slovenia: 2.1%). According to the R & D financial resources spent in Slovenia, 54% of all R & D activities in Slovenia took place in LUR.

In the Ljubljana Urban Region, there were 274,643 working places or 33.6% of all working places available in Slovenia in 2011. On the other hand, in the Ljubljana Urban Region lived 220,250 persons in employment. The discrepancy between both numbers reveals that the Ljubljana urban region is offering more working places than there are, mathematically, persons who can occupy them. Therefore, the Ljubljana Urban Region is attracting labour from neighbouring statistical regions.

Human capital

The Ljubljana Urban Region is home to more than a quarter of Slovenes. The number of inhabitants exceeded 0.5 million. The natural increase was positive. The annual population growth was the highest among statistical regions (0.67% LUR; 0.16% Slovenia). The ageing index reached 107, but was still below the national average (I = 118). The number of young inhabitants has been slowly increasing in the last five years.

Every year more than 1,000 immigrants from other statistical regions in Slovenia settle in LUR; therefore, LUR is the most attractive statistical region in Slovenia for living, studying and working.

The inhabitants in LUR are very well educated. More than one third of the population aged 30–34 years had tertiary education in 2011. Surprisingly, the percentage of the population aged 19–26 studying at the university is below the national average. In the academic year

2010/2011, 47.5% of population in the observed age group was visiting one of the faculties, while in Slovenia this percentage was more than 52%. The most important academic organization in LUR is the University of Ljubljana with 26 faculties and more than 60,000 students.

Ljubljana Urban Region as a problem region?

Although the Ljubljana Urban Region is presented here as the most successful, attractive and innovative statistical region in Slovenia, it has many specific development problems that are typical for all agglomeration regions. Namely, rapid economic development, accelerated population growth, agglomeration of economic activities, jobs, research and development activities, cultural and administrative institutions may have certain 'agglomerative' side effects, which gradually lead to economic, social, demographic, urban, environmental and spatial development problems (Kušar and Vintar Mally, 2004).

An in-depth analysis of the development situation and processes in LUR highlighted the following development problems (Kušar and Vintar Mally, 2004: 26):

- ▶ high costs of living (including the real estate prices),
- ▶ deindustrialization in traditional industrial activities,
- ▶ high rate of unemployment among the workers with low levels of education,
- ▶ intensive traffic flows, but reduced importance of public transport,
- ▶ expansion of built-up areas on agricultural land and water supply areas,
- ▶ deterioration of air quality and other environmental impacts resulting mainly from increased traffic,
- ▶ pollution of water resources, and
- ▶ conflict of interests related to agriculture, settlement, water supply, traffic and other economic activities.

But wealth, development and agglomeration are not spread throughout the whole territory of the region. LUR is characterized by developmental non-homogeneity with large under-developed rural and mountainous areas in the eastern and western parts of the region and agglomeration of population and economic activities in 'hot spots', where development problems are, as a result, the most acute.

Most of the identified development problems in this region are related to (Kušar and Vintar Mally, 2004: 26):

- ▶ decentralisation of population which was not followed by decentralisation of jobs,
- ▶ agglomeration of human capital and services in the region beca-

use of the best development opportunities compared to other regions in Slovenia, and

- ▶ emphasis on the function of Ljubljana as a capital and an insufficient emphasis on using comparative advantages of the region in a wider European area.

Conclusions

The Ljubljana Urban Region is the most developed region in Slovenia. It created more than one third of the national gross domestic product in 2010. More than three quarters of GDP were earned in service activities. The economic importance of the Ljubljana Urban Region is highlighted by the fact that it was the only statistical region in Slovenia in 2011 where the number of jobs in the region was much larger than the number of active persons living in it.

The education potential of the region was the highest among statistical regions in Slovenia as well. The region is also important in the field of research and development (R & D), both with the highest gross domestic expenditure and the highest number of R & D personnel (Slovene Regions in Figures 2012).

Although LUR is an economic engine of Slovenia, this development has important negative development consequences on the inter-regional and intra-regional levels. The economic and demographic concentration in LUR caused the formation of a clear core–periphery development model in Slovenia or, in other terms, the polarization process on the national level. These findings lead to the paradox: Hindering the development of LUR would cause irreparable damage to the national economic goals, but, on the other hand, increased polarization would cause additional development difficulties in Slovenia. On the other hand, accumulating and reproducing development problems and, in particular, reducing the quality of life and the environment in LUR causes severe development issues in LUR as well. Development problems defined in LUR may hold back the region's economic development in the future. This, in turn, would not have consequences only on the local and regional levels, but also on the national level. Therefore, national regional policy is faced with many challenges that need to be solved in the next programming period.

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The Ljubljana Urban Region within the concept of Slovenian functional regions

Alma Zavodnik Lamovšek

Introduction

The notion of a 'region' originates from Latin *regio*, region, meaning a landscape, territory, area, i.e., a more or less homogenous part of Earth's surface (Tavzes, 2002). The term is used in different disciplines; however, there is, in fact, no unanimous definition of the term. Most definitions are restricted to the explanation of the term as a territorial unit, with an array of specific and distinct features, or, on the other hand, as the notion for a certain administrative, economic or natural spatial unit populated by a specific community (Vrišer, 1978).

In research, a region is defined as a scientific tool, allowing for the elaboration of spatial generalizations based on chosen criteria (MVRDV, 2002). In this definition, a region is composed of two, typically connected parts that are independent, which are however linked through their characteristics, such as scale, hierarchy and time:

- ▶ The first one is a physical/spatial region which contains elements, such as climate, physical geography, physical infrastructure, population, built environment and all material goods that are marketed in the regions and worldwide;
- ▶ The other part is understood as a social system of flows and processes. They contain non-physical dimensions, such as behaviour and societal psychology, market activities and economic effects, information and knowledge exchange, globalisation, struggle for power, strategic connections and cooperation.

In this context, the functional region can be defined; it is organized around a node to which the neighbouring areas are attached, using traffic and communication systems or other economic connections, such as production or market networks. This is related to the patterns of daily migration, flow of goods, television and radio networks, newspapers and travels for recreation and entertainment. This definition can be summarised as the definition of a functional region »characterised by a high frequency of intra-regional econo-

mic interaction, such as intra-regional trade in goods and services, labour commuting and household shopping« (Johansson, 1998).

Studying functional regions in Slovenia

In 2010 in Slovenia, a study was performed whose main goal was the definition of different functional regions (Pogačnik et al., 2010). Next to the labour market method, other methods of studying functional regions were used to test their applicability in Slovenia, as a relatively small, but highly polycentric state (ESPON 1.1.1., 2004). The following methods were used:

- ▶ Formation of functional regions based on scenarios;
- ▶ Delineation of functional regions (Drobne et al., 2011, in: Zavodnik Lamovšek (ed.) 2011) using the data on daily commuters, based on the procedure of modelling the functional regions of Slovenia using three methods, i.e. labour market method (Karls-son and Olsson, 2006), the commuting zone method (Vanhove and Klaasen, 1987) and the Intramax method;
- ▶ Multi-criteria evaluation of different models of functional regions according to the selected variables (Pogačnik et al., 2010); and
- ▶ Modelling of functional regions related to the accessibility to regional functions (Pogačnik et al., 2011, in: Zavodnik Lamovšek (ed.) 2011).

Furthermore, an analysis was performed looking at the cross-border (functional) areas where Slovenia and its regions are present based on agreements, and (active) cooperation in operational programmes and projects encouraging and enabling cross-border, transnational and inter-regional territorial cooperation of Slovenian stakeholders in the wider (Central) European space.

The analysis of the results and the comparison of different regionalisations provided insight into the adequacy of the specific methods for modelling of functional regions on different spatial levels. The results of the study indicated that the defined functional regions were mutually comparable, irrespective of the study method chosen.

The Ljubljana Urban Region and the functional regions of Slovenia

The functional regions of Slovenia are mostly urban regions, where the city centres of the regions form around themselves a connected labour market and the gravitation towards educational, health, shopping, administrative, cultural urban functions and otherwise. On the other hand, the boundaries of urban functional regions coincide with the areas of significant partnership of cities and the countryside, with radiuses of leisure activities, for example, recreation, hiking trips, and second home mobility. Moreover, urban centres are often the centres performing the functions of environmental and nature conservation, protection and rescue, and also the centres of tourist, agrarian and other functional territories (Pogačnik et al., 2011, in: Zavodnik Lamovšek (ed.) 2011).

On the other hand, the functional regions defined in this way can be compared to the Spatial Development Strategy of Slovenia (SPRS, 2004), which introduces the category of wider city areas around the centres of national importance. These areas are closely connected to the central city, where there are many workplaces and versatile and diverse urban activities. They are defined by intensive flows, such as, for example, strong day-to-day work migrations and other kinds of migrations. The wider city areas of Ljubljana, Maribor, Koper, Celje and Nova Gorica are particularly noted (Figure 1).



Figure 1: Polycentric urban system with a hierarchy of centres and conurbations (SPRS, 2004)

In the wider European framework, for Slovenia six Functional Urban Areas (FUAs) were defined, of which only Ljubljana could be defined as a metropolitan area (MEGA; ESPON 1.1.1, 2004). Notably, relevant domestic documents do not perceive Slovenia in this way (SPRS,

2004). Among the functional regions in Slovenia, the Ljubljana Urban Region, whose area is commonly equated with the Osrednjeslovenska (Central Slovene) statistical region, stands out according to all criteria (Figure 2).

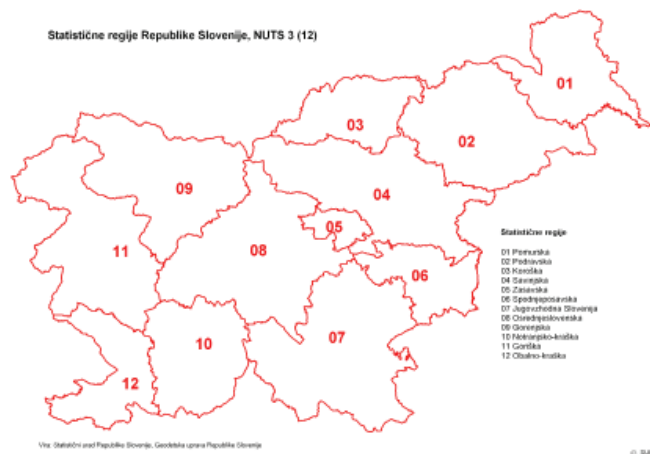


Figure 2: The Ljubljana Urban Region (LUR) is commonly equated with the Osrednjeslovenska statistical region (No. 08 on the figure), SURS, 2010

Conclusions

The definition of wider city areas in SPRS (2004) serves as a basis of spatial planning. A coordinated development of wider functional city areas is one of the eight priorities of Slovenia's spatial development. To this effect, two development directions have been proposed:

- ▶ In a wider functional area of the city, comprising the areas of several local communities, the spatial needs of development of cities, towns and other settlements are planned and managed based on inter-municipal cooperation, especially to rationalise traffic flows, efficient distribution of workplaces, housing, services and production activities;
- ▶ Special attention is given to a coordinated development of wider functional areas of centres of national importance, particularly due to their size, settlement pressures, versatile problems and/or expected development.

The new dynamics of connecting Ljubljana with its hinterland represent a serious challenge to governance, which, as it is, remains more or less rigidly connected to the administrative structure of neighbouring municipalities, which, along with Ljubljana, form a functional urban region. Despite the guidelines given in SPRS (2004), there is still a lack of efficient tools for municipal governance with its correspon-

ding urban area. Hence, by studying functional regions and their mutual demarcation we wanted to find the basis for shaping the strategies of connecting the cities with their surroundings. This is of particular importance for Ljubljana, which must be capable to connect and, at the same time, remain competitive to other cities, both in Slovenia and in the wider European space.

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Urban–rural partnership in the Ljubljana Urban Region

Mojca Foški, Gašper Mrak

Abstract

The Ljubljana Urban Region (LUR) is characterised by the blending of the urban and the rural. Its strong urbanisation and suburbanisation stand in juxtaposition to the vast rural areas. The interdependence of urban and rural areas is a spatial and social reality, while the flows of people, capital and goods occur both ways, continuously, creating a different functional and cognitive space. The demarcation into two spatial systems, i.e. urban and rural ones, does not lead to efficient land management and arrangement of activities. This issue, from the viewpoint of urban–rural interactions in LUR, is being briefly addressed in this paper. Furthermore, we expose the suitability of an interdisciplinary regional approach to a comprehensive treatment of urban–rural interactions.

Urban–rural partnership

The theory concerning spatial development has done away with (or nearly so) the demarcation between urban and rural areas and has started to emphasize their blending character and interdependence. Indeed, ESDP (1999), as the guiding commitment of the European spatial development perspective, has stressed that the traditional notions of 'urban' and 'rural' as two opposing spatial categories should be abandoned. Overcoming the partial treatment of urban and rural areas offers new opportunities, partnerships and synergies between cities and rural areas, enabling a comprehensive approach to shaping development possibilities in space, which help to alleviate negative development trends (Harej, 2012).

In the early 19th century, new definitions of modern spatial patterns started to emerge, which did away with the demarcation between two spatial structures, i.e. the urban and the rural. The word-plays and phrases that are used to grasp the space in-between, i.e. between the rural and the urban, testify about the complexity of such areas.

Different terminology is used, such as the 'Zwischenstadt' (literal

translation 'in-between city') urban–rural fringe, rural–urban continuum, diffuse city, and, commonly, 'rurban', short for the rural–urban partnership. All the aforementioned concepts have similar characteristics, meaning that they denote a dispersed spatial pattern outside of compact urban centres, mixed and specific rural–urban functions and mixed land use, and their blending in the networks where the territorial boundaries between urban and rural areas are blurred.

For some time, spatial planners have been faced with the challenge how to introduce efficient methodological approaches to spatial planning in areas with specific spatial situations. It is necessary to modify the conceptual approaches to spatial planning and introduce knowledge from different fields, hence improving the understanding of rural–urban areas and development. The versatility of stakeholders and their demands/needs calls for a different kind of spatial and/or functional connectivity. The different stakeholders claim the same piece of land; therefore, they are forced to cooperate. The traditional model of a compact city with a continuous concentric development can no longer adequately respond to the new fragmented structures subjected to the great dynamics of development. Gallent (2006) predicts that rural–urban areas will be guided by a form of planning and governance that promises to be far more negotiated and integrated. The approaches where the urban–rural partnership will transcend the sectoral approach will be especially effective, which, however, will only be possible in the regional framework (Vanempten, 2009a). It is becoming increasingly clear that the regional perspective and the urban–rural framework require a multidisciplinary approach.

The interactions between urban and rural areas go in both ways; quite often they are so intensively cohesive and exchangeable that it becomes impossible to distinguish between the areas and interactions, when, indeed, a new spatial tissue with specific functions can be identified. Nevertheless, many authors find that, characteristically, between the countryside and the city, the flow of goods, people, merchandise and capital occurs.

Rural areas are the hinterland of environmental benefits (agricultural

land – agricultural products, forests – wood, mining products), while also providing storage of quality drinking water and air. These resources often return to rural areas in the form of waste (waste water, CO₂ emissions, dust particles etc.), while their exploitation frequently causes the degradation of rural areas (e.g. quarries). At the same time, rural areas are the recreation hinterland to the urban population, hence representing a major source of income and employment for rural areas. Frequently, city and town dwellers exploit quality rural areas as second homes; furthermore, cities see rural areas as a potential for spreading out (building plots, space for infrastructure, industrial areas). 'Rurban' areas are not sporadic and disorganized 'unexploited land' waiting to be fully urbanised, as they are perceived by the economic interested parties, but, more often than not, quality ecological areas (Gallent, 2006). Additionally, urban and suburban centres offer rural residents employment and provide market for their products (garden vegetables, handicraft, wood etc.), tourism development (tourist farms, sports) and social services (health care, education, and culture). With their activities in the countryside, the city and town dwellers help boost rural development and raise the living standard of rural population, while, in turn, rural inhabitants with their way of life and quality natural environment mitigate the effects of the urban way of life.

Ravbar and Kladnik (2003: 143) find that the development of the countryside strongly correlates with the proximity of well accessible suburban centres, with which the exchange of functions is held, that is, an urban–rural partnership. Similar conclusions were drawn by Pogačnik and Konjar (2010) who studied the connectivity between the countryside and the city based on daily mobility to public functions. The higher the public function and the support functions of the city, the higher the level of vitality of rural periphery. Harej (2012) found that the level of connectivity between urban and rural areas does not decrease linearly with the distance from major urban centres, but rather it remains high in a narrow belt only; furthermore, the connectivity between urban and rural areas is not higher in functional urban regions and in more densely populated areas. Vanempen (2009b) argues that the larger the metropolitan area, the stronger its link with the rural hinterland, and the greater the implications for rural way of life and the pulse of the countryside. The blending of, and the level of connectivity between, urban and rural areas is one of the key indicators showing the spatial situation and the realization of the goals of spatial planning (Zavodnik Lamovšek and Kunstelj, 2010).

Urban–rural partnership in LUR

LUR comprises a surface area of 2555 km², while the City Municipality of Ljubljana (MOL), as the largest and most urbanised municipality in LUR (and in Slovenia), has an area of 275 km². In Slovenia, LUR is a centrally located region with the highest population density, populated by a quarter of the total inhabitants of the Republic of Slovenia. In

addition to its central position, its advantages lie in good traffic connections in all directions and the fact that it contains the Slovenian capital city. Economically, it is the most developed region with the highest level of entrepreneurship and human resources.

The rural areas in MOL represent more than 2/3 of the area, while in the total LUR, rural areas cover as much as 88%. It has a reasonably well preserved landscape in the hinterland, which is covered by landscape parks. 46% of LUR is included in at least one nature conservation category; 57% of the area is covered in forests, and, in terms of agricultural land use, permanent pastures (61% of agricultural land) and fields (22% of agricultural land) prevail.

Of 26 municipalities that make up LUR, 15 are classified (Ravbar, 1997) as predominantly rural areas. In terms of urbanisation, Ljubljana, as a national centre (with more than 100,000 inhabitants), stands out. In the urban hierarchy, the towns of Kamnik and Domžale with more than 10,000 inhabitants are defined as intermunicipal administrative centres, while Vrhnika, Litija, Grosuplje, Mengeš, Medvode, Trzin, Vir, Brezovica pri Ljubljani, Ig and Borovnica (towns with a population between 2000 and 6000) are municipal regional centres (background documents RPN LUR, 2009).

The municipalities differ in size and the number of inhabitants, their educational and employment characteristics, and, to a greater degree, in terms of development and scale of local, municipal economies. The settlement density outside urban and suburban centres is low and around the Slovenian average; therefore, the arrangement of social activities outside the centre is economically not justified; all other urban areas are changing into dormitory towns, along with the trend of monofunctional settlements (Internet 2).

The strong urbanisation and suburbanisation stand in juxtaposition to vast rural areas. Ravbar and Kladnik (2003: 143) argue that the development of rural areas in the entire LUR, as compared to other areas of Slovenia, is strongly above average or above average. Next to the high level of development, there is also the high level of landscape conservation and diversity. The analysis of natural features of the areas and the studies into spatial attractiveness, vulnerability and suitability, as part of the expert groundwork related to the siting of activities, have shown a large potential for day-to-day short-term recreation in the natural environment (Figure 1). The areas with the most potential for afternoon recreation in the natural environment are those whose nature is best preserved and offer the value of experience, i.e. waterside areas, forest edge, agricultural land, and high solar exposure areas. The criterion for everyday short-term leisure activities is the possibility of access on foot or by bike (also by public transport) from home. In LUR, the everyday short-term recreation is complemented by intensive visits to the countryside during weekends and prolonged spending of free time, with a prevalence of family outings

combined with culinary consumption and shopping. Walking, biking and foraging prevail. These potential areas, too, are evenly distributed in LUR. Due to the emphasized role of recreation and tourism in the natural environment, the function of agriculture is changing, which is starting to see the benefits of high natural conservation of LUR, particularly for development of ecological and integrated agriculture. The multifunctional role of agriculture is shown in other gainful activities (tourism, crafts, therapeutic agriculture). This duality of the working–residential (sub)urban space on the one hand, and the space for recuperation, escape and recreation on the other hand was labelled by Kos (2007) as 'Slovenia of two spaces'.



Figure 1: Potential of the environment for short-term recreational free-time activities in the natural environment (Internet 2)

At the same time, the high level of conservation of the LUR rural areas boosts the interests for exploitation of such environment for temporary or permanent living. Demographic trends show that the number of inhabitants in MOL is reducing, despite the increase in the population in LUR, indicating the trend of migration from urban centres (especially Ljubljana) to their hinterland (smaller towns and settlements), and to the countryside (Internet 1). At the level of LUR, this means the growing (sub)urban–rural conflict, which can be seen, for example, in the main directions of suburbanisation.

This new living dynamics brings new dimensions to the urban–rural

relationships, mostly studied by Kos (Kos, 2007). Among other things, rural residents want more modern, particularly infrastructural, urbanity in the countryside, while the suburbanised town residents want »peaceful and safe environment with the additions of recreation and culture« (Trček, 2009, in: Trček, 2010). The assimilation of both aspects into the rural–urban relationships is becoming complex, and, in the visions of the new rurality, it is often conflicting (Trček, 2010). The pursuit of a rural–urban partnership is becoming an increasingly complex system of different actors.

Conclusions

In LUR, the urban and rural areas are expressly diametrically opposed. LUR is the most urbanised region which, according to the statistical data, stands out from the Slovenian average; however, LUR is also distinctly rural. In terms of the national average, the partnership between the city and suburban centres, reflected especially in the flows of goods, capital and people, has raised the rural area of LUR to an area with above-average development. Demographic data indicate the emptying of, particularly, MOL and the growth of population in suburban centres and peri-urban rural areas. Sociologists point to the many growing conflicts between the urban-turned-rural dwellers and the increasingly urbanised rural residents. At the same time, the rural areas of LUR, with their high level of conservation, represent the potential for development of short-term recreational forms and development of integrated and ecological farming, complementing the needs of urban and suburban communities.

The short discussion of only a few interactions and conflicts represented here clearly suggests that when thinking about the development perspective of LUR the whole spectrum of space and its activities should be considered. The rural–urban partnership must go beyond the emerging local conflicts and interests, and put forward the development perspective of the region, as topical and spatial networking can be realized through regional development programmes and spatial concepts, where the synergistic effects of the diversity are sought. The needed mind shift from the demarcation to the connectivity is, however, needed with every individual and in all areas.

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Spatial Development Strategy of Ljubljana and the role of the City in the Ljubljana Urban Region

Ivan Stanič

1 Introduction

The history of planning in Ljubljana is long and successful. What started off as a calamity in 1895, when an earthquake hit the city, has transformed into day-to-day business of maintenance, management, facilitation and management. Until the earthquake, Ljubljana had developed by plots and parcels, following haphazard and spontaneous needs or initiatives. In the 19th century, Regulation Plans were the basis for developments, significantly accelerated by the building of the Southern railway, which reached Ljubljana in 1847.

The aforementioned shift happened when the city authority commissioned the best architects and planners of the empire to prepare spatial development visions for the city (Camillo Zitte, Max Fabiani, Jože Plečnik). These were followed by regulation plans, and serious construction in the city began. Just before World War II, the move to modern urbanism was apparent, but the classic regulatory activity was still pursued. The first comprehensive vision of spatial development of the city emerged no sooner than in 1953, but the passage to a 'plan' was still long. In 1965, the General Urban Development Plan was adopted and in 1985 the Long-term Plan. Since attaining independence in 1991, three documents have been prepared: Sustainable Development of the Municipality of Ljubljana – Strategy (2002), Concept of Spatial Development of the Municipality of Ljubljana (2002) and Ljubljana 2025 – Proposal of the Spatial Development Vision of the City of Ljubljana (2007). In 2010, the new Spatial Plan was adopted, the first after the break with socialism.

Spatial planning in the City of Ljubljana tries to accommodate the development goals of the public domain and private investment incentives. On the one hand, the statutory obligations are undertaken, while on the other, activities are run to facilitate the contemporary spatial development circle. This implies the necessary and legally called for coordination between the investors, fund providers, landowners (in many cases also from the public domain) and the local authority that, through a specified administrative procedure,

also maintains the public interest. Of course, as other cities in Europe, Ljubljana, too, was, and is, subject to uncertainties brought about by the recession, meaning that the recollection and adjustment of the set targets, which proved to be unsustainable in the sense of property development, public financing or market capacity, have to be undertaken.

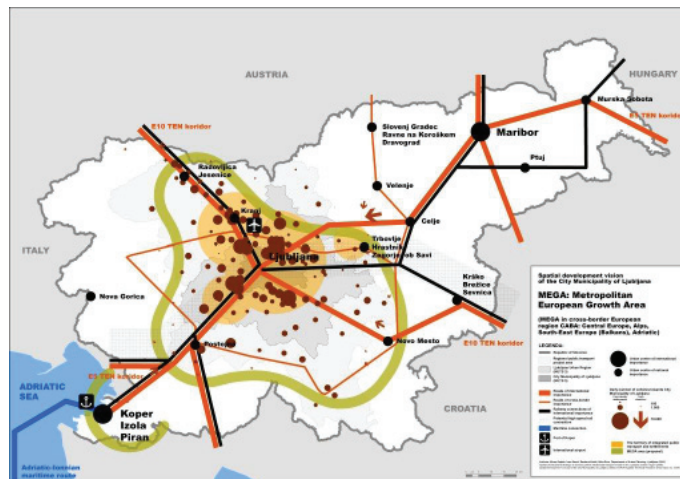


Figure 1: Weak MEGA Ljubljana – the city and functional-gravitational region (after ESPON)

2 Contemporary spatial values and corresponding planning actions

With the adoption of the new Municipal Spatial Plan, the City of Ljubljana's territory is covered by a uniform planning act (formerly 147 separate detailed plans), which is the legal basis for preparation of detailed plans and building documentation needed in permitting the procedures related to property development and management. It has been aligned to new development needs, planning initiatives

by investors, contemporary values and planning knowledge, as well as harmonised with complementary fields of planning endeavours. Its prime goal is to support, promote and ensure sustainable and humane spatial development.

The Municipal Spatial plan consists of three constitutive parts, i.e. Strategic Plan, Implementation Plan and Environmental Report.

2.1 Strategic plan

The Strategic Plan of the City of Ljubljana determines the guidelines, goals and concept of spatial development of the municipality, directions of settlement development and comprehensive regeneration, landscape development, land use and spatial development conditions, and also the concept of public utilities and transport infrastructure for the territory of the City of Ljubljana. The Strategic Spatial Plan, above all, obliges the City Council, City Administration and other bodies with public functions to ensure the implementation of the adopted Strategy with further action programmes, detailed spatial plans and other measures in their authority.

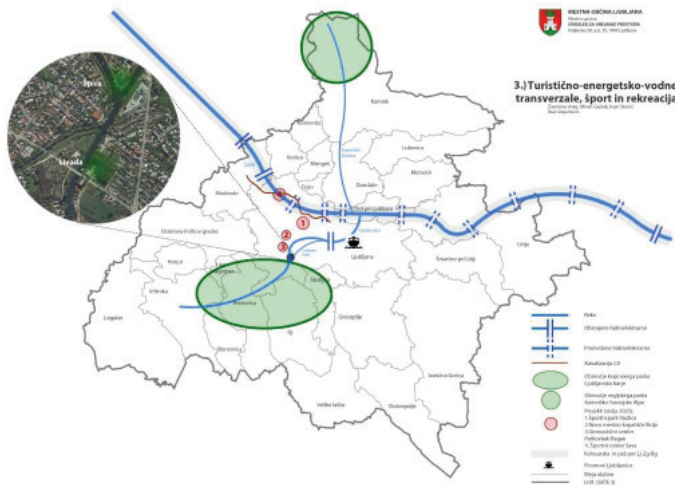


Figure 2: The Danube strategy priorities translated into national and regional projects (Gajšek, Stanič, 2011)

The new Municipal Spatial Plan of the City of Ljubljana is built on four guiding principles:

- ▶ Slovenia and its capital city Ljubljana have an exceptional geo-strategic position at the junction of four European macro-regions (Alps, Central Europe, Southeast Europe and Mediterranean). Slovenia is the only European country included in 4 trans-national cooperation programmes co-financed under the ERDF for

the 2007–2013 period.

- ▶ Slovenia and its capital city Ljubljana lie at the crossroads of two main European corridors (TEN corridors V and X).
- ▶ Ljubljana is a very green city in the sense of land cover and land use, with distinctly high shares of forests, agricultural land, parks, greenery, sports and recreation grounds and water surfaces (75% of the surface).
- ▶ The history of spatial and urban planning of Ljubljana is a long and successful one.

Concerning the implementation guidelines, aligned to the strategic goals, the first conditioning emphasis is on diligent implementation of the urban regeneration concept, both on the level of the entire city and on the level of particular places. On the level of Ljubljana, this means concentrated development along the main avenues, in the city centre (with eastward extension) and, in particular, regeneration projects, such as the Tobacco Factory and Partnership Šmartinska areas. The emphasis is also on public spaces (squares, embankments, bridges, parks, allotment gardens, Path of Remembrance and Comradeship etc.), with dedicated implementation of strategic decisions by land use stipulation and execution of particular projects.

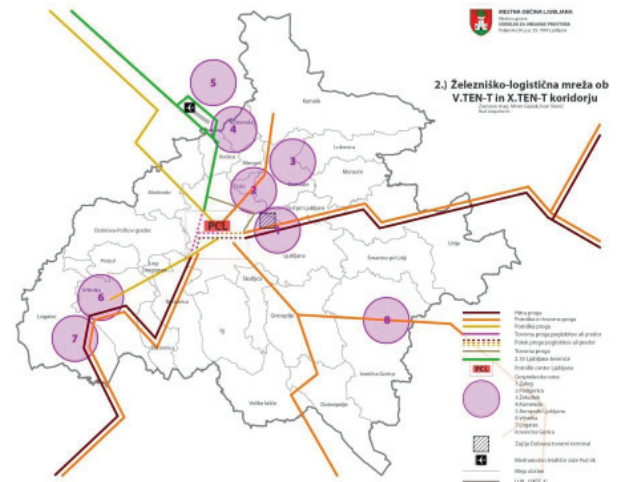


Figure 3: Transport axes and economic zones in Slovenia and the Ljubljana Urban Region

2.2 Implementation Plan

The Implementation Plan is the legal basis for preparation of detailed plans and building documentation needed in permitting the procedures related to property development and management and gives concrete stipulations for land use, planning parameters, conditions for utility planning and other issues related to physical development and planning, such as flood protection measures and safeguarding cultural heritage and nature.

The main focus of the planned urban development of the City of Ljubljana is on urban regeneration and planning of public spaces and the green system.

2.3 Environmental Report

To ensure an adequate cross-checking of particular concepts and solutions with environmental consequences, the Environmental Report was produced. This document assessed whether the solutions planned in the Strategic Plan and Implementation Plan benefit the general improvement of the environment or whether they cause rather negative effects. In the latter case, the so-called alleviation measures are prescribed, which have to be executed before any further development occurs. The environmental report applies to both the strategic and implementation levels.

2.4 Spatial planning and the new added value

With new Municipal spatial plan the following contributions to planning science and culture were noted:

- ▶ From the outset of the process, tight cooperation was established between the Department of Spatial Planning of the City of Ljubljana and the consultants working on the Municipal Spatial Plan – Strategic Plan, Municipal Spatial Plan – Implementation Plan and Environmental Report. It has to be emphasised that the three documents were prepared parallel to each other, meaning that the strategic goals and directions were simultaneously tested through the concrete implementation stipulations concerning land use and environmental consequences, and vice versa.
- ▶ Parallel to the new Municipal Spatial Plan (Official Gazette of the RS 78/2010) various expert guidelines and documents were prepared. To start with, the City of Ljubljana prepared the Vision of Spatial Development (Ljubljana 2025), which included the fundamental goals (sustainable city, regional city, ideal city) and all major urban and national investment projects. On the level of the Ljubljana Urban Region, two projects were prepared by the Regional Development Agency, i.e. expert guidelines for regional public transport and expert guidelines for settlement development in the region. Several departmental expert guidelines complemented the groundwork, such as expert guidelines for flood alleviation, expert guidelines for development on agricultural land and expert guidelines for assessing all planning development initiatives by public and private investors.
- ▶ Public participation was in the forefront: three public hearings were organised for the strategic part of the Municipal Spatial Plan and two public hearings and exhibitions for the implementation part, organised in all of the 17 neighbourhood communities of Ljubljana. Furthermore, a large comprehensive exhibition was organised as well as expert discussions with specific target groups.

- ▶ The complete plan is executed in digital technology, and the public hearings were also conducted in digital technology. The adopted plan itself can be accessed via internet and on the City of Ljubljana web page: www.ljubljana.si

3 Regional and international perspectives – The Danube strategy

So far, two macro-regional strategies have been prepared in the EU: the Baltic strategy (adopted in 2009) and the Danube strategy (adopted in 2011). Territorially defined regional strategies should become the vehicles for social, territorial and economic cohesion in the EU and the common denominators of territorially and functionally connected extant policies and funds. Thus far the countries included in the Baltic strategy have been more active. A possible reason is the variety of opportunities and possibilities in the Danube region. Nevertheless, the goals of the Danube strategy can be brought forward through national interpretation, without compromising the overall idea. A possible way forward is in the definition of main national objectives. In the case of Slovenia it would be the establishment of an EGTC of the North Adriatic with links to interested cities (Vienna, Munich, Bratislava, Zagreb etc.), seated in Ljubljana. On the international level, the City of Ljubljana functions through the Central Slovene planning region or the Western cohesion region, whereby the immediate territory, understood as referential for the city, is the region, comprising 26 municipalities.

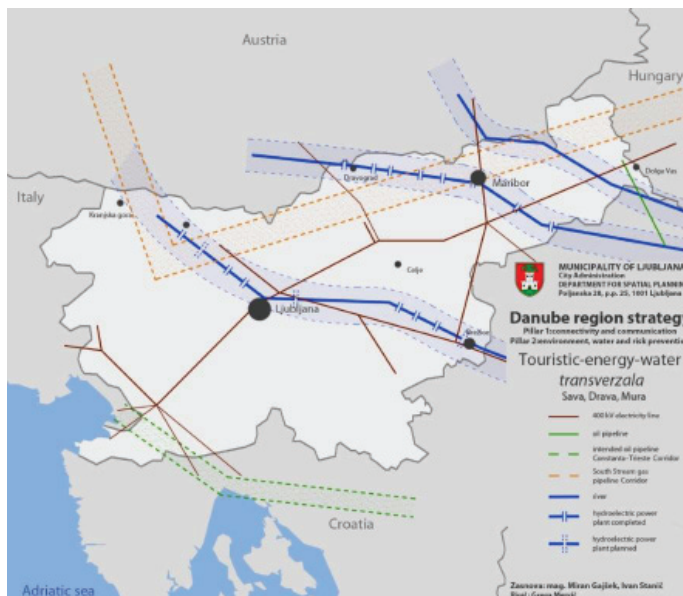


Figure 4: Tourism–energy water axes in Slovenia and the Ljubljana Urban Region

The goals of the Danube strategy are linked into 11 primary themes, in the framework of which Slovenia and Ljubljana will develop programmes to actively engage in the following fields:

- ▶ transport (better coordination of transport policies – inter-modality, improvements on the network, introduction of new technologies),
- ▶ secure energy provision (contract about the energy community of the EU and West Balkans, completion of transit and regional gas and electrical power lines and pipelines),
- ▶ water management (comprehensive management of the Danube River, including tributaries Sava, Mura and Drava, and safeguarding of water resources, flood prevention, reintroduction of river transport, multi-functional use of water, increased production of green energy, sustainable tourism),
- ▶ education and science (increased mobility in the higher education sector and science, and strengthening the settlement pattern of central places).

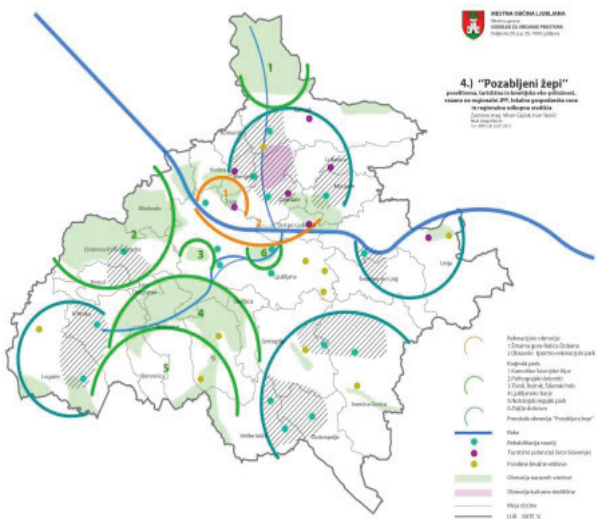


Figure 5: Special regional development areas in Slovenia and the Ljubljana Urban Region

3.1 The Danube strategy in Slovenia and list of possible projects for Ljubljana and the region

The illustrated projects are taken from the standing Strategy of Spatial Development of the Republic of Slovenia (2004) and other national strategic documents, as well as the standing Regional Development Programme (2007) and the Municipal Spatial Plan of the City of Ljubljana (2010), and some other EU documents. TEN-T corridors V and X are the backbone of the projects. These projects or strategic ideas

will also be the basis of project proposals for the 2014–2020 programming period.

4 Conclusion

Contemporary planning theoreticians have already established that spatial management in cities needs a completely new paradigm, whereby the regulation of physical space is being supplemented by management of processes. Simultaneously, the traditional planner is confounded by fears conditioned by the shift of urbanism and city development from architects and urban designers into the range of politicians, investors and financial institutions. As the past few years have shown, justly so. However, planning as such is only one field in the formation of space, albeit an important one.

Spatial plans are also physical artefacts; however, in contemporary spatial management, even with the introduction of e-administration, the purpose of paper plans is diminishing. Soon most operations linked to informing the public about spatial development regulation, even undertaking separate procedures, will be possible from a domestic console or remote office. Spatial plans have transformed into spatial databases, while city development and management is conducted through digital ordinances. The physical form of urban development or spatial planning documents is changing and the plan, as such, is a legal code generated from data bases of spatial information.

Of course, such plans can also be printed or framed and stuck to a nearby wall.

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1.3 Methodology

The Poly5 project: towards a 'post-utilitarian' approach to mega transport infrastructure planning.

Sandro Fabbro

1 Abstract

Paradoxically, the current crisis is not only reshaping European corridors, it is also creating the cultural and epistemic conditions for a new framework for mega transport infrastructure planning, where more complex dimensions (political, financial, economic, spatial, environmental), at different territorial levels, need to be evaluated and integrated all together.

The alpine territory, due to its environmental, ecological and social sensitivity, is a space where, even more than in other territories, all these dimensions must be acknowledged, recomposed and managed all together in order to enhance the overall quality of both the infrastructural projects and the alpine territorial systems. In this respect, an integrated conceptual framework, and a coherent Information and Communication Technology (ICT) platform, can provide the valid tools to deal simultaneously with all those dimensions and form the basis for a different planning approach.

Some of the objectives of the Poly5 project (promoted in the context of the Alpine Space programme) are strictly connected with this important scientific and practical task. In fact, with specific reference to the Mediterranean Corridor (former Corridor 5) that also crosses the alpine territory, the Poly5 project is particularly aimed at elaborating an approach to infrastructure planning able to overcome some of the typical weaknesses of decision making in the field of mega transport infrastructure projects.

In this context, the Working Package 4 (WP4) of the Poly5 project, under the responsibility of the Department of Civil Engineering and Architecture of the University of Udine, is particularly aimed at defining the conceptual framework of this different approach as well as constructing a tool (the knowledge platform) for its implementation.

2 The poor performance of MTIP projects

2.1 Foreword

Mega transport infrastructure projects (MTIPs) are complex affairs by nature and entail problems of uncertainty, complexity and risk on different scales from the global to the local. To some extent, it is inevitable for MTIPs to be inertial entities: slow to incorporate new practices and difficult to adapt to new spatial contexts and socio-economic conditions. However, the current crisis is demonstrating a sort of collapse in credibility of large infrastructural projects, even beyond their structural nature. Why is this happening? What is the origin of this collapse? How is it possible to overcome this situation that threatens to block even useful and necessary programs? The task of this paper is to try to answer some of these questions. The Trans-European Network for Transport (TEN-T) represents a valid case on which to study this phenomenon. The hypothesis that we want to discuss is that this collapse is due to an overly simplistic, if not wrong, decisional process that has neglected, inter alia, the necessity to confront the territorial diversities of the European space.

2.2 The collapse in credibility of mega transport infrastructure projects

Huge construction costs, often coupled with cost overruns, benefit shortfalls and great territorial and environmental impacts, are strictly connected with MTIPs. Flyvbjerg (2003, 2005 and 2008) claims that something other than poor data and limited models is at the root of the insufficient effects of MTIPs and that the inadequacy of current approaches to the analysis and planning of MTIPs constitutes probably the main reason of their poor performance. This inadequacy has been extensively documented in the international literature (Dean, 2012a). According to several authors (Flyvbjerg, 2003; Flyvbjerg and Cowi, 2004; Batty, 2007; Bertolini and Salet, 2008; Priemus, 2010): it dwells partly in the complexity of the infrastructure systems themselves and partly in the highly stochastic

nature of the 'project development cycle'. Furthermore, the extremely turbulent external environment into which a given mega-project is placed, involving a multitude of variables and actors, combined with its extremely long lifespan, makes financial, political, social and technical changes likely to happen. Consequently, the project-development process often appears to be fragmented (Allport, 2011) and fails to adequately take into account the systemic ramifications of complex interactions and the inevitable uncertainties (Dimitriou et al., 2008). Nonetheless, they often exhibit an over-optimistic judgment about the future events, without considering adequately the possible consequences of a downside scenario.

Furthermore, Flyvbjerg asserts that viability and feasibility estimations are often related to strategic misrepresentation. In particular, two studies about strategic misrepresentation undertaken in UK (Flyvbjerg and Cowi, 2004) and US (Wachs, 1990) clearly demonstrate that consultants appear to focus on justifying projects rather than critically scrutinising them. According to these explanations, the inaccurate forecasts are more linked to power and interests than to technical faults. This happens particularly during the forecasting of the outcomes of projects because:

- ▶ forecasters and planners, in order to gain political acceptance for their projects, often deliberately and strategically overestimate benefits and underestimate costs;
- ▶ project promoters, especially when a given project is in competition with others for scarce resources, tend to emphasise scenarios of success and minimise those of failure.

Consequently, the preparation of large infrastructure plans and projects not only would require a more accurate problem analysis (Priemus et al., 2008), but also a different approach to political decision making in order to integrate, in its elaboration and discussion, more contextual knowledge and more democratic participation and judgment.

3 The criticalities of Corridor 5 (now Mediterranean Corridor)

The most recent version of the TEN-T programme, proposed by the Commission in 2012, to be approved by the Parliament in 2013 and to be completed by 2030, represents the provision of a new core network of only ten major transport corridors. In this reduced program, Corridor 5 is now called Corridor 3 (or Mediterranean). The high speed railway, which is the backbone of the corridor, remains, from different points of view, very controversial. Mega railway projects that bear on some of its sections (in particular on the Western Alps in Piedmont Region, and on the Eastern Alps in Veneto and Friuli-Venezia Giulia Regions) remain particularly contested, not only by local communities (as in the case of the well-known conflict in the Susa Valley), but also by academics and consultants in transport economics. High speed railway and the connected works, such as the new and long tunnels,

are not considered useful because the estimated costs are too large if confronted with the transport demand forecasts and, consequently, with the expected revenues (Ponti, 2003; Scott Wilson Business Consultancy, 2007). Moreover, the planning of the corridor is characterized by the lack of any serious consideration of the existing situation (Erba, 2004) as for the case of the poor catchment areas along some non-metropolitan sections, particularly Eastward; or for the scarce consideration for the existing underutilized transport infrastructures (Dean and Fabbro, 2011). Moreover, Eastward, even the political regional context has proved to be critical for the project: in the North-East of Italy, the persistence of conflicts among different actors and strategies (in the Veneto region there are, in fact, three alternative tracks, for the new railway, under examination) and the subsequent decisional stalemate, can be seen as potential sources of uncertainties about the implementation of Corridor 5 (Corradini, 2007; Fabbro and Mesolella, 2010).

Considering the current financial constraints impacting the planning of large infrastructures, there is also a lack of coordination and integration between the newly planned and the already existing infrastructures (Fabbro and Dean, 2012) in order to define more feasible integrations between the existing and the new infrastructures. In other words, allowing for integration between new and existing infrastructures would render new plans more financially viable, whereas the exaggerated emphasis given to the new High speed/High capacity railway along the corridor with the wilful ignorance of the residual capacities of the existing railways seems to depict an evident case of overestimation of the miraculous effects of the new provisions and strategic underestimation of the existing context. This has hindered the possibility to elaborate transport alternatives and mixed infrastructure solutions.

In conclusion, different important inadequacies seem to demonstrate that the planning of Corridor 5 has seriously neglected many evidence-based reasons and this shortcoming appears further emphasised by the main implications of the current severe financial crisis, such as public cutbacks and the necessity to strictly redefine the few priorities that really matter to relaunch economic growth.

To conclude this point it can be said that, from the list of the infrastructures of 'national strategic interest' of the Legge Obiettivo (law n. 443/2001), to the Strategic National Framework 2007–2013 and to the relative 'Strategic Territorial Platforms', notwithstanding the abuse of the term 'strategic', neither a strategy for the whole Italian section of Corridor 5, nor strategies for the single regions, seem really to have been promoted.

4 The limits of the utilitarian model in the decision making on MTIPs

There is a strong evidence, as previously discussed, that typical transport forecasts and cost-benefit analysis, elaborated in order to justify plans and projects underlying the TEN-T, are often overly ambitious, too optimistic, if not misleading and fallacious. This is probably due to some intrinsic and objective difficulties and complexities of these projects, but it is also true that you cannot avoid taking into account the hypothesis that it is also due to some limited, if not wrong, theoretical and methodological assumptions.

'Utilitarianism' represents the typical philosophical approach to the assessment of the 'utility' of public projects and programs, while 'welfare' is the typical parameter of utilitarian plans, projects and programs in the sense that they can demonstrate their utility if the 'consequences' (effects) they produce, maximize, under some given constraints, the social welfare (also called utility) that is defined as the sum of the welfare interests of the many individuals directly or indirectly involved. All the various methods of inquiry, survey and assessment in planning (from one-dimensional to multi-dimensional) are thus ultimately derived from a utilitarian approach to planning.

However, this utilitarian approach does not question the formation and the nature of welfare interests, nor does it consider whether these are expressed by all the social groups and territories that could be, directly or indirectly, affected by the consequences. Interests are given and defined as aggregations of the more evident and direct preferences. Examples of this type of approach are the various impact assessment tools and procedures from cost-benefit analysis (CBA) to the different attempts to take account of impacts on groups and on communities (Lichfield, 1992).

Also methods to survey stakeholders' opinions are, at the end, utilitarian methods. The main weaknesses of this 'utilitarian model' seem to be the following (Van Wee, 2012):

- ▶ The parameter to be maximized is controversial. This can be welfare, but other alternative 'parameters' may exist and consequently there is more to be surveyed and evaluated than welfare, such as economic efficiency, local development issues, social cohesion issues, symbolic place meanings, environmental qualities, etc.;
- ▶ CBA evaluates changes in welfare, but ignores absolute levels;
- ▶ Distributional effects are usually ignored;
- ▶ Different consequences, on the different spatial scales, are also ignored;
- ▶ Some effects are difficult to monetize;

- ▶ Poor people, countries, areas count less than rich people, countries, areas;
- ▶ The process of selecting, defining and designing alternative options, as well as outcomes, matters, but this aspect is often neglected.

For all these reasons it can be realized that utilitarian approaches are certainly useful but not in all spatial and temporal situations (Dean, 2012b). Moreover, if a clear order of preferences is lacking, either because the actors who should express them are not, for various reasons, able to do so, or because there are no adequate actors to represent them, or because the preferences are not yet emerged in a clear and definite manner, or, again, because preferences have emerged but are different and in great conflict with each other, a theoretical risk exists that an utilitarian planning process will be wicked since its inception.

So, it seems realistic to formulate the conclusion that the utilitarian approach to planning is often inadequate and that a more integrated approach to planning should be pursued. This is probably the case for MTIPs. A different planning approach should be able, at least:

- ▶ to allow the emergence and legitimation of weak or implicit preferences. This objective could be realized through the setting up of a structured and informed public dialogue;
- ▶ to compare and possibly to integrate more ordinary, sectoral and local preferences with more general, inter-sectoral and multilevel issues;
- ▶ to offer, to all participants, the opportunity to know and evaluate different alternative scenarios by means of knowledge confrontation;
- ▶ and, therefore, to encourage the emergence of a broader system of 'meanings' and 'meta-preferences' (Hirschman, 1982).

Differently from pure utilitarianism, this approach implies a planning system where preferences are not only given but even enacted, formed and structured in a public process. This implies the design of a possible 'future', rather than a simple aggregation and evaluation of the preferences already expressed. A 'visioning' approach is still partly an utilitarian approach as it falls within that horizon, whereby the plan is first and foremost a response to the desires and interests of the various stakeholders (citizens, communities, companies etc.); therefore, it should be able to be assessed on the 'consequences' it produces on collective welfare. However, it seems also to lay down the conditions for going beyond the main limitations of the classical utilitarian approach to plan making (Moroni, 1997). A different definition of the 'utility' can thus emerge: not just the registration of given welfare preferences, but also the emergence and the construction of new meta-preferences – integrating, with the interests, also meanings and values – that can represent the basis for a more mature conception

of utility and, through it, of the welfare perspective itself. This is what we call, in this paper and making reference to a wider socio-cultural perspective, a post-utilitarian approach to planning.

5 Spatial cognitive mediators within a post-utilitarian MTIP planning approach

Scenarios, visions and strategies are the basic materials for the construction of a possible post-utilitarian framework. They are, in fact, synthetic and integrated representations of the reality (existing and emergent) and, as such, they allow, at the same time, new knowledge to emerge and new action to be done. As they favor a process of interaction and collaboration that bridges existing knowledge with new ideas and solutions, they can be nominated 'cognitive mediators'.

Scenarios are derived from the existing situation. If we refer, for example, to the data of a SWOT analysis, at least four scenarios, representing the possible evolutions of its four boxes, can be explored: the two scenarios deriving from the two boxes regarding Strengths and Weaknesses – as they represent extensions of the existing order – are quite easy to infer, while the scenarios that represent extensions of the two boxes regarding Opportunities and Threats – as they introduce to new orders generated from the impacts of MTIPs – are strongly influenced by unknown risks, uncertainties and complexities. Therefore, there is an intrinsic difficulty to deal with scenarios: if we look only at the existing knowledge, we probably find many reasons 'to do nothing' (maintain the existing order) and, consequently, to renounce to look hopefully towards a better future; but if we look with over optimism to the emergent order, we neglect to tackle real uncertainties and risks. Overcoming this 'impasse' implies a passage from 'knowledge' to 'action', or, in other terms, from the 'ontic' to the 'deontic' dimension. In this respect, the construction of the spatial vision represents this delicate passage because it bridges the existing reality with the emergent scenarios, the real with the desired future of a given community. As such, it mixes meanings, values, interests and expectations in a syncretic idea of the future. There is no doubt that the mixture could be explosive but, at the same time, it could be very creative of the new order.

So, while scenarios and visions represent the bridge between knowledge and action, strategies represent the concrete set of actions that allow, in a more limited time and space and according to the available resources, to pursue the too general aims of the vision. Consequently a strategy is a set of actions coordinated in space, over time and between different sectors. It also implies a different type of knowledge that we can call 'strategic knowledge' that is referred to the most relevant spatial, temporal and cross-sector interactions and impacts. Therefore, a post-utilitarian approach to MTIPs planning means, first of all, to put at work all together the different 'cognitive mediators' (scenarios, visions and strategies) in real urban and regio-

nal contexts intersected by MTIP programmes. As they refer to spatial contexts, they can be also called 'spatial cognitive mediators'.

In the Poly5 Project, through the elaborations of a specific type of knowledge base platform, we try to bring forward some first steps towards this integration between scenarios, visions and strategies.

6 The 'Teknoss' knowledge platform

The creative passage from scenarios to visions and from visions to the strategic action can be facilitated and enacted if an appropriate knowledge system is injected in a real collaborative context.

TEKNOSS (which stands for Territorial Knowledge Sharing System) is the ICT knowledge platform, elaborated in the context of the Poly5 project, which aims at supporting these interactive and collaborative contexts. TEKNOSS is a web platform, built on a new technology (Semantic Wiki), derived from the knowledge management methods that have been devised within the framework of the 'Semantic Web', a recently developed approach to the Web 3.0 (Jogan, 2003).

The purpose of the Semantic Web proponents is to allow web user communities to facilitate the maximum exchange of knowledge that is available in a specific domain (knowledge sharing). In this case, the identified domain is relative to the Mediterranean Corridor of the TEN-T programme and the alpine territories interested by its passage in the cross-border alpine areas, westwardly between Italy and France (Savoie, Province of Turin) and, eastwardly, between Italy and Slovenia (Veneto Region, Province of Gorizia, Sempeter Vrtojba Obcina, Ljubljana Region). The knowledge gathered so far, at the level of each regional unit, refers to the process that goes from the launching phase to the implementation of the project.

Practically, TEKNOSS is a collection of web pages (the knowledge base) held together by an underlying model (ontology) of the knowledge described in its pages.

The ontology makes the (semantic) relations of the pages contained into the knowledge base in 'machine understandable' commands so as to assist, with Artificial Intelligence tools, the user to browse large amounts of data (text, statistics, images, maps) in search for answers to specific questions.

The knowledge contained in TEKNOSS was collected through a survey (with a specific info-sheet) from the different partners of the Poly5 project.

Since full access to information is guaranteed, TEKNOSS can allow each user, directly from one source, to achieve full understanding of what is going on at different scales, systems and subsystems of the Mediterranean Corridor. This feature can greatly improve the interac-

tions and confrontation between different stakeholders and levels of decision making and between decision makers and the local communities. Consequently, if properly used and developed, TEKNOSS can become an important tool, in new knowledge gathering, in support of public debate inside the decision making processes.

7 Conclusions

In the paper it has been argued that, differently from pure utilitarianism, a post-utilitarian approach to infrastructure planning implies a planning system where preferences are to be considered not only given but even enacted, formed and structured in a public debate at different territorial levels. This implies the design of a possible 'future', with or without the infrastructure and through the application of the mentioned 'spatial cognitive mediators', even at the local level (urban, regional), rather than a simple aggregation and evaluation of the, already existing, preferences, through a traditional top-down decisional process. Technically speaking, this implies not just the registration of given welfare preferences at the top level, but also the construction of meta-preferences, able to integrate, with interests, also meanings and values, at the local level. Scenarios, visions and strategies seem to be the basic elements for the construction of this possible 'post-utilitarian' framework. They are, in fact, synthetic and integrated representations of the reality both existing and emergent and, as such, they can allow, at the same time, new knowledge to emerge and new action to be done. While scenarios and visions represent, in fact, the bridge between knowledge and action (present and future), strategies represent the concrete set of actions that allow, in a more limited time and space and according to the available resources, to pursue the often too general aims of the vision.

The creative passage from scenarios to visions and from visions to the strategic action can be facilitated and enacted if an appropriate knowledge system is injected in a real collaborative context. But this point raises a series of new questions: Which is the institutional site that should be able to implement this approach? In which concrete situations and space-time context? It is no doubt that only a public institution is in the formal and practical condition to put in practice a public debate like that proposed before, and it is no doubt, at the same time, that the proposed process must be allocated in a time-space context coherent with the specific structural features of the considered objects (MTIPs). It is at the same time clear that:

- a. the institutions involved in these decisional processes are different as, just to cite the most important ones, the EU, the member states, the regions and each one of these has its visions and strategies (Fabbro and Mesolella, 2010) and often conflicting each other;
- b. At the same time the different institutions have their different

approaches, procedures, planning systems etc., which seem really impossible to harmonize in some way.

A possibility could be that to extend, at the European, national and regional levels, a procedure similar to the French 'débat public': this means to realize, in a short time (some months) and at the earlier stage of the decisional process (when interests have not already been aggregated) a public consultation on the 'multiscalar' (European, national, regional) infrastructure scenarios of the given territory in order to allow also the emergence of new knowledge, ideas, visions and perspectives other than the already existing. This consultation should be, at the same time, very informed and well managed but, first of all, really tertiary in its role and position among the different interests involved.

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Corridor 5 from the perspective of the Province of Turin

Giannicola Marengo

POLY5 (Polycentric Planning Models for Local Development in Territories interested by Corridor 5 and its TEN-T ramifications) is a transnational project financed under the framework of the European Cooperation Programme Alpine Space 2007–2013, priority 2 'Accessibility and Connectivity'.

The project involves 10 partners coming from Italy, France, Austria and Slovenia, ranging from Universities to Public Administrations and covering an area going from Chambéry (FR) to Ljubljana (SI).

The main project objective is to enhance accessibility, connectivity and competitiveness of alpine territories interested by major transport infrastructure granting, at transnational level, a balanced and polycentric local development.

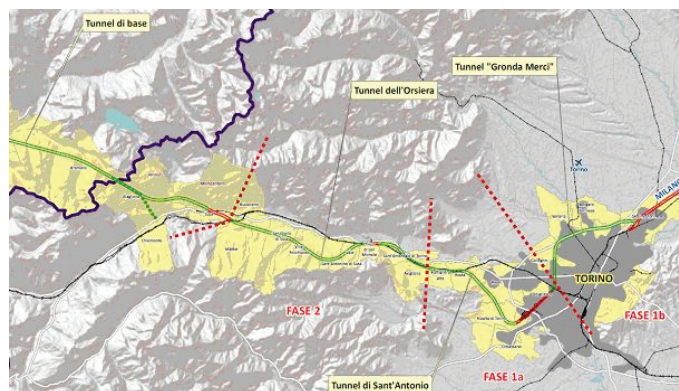
This overall project objective is achieved through the implementation of local development models able to take advantage of the opportunities offered by the infrastructure in all phases of its life-cycle: design of the infrastructural project, implementation during its building and management, once the infrastructure is functioning.

The project starts from data collection to define a shared cognitive framework of the territorial resources, values and risks related to the major transport infrastructure impacting on the partnership area. Stemming from this first analysis, transnational solutions to common problems are provided, through the definition of specific tools for local polycentric development and the implementation of pilot actions to test them. The last step is the evaluation of the efficacy of developed toolkits and their generalization and transfer to decision makers with the ambitious expected result of promoting a policy change in order to enhance competitiveness and accessibility of alpine areas affected by major transport infrastructure.

The Province of Turin, Transport Planning Service, acts as Lead Partner of this project and has strongly pursued the approval and implementation of this project. The Province of Turin is in fact directly affected by the Turin–Lyon new rail link which, within the overall Corridor Lisbon–Kiev, is a prerequisite for the strategic development of Piedmont and Italy. At territorial level, the Turin–Lyon new rail link

interests a complex area of about 100 km, 71 municipalities and over 1.5 million inhabitants, characterized by one of the most relevant Italian manufacturing system.

This is a territory with high potentials and many constraints, some of which are linked to the risk of marginalization affecting some areas not characterized by highly attractive features, like the winter ski resorts of the upper valleys. In this context the Turin–Lyon new rail link becomes, at the same time, a challenge to be faced and a development opportunity within a polycentric approach.



To be exploited and become a real opportunity, the infrastructure cannot be conceived and built as a simple line crossing the territory, but as an integrate network able to generate added value for local communities.

This is exactly the aim addressed by the Province of Turin through its participation to POLY5: integrate the infrastructure in a balanced and sustainable way, enhancing local development, promoting local communities participation and supporting the involvement of local enterprises, especially small and medium enterprises, while minimizing the negative impacts, inevitably linked to the presence of the infrastructure.



Figure 1: Source: <http://www.ltf-sas.com/>



Figure 2: Source: <http://www.ltf-sas.com/>

Regional Portrait from the POLY5 Partners' views

Chiara Andreotta

The Poly5 project is a transnational program involving ten partners from Italy, France, Austria, Germany and Slovenia, and identifies the cooperation among each collaborator related to Major Transport Infrastructures (MTIs). The project is under the supervision of the European Cooperation Programme Alpine Space 2007–2014 'Accessibility and Connectivity'. The main organization's goals are to improve accessibility and connectivity in the alpine territories interested by MTIs (Internet 1).

The partnership involves three members from different universities and seven members as regional partners. Within the academic field, three different methods to approaching the MTI impact have been chosen. The Udine University is studying the area by using the scenario method, the Technical University of Munich is applying the strategy process and the Vienna University of Technology is bearing the visioning approach.

Within the Poly5 Work Package 4, the Vienna University of Technology asked the seven regional partners to draw up a Regional Portrait 2030, providing their points of view. The aim was to estimate and to show the desired future, i.e., a picture of the whole area involved in Corridor 5. Every member had to dedicate 3 hours to the vision by following the general guidelines: to identify the three 'hottest' spots, to identify the three 'top areas' and to identify the three most important stakeholders of the 'top areas'. The expected results were a short description about how and why the particular selections were made and an estimation regarding the impacts of their own selections to the wider territory. Besides the verbal descriptions, they were asked to draft two sketches on the provided maps, referred to the European and Alpine scales.

The different points of view from the seven regional partners show the perceptions about the Corridor 5 project and its influence in the territory. Firstly, the Province of Turin is directly interested in the high speed and high capacity railway Turin–Lyon. Here, the infrastructure is not recognized as a pipeline that crosses the territory, but as an integrated work that could generate the added value for local commu-

nities. The Ljubljana Regional Development Agency is seeking an economic and social structure between the 26 municipalities in favour of a homogeneous urban region. The agency's aim is to be responsible and helpful towards all citizens; a regional development project is the opportunity to establish a base for a higher quality of life.

The Veneto Region, introducing the Corridor 5, achieves a new transport infrastructure network and a mobility strategy that allows for a new dialogue among international markets. A multifunctional approach is necessary to involve social approval and to find investments promoting environmental sustainability in order to obtain a shared and equal development process. The General Council of Savoie recognizes the important benefits in the Poly5 project, providing an occasion to work, specifically, on reducing the risks induced by the Corridor 5 all over the areas involved. The Municipality of Sempeter-Vrtojba is located on the western margin of Slovenia, nearby the Italian border. It is aware of the challenges to create an effective and complete supportive environment to ensure the best infrastructure possible and to generate an adequate context for economic development and innovation. The organisation Transpadana has the aim to raise the public awareness and to show the strategic importance of a high speed and high capacity railway link between Italy, France and Slovenia. One of the potential benefits in this change is the improvement in transportation of goods and passengers in a safe and environmentally-friendly way. Italy, particularly, increases the final railway system in accordance with international quality standards, hence reducing the negative environmental and safety implications of road freight transportation. The Province of Gorizia lies in a strategic location due to its position near the borders with Eastern Europe. A new connection with the east and west directions ensures a renovated infrastructure system in order to create an efficient transportation network for both freight and people. No less, the interconnections with the focal point of the Monfalcone airport and harbour guarantees to the Province the role of an intermodal hub, connecting the existing industrial areas in the European social and economic contexts.

In the seven Regional Portraits several different issues stand out as

well as some common aspects. In certain portraits the sketched maps concern a wider area, i.e. even from Barcelona to Budapest; however, some other regional partners highlighted their own areas as the most important, while leaving out a big part of Corridor 5. In addition, the territories belonging to the seven involved members are the most nominated, while there are gaps in the areas without representatives among the regional partners. For instance, the Po valley and the Milan metropolitan area are not mentioned in the Regional Portraits.

Nevertheless, the Regional Portraits 2030 were summarised by the UT Vienna to obtain a global vision from the seven Poly5 partners. The results shown in the three figures (1–3) represent the main issues: the connection sea–land, the modal hubs and the international relations.

1 Harbour hubs

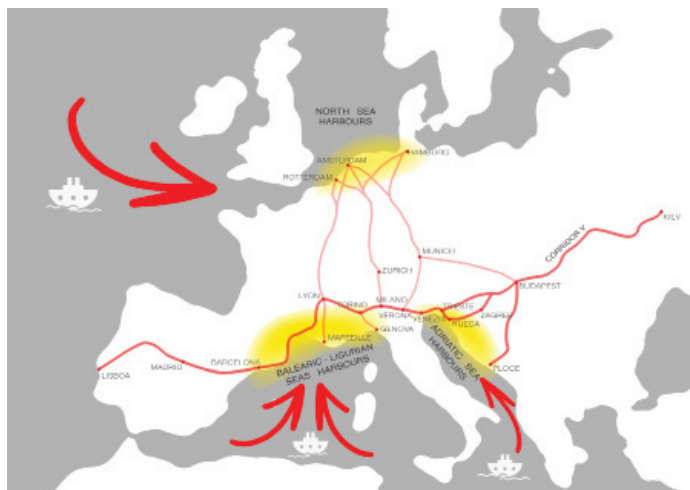


Figure 1: Harbour hubs (by Chiara Andreotta)

The first figure from the seven Regional Portraits shows the relation between the sea transport and the European corridors. Corridor 5 improves the expected growth of the major Mediterranean harbours and confirms their role as major European harbours in a global economy.

From the visions, two different spots were derived, in the Adriatic Sea and in the Balearic and Ligurian seas. Consequently, a solid link between Corridor 5 and the seas touching upon southern Europe is required. The result is a flow from the Mediterranean Sea to Southern Europe, opposite to the already well built link from the North Sea and Northern Europe.

2 Modal hubs

The second figure summarising the minds of the Poly5 partners illustrates the logistics and intermodal hubs along the track of Corridor 5. These points are the intersections between different transport solutions, while three distinct conditions can be identified: logistic space, intermodal exchange spaces and crucial areas. Firstly, the logistic hubs are Lyon, Orbassano (nearby Torino) and, with a smaller impact, Verona. They are the crossing between different freight flows and a freight exchange area, connecting the north–south Europe and the east–west Europe. Lyon, for its strategic position at the crossroads of modern railways and highway systems, can play an important role and can become the south-western European reference point for gathering and distributing. The position of the freight yard Orbassano with the construction of the Turin–Lyon connection reflects a certain socio-economic effort. Meanwhile, Verona is at the crossroads between the corridor Palermo–Berlin and the highway systems, confirming its role as a crucial node at the European level.

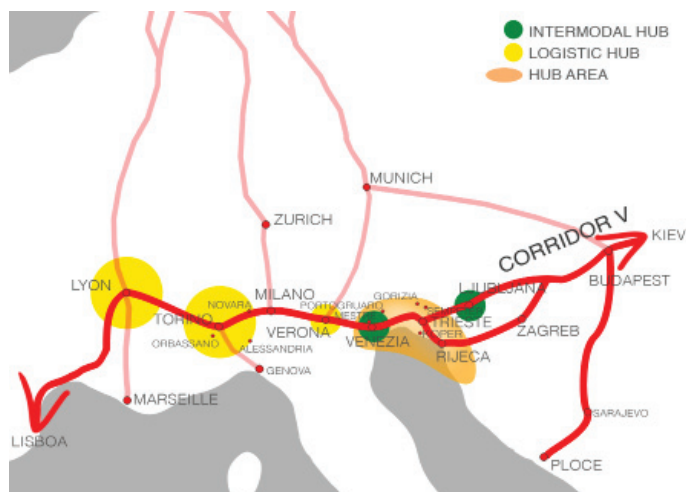


Figure 2: Modal hubs (by Chiara Andreotta)

The second hub typology is identified in Venezia and Ljubljana, i.e., intermodal exchange centres between air, ground, rail, sea and river transports. Especially the Marco Polo airport continues to play a cardinal role in the movement of goods and passengers for all the Adriatic Sea, as one of the key access points to Europe. Instead, the Ljubljana metropolitan area should be one of the top cities due to its metropolitan functions, including its role in the ESPON programme (the European Observation Network for Territorial Development and Cohesion).

Lastly, the precise area on the Adriatic Sea coast from Venezia to Rijeka is recognised. This area includes all harbours and the nearest hinterland and exercises the traffic interchange role between the sea, land and air. The area also includes the regions of Šempeter and Vrtojba, a strategic geographic position within Europe, as an expansion towards the east and the Balkans.

3 Mental map of Poly5 cooperation

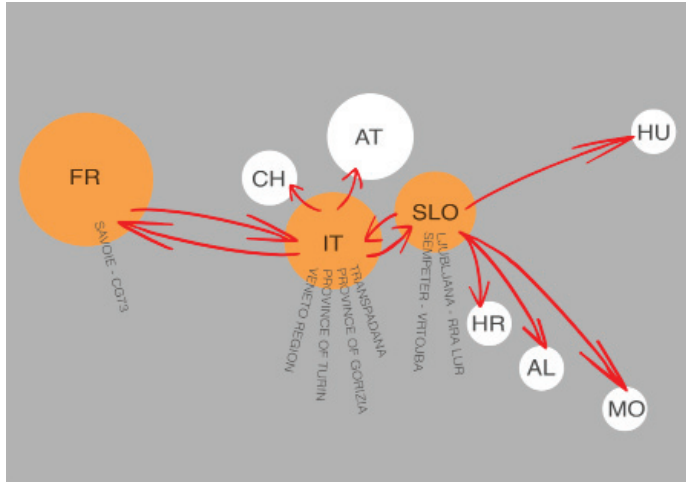


Figure 3: Mental map of Poly5 cooperation (by Chiara Andreotta)

The third figure derived from the seven Regional Portraits shows the cooperation networking between the different involved Nations on all administrative levels. The European States interested by Corridor 5 have economic and developmental potentials offered by the new connections on a large scale, and local advantages deriving from an enhanced connectivity. In the vision, the Nations are still the most important stakeholders in terms of decision-making and financing of infrastructures.

In the figure, the circles represent the States with different dimensions which symbolise their influence. France, Italy and Slovenia stand out as the biggest actors, while more collaboration between their administrative levels is required. The vision of the seven partners also shows the distances felt among each other; in fact, the red arrows represent the gaps and the necessary dialogues between all the involved nations. Notably, certain connections are missing because they were not mentioned in the Regional Portraits by the Poly5 members.

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Internet 1: <http://www.poly5.eu/> (18 December 2012).

Municipality Šempeter-Vrtojba; Province of Gorizia; Province of Turin; Transpadana; Regional Development Agency of the Ljubljana Urban Region, Regional Development Department; Veneto Region; General Board of Savoie. Poly5 WP4 Context, Scenario, Vision, Region Portrait 2030 (14 June 2012).

Poly 5 in the context of Trans-European Networks

Andreas Dillinger

Background

The idea of Trans-European Networks (TEN) emerged in conjunction with the proposed Single Market. It makes little sense to talk of a big market, with freedom of movement within it for goods, persons and services, unless the various regions and national networks making up that market were properly linked by modern and efficient infrastructure. The construction of Trans-European Networks is an important element for economic growth and the creation of employment. (European Commission, 2008: 1)

The Treaty establishing the European Union provides a sound legal basis for the TENs. Under the terms of Chapter XV of the Treaty (Articles 154, 155 and 156), the European Union must aim to promote the development of Trans-European Networks as a key element for the creation of the Internal Market and the reinforcement of Economic and Social Cohesion. This development includes the interconnection and interoperability of national networks as well as access to such networks. (European Commission, 2008: 2)

This EU strategy focuses on three pillars:

- (1) **Energy:** Europe's energy infrastructure is the central nervous system of our economy. EU energy policy goals, as well as the Europe 2020 economic aims, will not be achievable without a major shift in the way European infrastructure is developed. Re-building our energy system for a low-carbon future is not just a task for the energy industry. Technological improvements, greater efficiencies, resilience to a changing climate and new flexibility will be necessary. This is not a task which a single Member State can achieve on its own. A European strategy, and funding, will be necessary. (European Commission, 2012: 1)
- (2) **Telecommunication:** The European Community programme eTEN finished at the end of 2006. By providing funds it supported the deployment of trans-European e-services in the public interest. eTEN programme covered the following themes: eGovernment, eHealth, eInclusion, eLearning, Services for SMEs etc.

From 2007 onwards European Commission supports the electronic services in the areas of public interest through the ICT Policy Support Programme (ICT PSP), which will run until 2013. ICT PSP is a component of the Competitiveness and Innovation Framework Programme (CIP). (Europe's information Society, 2011)

- (3) **Transport:** Decision No. 1692/96/EC of the European Parliament and of the Council of 23 July 1996 on Community guidelines for the development of the trans-European transport network has been substantially amended several times. Since further amendments are to be made, it should be recast in the interests of clarity. The establishment and development of trans-European networks contribute to the attainment of major Union objectives, such as the smooth functioning of the internal market and the strengthening of economic and social cohesion. The establishment and development of trans-European transport networks throughout the territory of the Union also have the specific objectives of ensuring the sustainable mobility of persons and goods under the best possible social, environmental and safety conditions and integrating all modes of transport, taking account of their comparative advantages. Job creation is one of the possible spin-offs of the trans-European network. (European Parliament, 2010)

Grants, in particular under the TEN-T budget line and the Cohesion and European Development Funds, play a major role in both project preparation and implementation phases. Grants are allocated to studies (from feasibility studies to comprehensive technical or environmental studies and costly geological explorations), helping to overcome early stage project difficulties, and to the works phase. A key issue for the future in relation to the implementation of the TEN-T policy is to rationalise the allocation of grants and to link it to the projects' European added value so as to ensure the best value for EU money. (European Commission, 2012: 2)

The European Commission also established the Trans-European Tran-

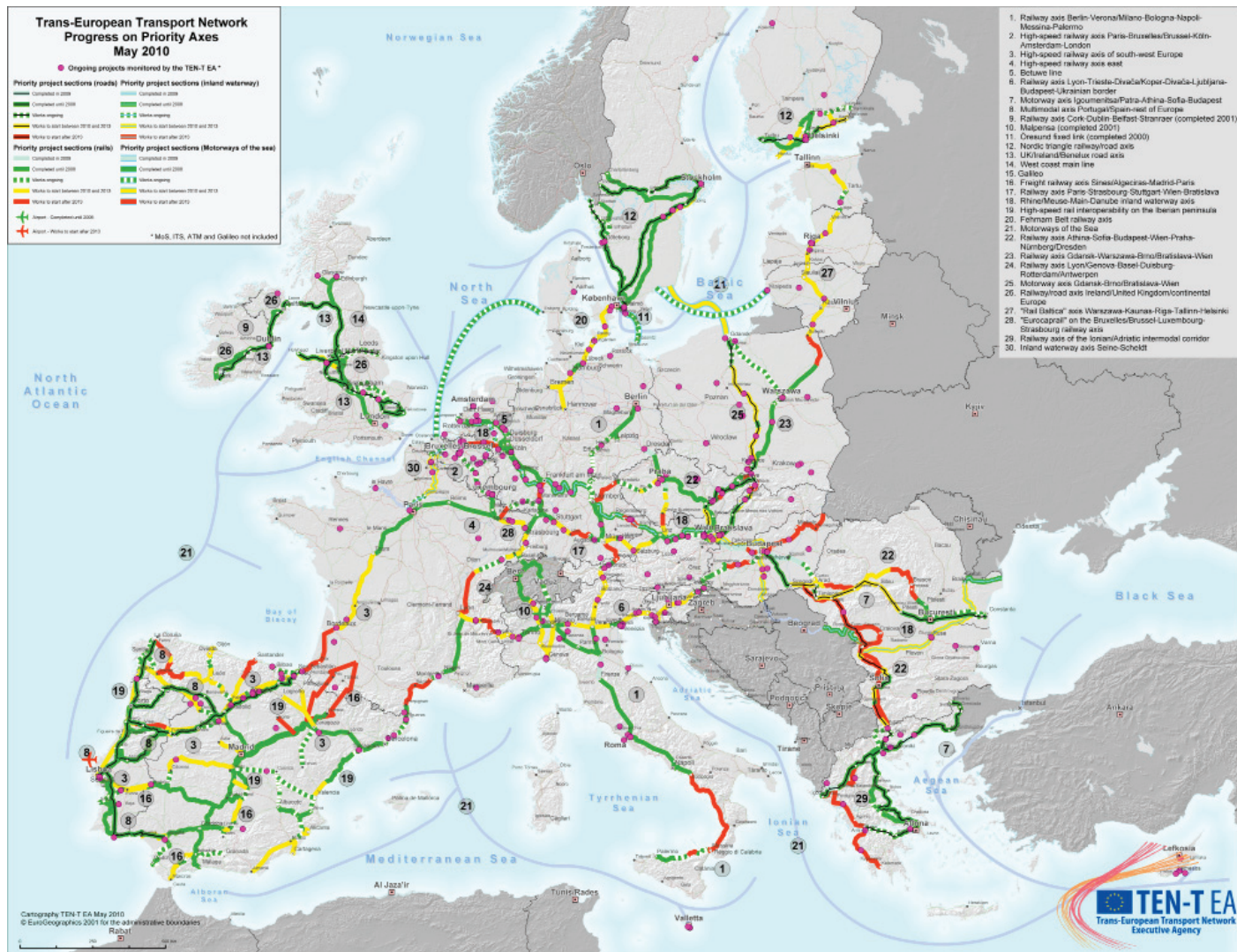


Figure 1: Trans-European Transport Network – Progress on Priority Axes

transport Network Executive Agency (TEN-T EA) which is responsible for managing the technical and financial implementation of the Trans-European Transport Network (TEN-T) programme, one of the most important means of infrastructure funding. (TEN-T EA, 2012)

Trans-European rail transport network

Overview

In the last 20 years the Commission has been very active in restructuring

the European rail transport market and strengthening the position of railways vis-à-vis other transport modes. Commission efforts have concentrated on three major areas which are all crucial for developing a strong and competitive rail transport industry: (1) opening of the rail transport market to competition, (2) improving the interoperability and safety of national networks and (3) developing rail transport infrastructure. (European Commission, 2012: 1)

The trans-European rail transport network (see Figure 1), based on the interconnection and interoperability of national transport networks, is of great importance for the EU's economic competitiveness and its balanced and sustainable development. As part of the EU's TEN-T programme, a number of European Coordinators are tasked with facilitating the implementation of certain multi-country rail projects that are seen as a high priority for the network. One of the EU's aims for the rail sector is to upgrade by 2012–2015 a number of important freight routes by deploying the ERTMS (European Rail Traffic Management System) systems along them. The six routes carry around a fifth of Europe's rail freight traffic. The EU is also working towards the creation of a rail network giving priority to freight, including the realisation of a number of international freight-oriented 'corridors' – at least one in each EU Member State by 2012. (European Commission, 2012: 3)

Each corridor is divided in several Priority Projects (or axes) which are shown on the following figure.

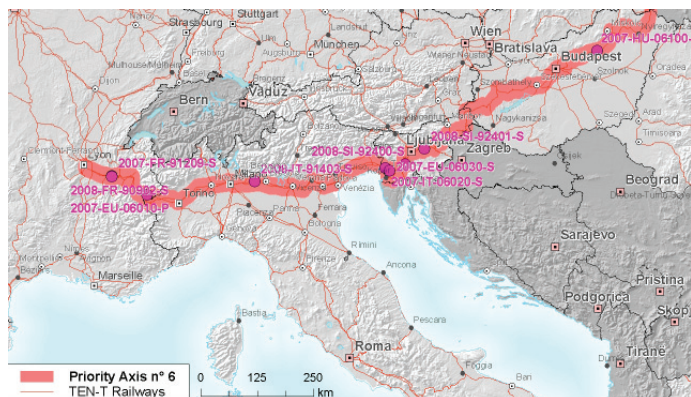
A major innovation on the current TEN-T guidelines is the introduction of 10 implementing corridors on the core network. They are there to help implement the development of the core network. Each corridor must include three modes, three Member States and two cross-border sections. 'Corridor platforms' will be created to bring all relevant stakeholders and Member States together. The corridor platform is a governance structure that will devise and implement 'corridor development plans' so that work along the corridor, in different Member States and at different stages of progress, can be joined effectively. European co-ordinators will chair the corridor platforms for the 10 key corridors on the core network. (European Commission, 2012: 4)

Corridor 5 – Priority 6

The railway axis from Lyon to the Ukrainian border is the main east–west passage south of the Alps, connecting the Iberian Peninsula with the eastern part of Europe and beyond. The 1638 km long railway axis is an important high capacity east–west rail axis crossing the Alps between Lyon and Turin. It touches upon four Member States (France, Italy, Slovenia and Hungary), linking important urban areas. It will also deliver an important increase in transport capacity, thus allowing a modal shift from road to rail to be realised in the sensitive mountainous regions it crosses. (TEN-T EA, 2012)

These selected activities (see also Figure 2) take place within the Priority Project 6 (TEN-T EA, 2012):

- ▶ Turin–Padua: technological improvements to the efficiency of the Milan railway junction (2011-IT-93097-P)
- ▶ Treviglio–Brescia HS/HC section: civil works phase (2011-IT-93095-P)
- ▶ Elaboration of the executive design for upgrading of the section of the railway line Poljčane–Pragersko (2010-SI-92232-S)
- ▶ Hub of Torino, section Susa–Stura, Priority Project 6, removal of bottleneck (2009-IT-06047-E)
- ▶ Working out of preliminary studies for the construction of the new line of high capacity/high speed line Ljubljana–Zidani Most (2008-SI-92401-S)
- ▶ Working out of preliminary studies for the construction of the new line of high capacity/high speed line Divača–Ljubljana (2008-SI-92400-S)
- ▶ Completion of final design of the Treviglio–Brescia Section, on the Milano–Verona high speed/high capacity line (2008-IT-91403-S)
- ▶ Rail project Lyon–Turin: studies on French access routes to base tunnel (2008-FR-90902-S)
- ▶ Studies for preparation of approval of the railway line section Budapest–Keleti–Miskolc–Nyiregyhaza (2007-HU-06100-S)
- ▶ Lyon–Turin railway project: French accesses to the Base Tunnel (2007-FR-91209-S)
- ▶ Cross-border railway line Trieste/Divača: study and design of the Trieste–Divača–Ljubljana–Budapest–Ukrainian border (2007-EU-06030-S)
- ▶ New Lyon–Turin Rail Link – Franco-Italian Common Part of the International Section (Studies and Works) (2007-EU-06010-P)
- ▶ New AV/AC line Venezia–Trieste–(Ljubljana) in Italian territory: sections project (2005-IT-90901-S)
- ▶ Strengthening of the Turin–Modane line and Turin freight belt (2005-IT-606a-S)
- ▶ New Lyon–Turin Rail Link – International Section (2005-EU-603a-S)
- ▶ Technical documentation for the construction of the 2nd track of the railway line Divača–Koper (2004-SI-92701-S)
- ▶ New AV/AC Venezia–Trieste–(Lubiana) line in the Italian territory: section project (2004-IT-90905-S)
- ▶ Study on the rehabilitation of the railway line section Székesfehérvár–Boba (2004-HU-92203-S)
- ▶ Study on the rehabilitation of the railway line section Szajol–Záhony (2004-HU-92202-S)
- ▶ Nouvelle liaison ferroviaire transalpine Lyon–Turin, section internationale (partie sous maîtrise d'œuvre RFF) (2004-FR-603b-S)
- ▶ Upgrade of the Turin–Modane line and the Turin freight bypass (2003-IT-606-S)



Source: TEN-T Executive Agency

Figure 2: Railway axis Lyon–Trieste–Divača/Koper–Divača–Ljubljana–Budapest–Ukrainian border

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Visioneering _ Planning tool with the phenomenological approach

Geli Salzmann

Visioneering's objective is the designing of comprehensive and inspiring pictures of regions in order to stimulate the political, public and professional discourse. This technique – visualisation of regional facts, connections and visions – is used as a communication tool in order to open and exceed different existing perspectives. Besides the planning tools like scenario technique and strategic impact modelling – which are mainly based on quantitative and statistical data of a region –, the visioneering tool unites place- and people-based qualitative research methods. It operates as the interface of creative design, methods of communication and technical/scientific spatial analysis and certainly assists in grasping a region. It builds on the phenomenological approach where it is argued that only those things and issues which we can label, sing about, describe or sketch, can become reality.

Visioneering as a term is a construct of 'envisioning' and 'engineering'. Visioneering means the engineering of visions with modes based on citizens' empowerment, participation of relevant stakeholders and innovative use of social capital. It challenges spatial planners to translate stakeholders' views into a suitable 'language' which is understandably quick and prompt for plural addressees, e.g. for politicians, citizens, planners.

Visioneering aims to create a future image of a region – in a wider time frame as well as in a wider area than conventional and usual planning tools do – by involving local peoples' desires. It deals with regional challenges in an integrated, holistic manner. It helps to achieve clear mental pictures of what could be, fueled by the conviction that it should be. It combines formal government structures with flexible informal governance structures that correspond to the scale at which the challenges prevail.

Visioneering is a communication tool based on mental pictures of stakeholders which play a crucial role in a planning process. The vision – produced by considering mainly stakeholders' knowledge and perspectives – supports other tools like the scenario technique and strategic impact modelling to realise planning processes. In an iterati-

ve process, the visions should be proven periodically in order to check if they had already become reality.

Visioneering as a tool helps in the process of planning to gain and obtain a shared strategic vision for a region. Regions – even if they are determined by administrative borders – are not clearly bound in our minds and in their function. First, they have to be in people's consciousness as a planning subject in order to serve as spatial units for political and planning formations. But the role and the function of the region in a planning cycle is still underexposed in scientific and practical terms.

Hence, the UT Vienna is working on transforming the phenomenological planning approach into a planning tool. In teachings at the university as well as in practical implementations like the Alpine Space Project POLY5, our team is searching for suitable solutions in order to create easy understandable images for crucial regional matters. Challenges, such as communication across national borders, coordination of policies and transnational spatial visions, require an interaction of different disciplines, from different languages and different minded people. In order to introduce you, personally, to complex spatial issues – even if you are simply a reader of this article – I invite you to join this journey to the Alps in 2050. The following two examples show the phenomenological approach of the visions, using pictures, which you will hopefully remember in the future: How beautiful are the Alps? Some say as beautiful as the people living there, but the idyll and the reality diverge. The vision of sustainable development in the Alpine Space – a balanced natural and cultural landscape – is a utopia: a myth. Within an exaggerated vision of 2050, done by the students of UT Vienna, the sea level increased dramatically due to climate change. In this vision, the Alps are no longer a European barrier with a beautiful natural landscape; they become the new hot spot of the European continent. The region mutates into an archipelago with excellent waterway connections through former valleys, which are flooded by the dying glaciers. People escape from the disappeared metropolitan areas, e.g. Paris, London and Rome, even Udine, Lyon,

Torino and Ljubljana, to new urban mega living areas at the Peak of the Alps, called 'Zermatt', 'Tyrolana' or 'Aletsch Town'. This vision is like a parody to the shrinking alpine areas, but there is more reality behind this than can be imagined now. It is a provocative map which always stimulates spectators' minds.

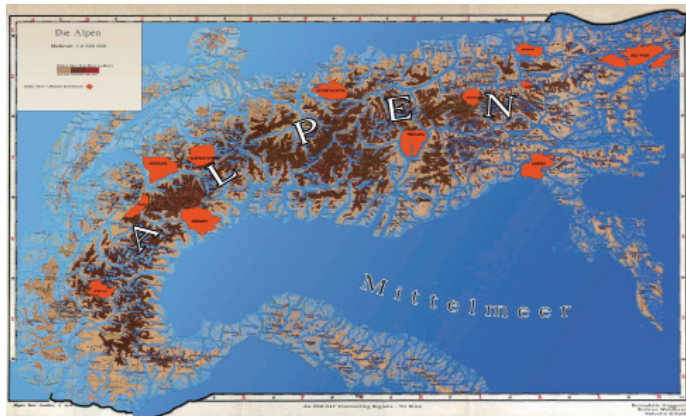


Figure 1: Students Work_Fortress Alps, UT Vienna, 2012

According to the reshaping of Europe into the so-called 'macro-regions', a second example of visioneering will show an issue which deals with the relationship of alpine megacities and their extended leisure areas resulting from the excellent infrastructure. In 2050, Munich, for example, will be an alpine metropolis and its city park will be located in Kitzbühel, Tyrol, Alps. In 40 years, the 'Munich Empire' will extend from Tyrol to Mallorca, because these new metropolitan suburbs will be well connected to the core city within 60 minutes. States like Austria, Germany and Spain will no longer have any importance in the European policy and people will be more mobile than ever. The structurally weak areas will merge with highly dense city centres. Similar phenomena will be observed in other alpine neighbouring cities, like Vienna, Ljubljana, Milan and Lyon, all being part of the new division of alpine space.

Using visioneering, the team of UT Vienna tries to support the development of a polycentric planning tool for POLY5, which is headed by Prof. Sandro Fabbro. The POLY5 project deals with regional impacts of the Trans-European Transport Network (TEN-T) along Corridor V in the Alps. It focuses primarily on the positive effects of the connection to high-level transport systems for the local population. The innovative approach of the planning tool lies in the choice of several methods. Three methods – strategy development, scenario planning and visioneering – are currently in the testing phase. University of Udine, UT Munich and UT Vienna are trying out different approaches, using the

knowledge of the seven local project partners of POLY5 from Slovenia, Italy and France, in order to create additional values in the involved regions.



Figure 2: Students Work_Metropolitan Munich UT Vienna 2012

The team of UT Vienna, operating with visioneering, first asked the local partners to bring in their visions for the whole area of POLY5, which extends from Lyon to Ljubljana in the further frame of the whole Corridor V from Lisbon to Kiev. They created the so-called Regional Portrait 2030 where they had to identify their three 'hottest' spots, their three 'top areas' and their three most important stakeholders of the 'top areas'. In a plenary session they together discussed the results and obtained a broadened view of the complexity of the POLY5 area. In a second step, the seven local partners were asked to choose one method to verify the regional practicability.

Project Partner RRA LUR – Regional Development Agency of the Ljubljana Urban Region – decided to test the visioneering method in cooperation with the University of Ljubljana. The result is a master project with the students from Ljubljana and Vienna, working out together four visions of the Ljubljana region in order to stimulate ongoing regional development debates. The Tracking Ljubljana Region project was designed as a process over a period of five months in 3 Acts: Grasping – Grounding – Spreading.

Act 1: Grasping (October–November 2012)

In Act 1 of the master project, the students from Ljubljana and Vienna grasped the Ljubljana Urban Region from several different perspectives. Starting from the recognition that regions are constituted due to natural and artificial structures, social interactions and networking, identity and culture, functional relationships, etc., the students were trained to understand and initialise a region also in creative terms. Different methods of visualising and staging were examined and developed, such as mental maps, storytelling, mind mapping, future links, provocative cartography, unconventional descriptive sketches, space puzzles, rough and subtle scans, scribbles, inverse methods, space patterns, video, photographic documentation. Next to the inputs from local experts, these techniques were applied in the context of the Ljubljana Urban Region, where in the frame of Workshop Nr. 1 – from October 10 to October 16, 2012, in Ljubljana – the first visions for 2030 were elaborated.

Act 2: Grounding (November–December 2012)

A planning cycle is characterised by several steps or stages in which, in the ideal case, different planning tools are applied with the purpose of generating and exchanging the project-relevant knowledge and information. Generally speaking: Knowledge is produced at a certain step of the planning cycle and is then nourished by the following steps. The planning practice makes us aware that planning tools and approaches are not always used in a coordinated, efficient and sound way and, hence, risk the success of big planning projects or lead at least to unsatisfactory results or side effects.

Therefore, in Act 2 of the master project, the visioneering planning tool, as applied to the Ljubljana Urban Region in Act 1, is getting grounded in the bigger planning cycle of a major infrastructure project (TEN-T Corridor V). Accordingly, 10 actions were defined trying to integrate the visions into people's minds and into the planning cycle.

Act 3: Spreading (December 2012–February 2013)

The dissemination of information is at the centre of Act 3 of the master project. The students will discuss the research results with the project partners and will present the outcomes of the master project in the frame of the Alpine Space – Poly5 Conference in Udine (Italy), to be held on 28 February 2013.

Within those two testing loops – first the Regional Portraits representing the whole area and secondly the four visions of the Ljubljana Urban Region – we hope to encourage the addressees to enter into new fields of planning methods. For students as well as for politicians, planning experts or citizens the results of this experiment should widen their horizons of planning and acting.

2 PRESENTATION OF RESULTS

2.1 Abstracts (in the English and Slovene languages)

FOR EVER YOUNG/ZA VEDNO MLAD

Student/šudentka UL FGG: **Nadja Kmetič**

Students/študenti TU Vienna: **Frank Mario Kierdorf, Felix Kortung, Tamara Vlk**

Erasmus student /Erasmus študentka: **Ewelina Więckiewicz (Poland/Poljska)**

Abstract

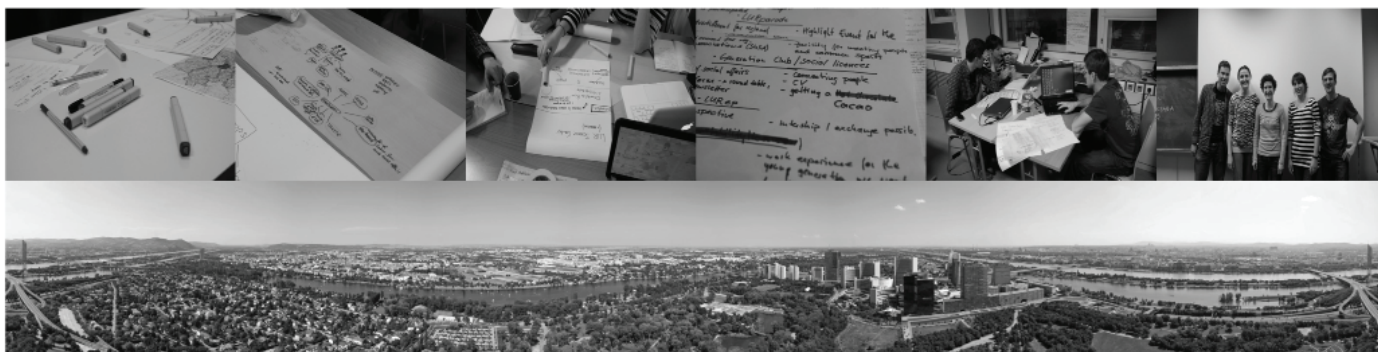
According to the current situation, the Ljubljana Urban Region (LUR) consists of 26 municipalities. Initially, it should be noted that, politically, the municipalities perceive LUR as an administrative region only. On the one hand, the local authorities want independence from the region, but, on the other hand, they are not self-sufficient enough. In brief, the task is to give LUR a unique selling position and profile that cover social, political and economic benefits.

Forever Young is LUR in 2030, and it combines mainly short-term implementation actions with benefits for the region as a whole, hence giving LUR a new profile.

Povzetek

Ljubljanska urbana regija (LUR) je sestavljena, glede na trenutno stanje, iz 26 občin. Najprej je treba omeniti, da – politično gledano – občine LUR dojemajo zgolj kot administrativno regijo. Po eni strani si lokalne oblasti želijo neodvisnost v regiji, po drugi strani pa niso dovolj samozadostne. Naloga je dati LUR edinstven prodajni položaj in podobo, ki zajema družbene, politične in gospodarske koristi.

Forever Young predstavlja LUR v letu 2030 in združuje predvsem kratkoročne izvedbene dejavnosti s koristmi za celotno regijo ter tako daje LUR novo podobo.



forever young



Vizija Ljubljanske urbane regije v letu 2030



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Zagotavljajo kvaliteto

Fakulteta za tretje življenjsko obdobje
Univerza v Ljubljani
Ministrstvo za delo, družino in socialne zadeve, Direktorat za družino

Izvršilne organizacije

AIIESEC
IAESTE
Center za krepitev zdravja in obvladovanje kroničnih bolezni, Oddelek za kronične bolezni - CINDI
Slovenska univerzitetna športna zveza - SUS
Obrtno-podjetniška zbornica Slovenije
Turistično informacijski center Ljubljana

temeljna

Ciljne skupine

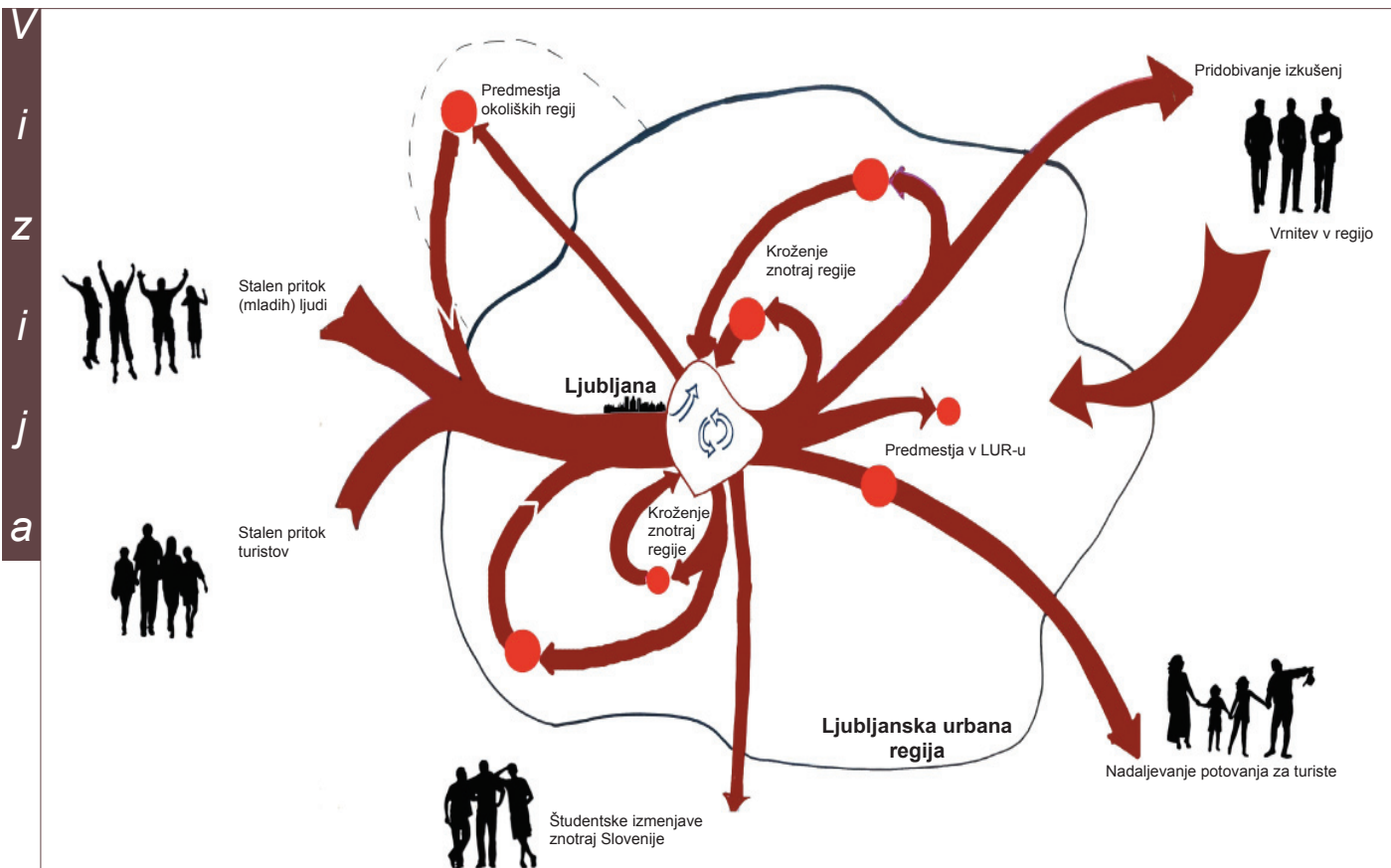
Domači študenti | tuji študenti
Praktikanti
Starejši občani
Vozači
Mlade družine
Turisti

Generacijski klub

*vkjučuje ljudi vseh starosti,
razne vrste aktivnosti
in vse občine*



*združevanje javnosti, podjetij in
izobraževalnih ustanov
sezonski dogodki, spoznavna srečanja
spletne strani za izmenjavo mladih in
izmenjavo sredstev*



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Prednosti za ljudi

Prednosti za deležnike

<p>Sezonska brezplačna vožnja skozi LUR z javnim prevozom ter organizacija lokalnih kulturnih in športnih dogodkov s pomočjo prebivalcev občine</p> <p>En dan v LUR-u</p>	<p>Vsakoletna spomladanska parada v Ljubljani za ponazoritev povezanosti med vsemi starostnimi skupinami v LUR-u</p> <p>LURParada</p>	<p>Možnost, da vsi ljudje sodelujejo v regijskem teku, ki poteka skozi vse občine z namenom spoznavanja lokalnih značilnosti</p> <p>Orientacijski tek</p>	<p>Društvo namenjeno vsem starostnim skupinam z namenom prostovoljstva in sodelovanja</p> <p>G-klub</p>	<p>Regijski programi za izmenjavo praktikan-tov in zagotovo za zaposlitev v LUR-u</p> <p>LURip →</p>
<p>Udeležba lokalnih in regionalnih prevoznih podjetij. Sponzorstvo in oglaševanje aktivnosti organizacij CINDI in SUS.A.</p>	<p>Regionalna podjetja imajo možnost predstaviti profil podjetja, ki je v sklopu oglaševanja na paradi.</p>	<p>Ozaveščanje o pomembnosti športa, skrbi za zdravje in ustanov vseživljenjskega učenja v regiji.</p>	<p>Podlaga za povezovanje ljudi in podjetij z družabnimi dejavnostmi.</p>	<p>Motiviranje ljudi z možnostmi za zaposlitev.</p>

BALKAN_HUB/VOZLIŠČE_BALKANA

Student/šudentka UL FF: Tina Rakuš

Student/šudentka UL FGG: Špela Žohar

Students/šudenti TU Vienna: Alexander Jabur, Richard Klimeš, Denisa Rummelová

Abstract

The motivation behind this work was to create a vision for the future development of the Ljubljana Urban Region in terms of international accessibility and mobility. The past development in this field caused a range of different effects: on one hand, the investments in infrastructure made the economic growth possible, but, on the other hand, these lead to the continuously growing negative effects of transit traffic and failed to establish Slovenia as a destination.

Due to their size, the Ljubljana Urban Region and Slovenia in general have a vulnerable position in the globalized world. In order to maintain a sustainable development, they are in great need of a clear future path. Sometimes the potentials are being overlooked. A fresh independent perspective can help to discover these potentials and to understand what is really unique about the region. The method of 'visioneering' enables a creative and courageous approach to develop a vision for the Ljubljana Urban Region in 2030.

The vision Balkan_Hub sees the Ljubljana Urban Region in 2030 as an attractive gateway with fast and efficient connections to the Balkans and the Adriatic Sea. Due to its international character, this vision has a broader perspective. Utilizing the cultural and geographical proximity to the Balkans, Adriatic region and important European markets is one of the main potentials. As a result of geopolitical integration of the Balkan countries, new markets emerge. Owing to the development of railways and shipping, Ljubljana has the opportunity to position itself as an attractive hub and an economic and investment destination.

Povzetek

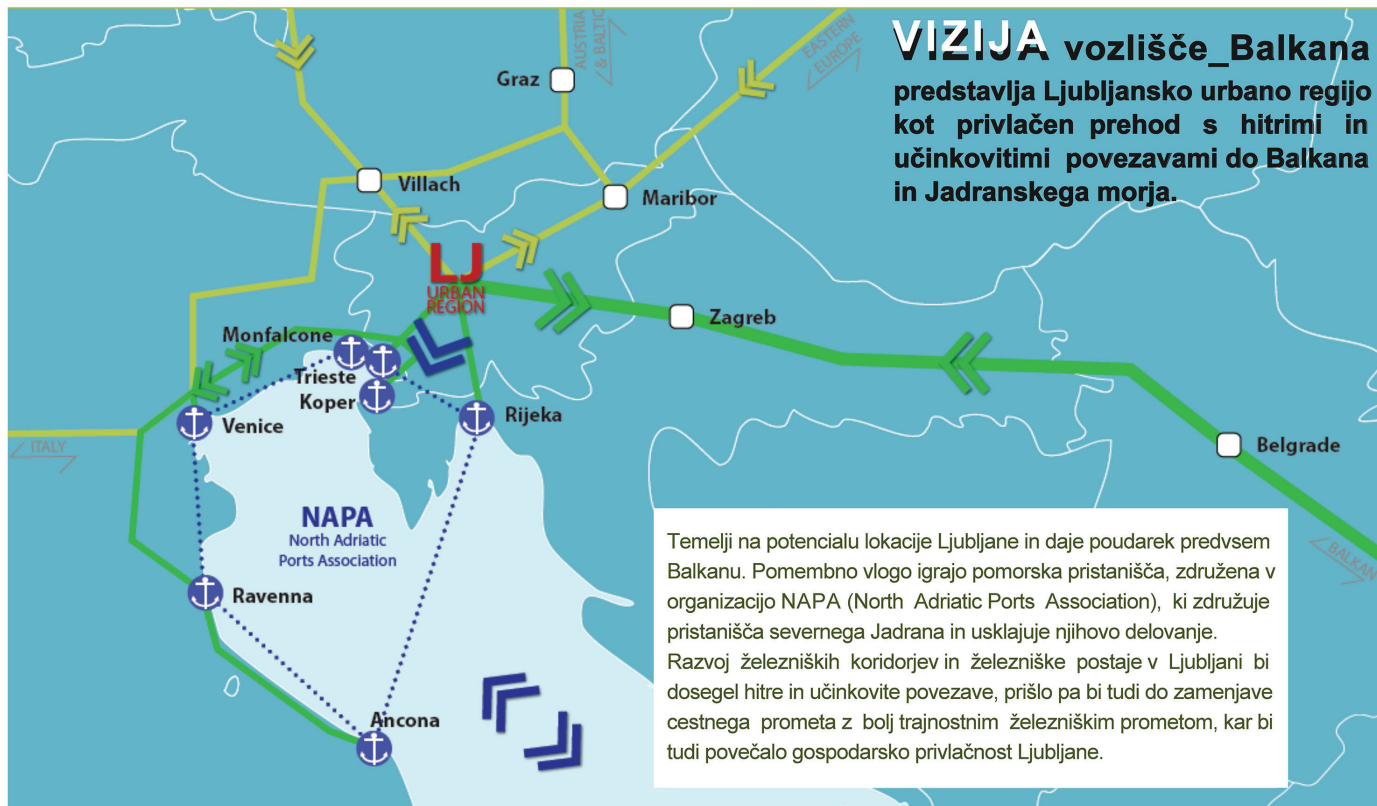
S tem projektom smo želeli ustvariti vizijo razvoja Ljubljanske urbane regije, predvsem glede mednarodne dostopnosti in mobilnosti. Pretekli razvoj je povzročil vrsto različnih učinkov: razvoj infrastrukture je omogočil gospodarsko rast, po drugi strani pa je to vodilo v stalno naraščanje negativnih učinkov zaradi tranzitnega prometa, to pa je onemogočilo izpostavitve Slovenije kot destinacije.

Ljubljanska urbana regija in Slovenija imata v globaliziranem svetu precej ranljiv položaj predvsem zaradi svoje majhnosti. V želji ohranjanja trajnostnega razvoja je potreben jasn prihodnji razvoj. Potenciali območja so pogosto spregledani. S svežimi in neodvisnimi predlogi lahko raziščemo in razumemo to območje in odkrijemo posebnosti regije. Način preučevanja, poimenovan »visioneering«, omogoča ustvarjalen in pogumen pristop k razvoju vizije Ljubljanske urbane regije do leta 2030.

Vizija, ki smo jo poimenovali Vozlišče_Balkana, vidi Ljubljansko urbano regijo leta 2030 kot privlačno prehodno območje s hitrimi in učinkovitimi povezavami do Balkana in Jadranskega morja. Ta vizija ima zaradi mednarodnega značaja precej široko perspektivo. Eden glavnih potencialov regije je kulturna in geografska bližina Balkana, območja Jadrana in pomembnih evropskih trgov. Kot rezultat geopolitičnega povezovanja balkanskih držav se odpirajo številni novi trgi. Zahvaljujoč razvoju železniškega in ladijskega prometa ima Ljubljana možnost, da se postavi v položaj privlačnega vozlišča in pomembne gospodarske in investicijske destinacije.

VIZIJA 2030: vozlišče_Balkana

Projekt Ljubljanske urbane regije
Skupina za mednarodno mobilnost in dostopnost



UKREPI

SPLETNA STRAN

- ~ Lahko dostopna in razpoložljiva elektronska ploščad
- ~ Objava novic, razvojnih posodobitev, razprav
- ~ Interaktivni zemljevid severnojadranskega območja s tremi ciljnim točkami

KONFERENCA NA KRIŽARKI

- ~ Redni sestanki
- ~ Razprave med deležniki, ciljnim skupinami in javnostjo

DELEŽNIKI

GLAVNE INTERESNE SKUPINE

- ~ DRUŽEVANJE SEVERNOJADRANSKIH PRISTANIŠČ
- ~ PREDSTAVNIKI VLAD

USKLAJEVANJE

- ~ EU POMORSKA PLOŠČAD
- ~ EU GENERALNI DIREKTORAT ZA REGIONALNE IN URBANE POLITIKE
- ~ SKUPNOST EVROPSKIH ŽELEZNIŠKIH IN INFRASTRUKTURNIH PODJETIJ

IZVAJANJE

- ~ MINISTRSTVA ZA INFRASTRUKTURO
- ~ SEVERNOJADRANSKA PRISTANIŠČA
- ~ LJUBLJANSKA URBANA REGIJA

CILJNE SKUPINE

- ~ LADJARSKE DRUŽBE
- ~ LADJEDELNIŠKE DRUŽBE
- ~ VLAGATELJI V INŽENIRING
- ~ IZOBRAŽEVALNE IN RAZISKOVALNE INSTITUCIJE



POTUJOČA PREDSTAVA

- ~ Spodbujanje projektov in dejavnosti - razstava ladje in vlaka
- ~ Potujoča predstava na ladjih in pristaniščih severnojadranskega morja
- ~ Potujoč vlak med pomembnimi ekonomskimi točkami znotraj in zunaj meja Slovenije

OTOK

- ~ Razstava na umetnem otoku
- ~ Prostor za delavnice in poletne kampe
- ~ Regijski pomorski informacijski center in turistične znamenitosti

SPONZORJI (NAPA SKLAD)

- ~ Štipendije
- ~ Univerza na Primorskem: študijski programi pomorstva in prometa
- ~ Kulturni dogodki, ekskurzije in izleti
- ~ Mednarodni natečaj

LURMO: OUR COMMON FUTURE/LURMO: ZA SKUPNO PRIHODNOST

Students/šudenti UL FF: **Tamara Danijel, Štefan Rot**

Students/šudenti TU Vienna: **Can Ceylan, Moritz Polacek**

Erasmus student/Erasmus študent: **Jakub Wabinski (Poland/Poljska)**

Abstract

In the times of high mobility of resources, like knowledge, money, people and goods, and, moreover, the globalization process, the weaknesses in site-related factors are leading to the transformation of urban and rural areas. As a consequence, it is important that regions specify and obtain their identity. The areas ignoring these issues are losing in the global competition. A modern society needs, on the one hand, to implement these global trends, and, on the other hand, it must be aware of its own strengths and support its own development. The consequence of this is a society that consists of people with many forms of lifestyle, family structure/network and requirements of their working and living conditions. The cooperation of cities with its surrounding areas is the only way to satisfy the different expectations.

The Ljubljana Urban Region, like other regions of the former socialist countries, has been faced with a major development after the fall of the regimes in Eastern Europe in the late 1990's. The change from the planned economy to the free market economy is still underway. The local economy is highly dependent on foreign investors and the democratic routine is mainly characterized by a top-down structure. Hence, cooperation is not only needed to increase local market activities, but also to increase horizontal and vertical cooperation to integrate the citizens through a participation process. The goal of the Lurmo 2030 vision is to create platforms, consisting of stakeholders who feel the need to improve the current situation of foreign capital dependency and the top-down structure. These platforms, including the Living Laboratories and the Business Improvement Districts, are led by a third platform called the Ljubljana Urban Region Management Office.

These changes, implicating formal instruments, like the regional development plan and the regional planning programme, are necessary to connect the local players, administrative units, politicians and the population who are, in collaboration, establishing an innovative and competitive region. Having in mind the financial crisis and the shortage of resources, it is necessary to use these elements efficiently. Cooperation is an important instrument to reach this efficiency. Hence, the Ljubljana Urban Region has to work together. For our common future.

Povzetek

V času velike mobilnosti virov, kot so znanje, denar, ljudje in blago, in drugih značilnosti globalizacije prihaja do procesov spreminjanja mestnega območja in podeželja. Prav zaradi tega je pomembno opredeliti oziroma utrditi identiteto posamezne regije. Območje, ki tega ne upošteva, se sooči z nekonkurenčnostjo v svetovnem merilu. Sodobna družba torej na eni strani potrebuje vključitev svetovnih trendov, na drugi strani pa se mora zavedati svojih prednosti in podpirati endogeni razvoj. Posledica tega je družba, ki jo sestavljajo ljudje z raznolikimi življenjskimi slogi, potrebami ter delovnimi in življenjskimi pogoji. Edini način za izpolnitev teh različnih pričakovanj je sodelovanje mesta in okolice.

V Ljubljanski urbani regiji je tako kot v regijah drugih nekdanjih socialističnih držav po padcu vzhodnoevropskih režimov v poznih devetdesetih letih sledil razmah razvoja. Prehod iz planskega gospodarstva v tržno gospodarstvo še vedno poteka. Lokalno gospodarstvo je močno odvisno od tujih vlagateljev, vse odločitve pa se sprejemajo po načelu »od zgoraj navzdol«. Zato sodelovanje ni le potreben ukrep za povečanje aktivnosti na lokalnem trgu, ampak tudi za povečanje horizontalnega in vertikalnega sodelovanja in za vključevanje državljanov v procese sodelovanja. Cilj programa Lurmo 2030 je ustvariti platformo, sestojčo iz deležnikov, ki menijo, da je treba izboljšati sedanje stanje glede odvisnosti od tujega kapitala in pristope »od zgoraj navzdol«. Te platforme, vključno z živimi laboratoriji (Living Laboratories) in t. i. BID-i (Business Improvement Districts), vodi tretja platforma, tj. Uprave Ljubljanske urbane regije.

Te spremembe, ki nakazujejo formalne instrumente, kot so regionalni razvojni načrt in program regionalnega načrtovanja, so potrebne za povezavo lokalnih akterjev, upravnih enot, politikov in prebivalstva, ki sodelujejo pri vzpostavitvi inovativne in konkurenčne regije. Ob trenutni finančni krizi in pomanjkanju virov je treba regionalne dobrine uporabljati še posebej učinkovito. Sodelovanje je pomemben instrument za doseganje te učinkovitosti. Ljubljanska urbana regija mora torej delati skupaj. Za skupno prihodnost.

2012



LUR

Mejniki

Vključitev in informiranje
Vključevanje porabnikov v proces
Izkoriščanje notranjih potencialov
Mednarodna konkurenčnost
Od LUR k LURMO



Koncepti

Živi laboratoriji ●
OIP-i ●
RMO ●

Deležniki

- Tehnološki park
- Tehnološka mreža ICT
- ELivingLab
- ENoLL
- Univerza v Ljubljani
- Obrtno-podjetniška zbornica
- Gospodarska zbornica
- Turistično-informacijski center
- Lokalne akcijske skupine
- Župani 26 občin
- RRA LUR
- Direktorat za regionalni razvoj in evropsko teritorialno sodelovanje

Akcijski plan

- Posredovanje informacij
 - Javne razstave ●
 - Informacijski sestanki ●
 - Baza infrastrukture ●
- Preudarki prebivalcev
 - Delavnice ●
 - Raziskava med podjetniki ●
- Ustvarjanje uprave
 - RegLab-i ●
 - Kongresna dvorana ●
 - Promocijska ponudba ●
 - Mobilno vodstvo ●
- Vpeljava regionalnih medijev
 - Klasični mediji in internet ●
 - Mobilne aplikacije ●

Vizija
2030



our common future

naša skupna prihodnost LURMO

LUR
- Ljubljanska Urbana Regija
LURMO
- LUR Management Office/
Uprava LUR

Can Ceylan, TUV
Tamara Danijel, UL FF
Moritz Polaček, TUV
Štefan Rot, UL FF
Jakub Wabinski, UL FGG

20-MINUTE REGION/20-MINUTNA REGIJA

Student/študenti UL FF: **Matej Gregorčič**

Student/študent UL FGG: **Uroš Rozman**

Students/študenti TU Vienna: **Fabian Dorner, Julian Thomas, Eva-Maria Missoni-Steinbacher**

Abstract

The Ljubljana Urban Region is characterized by high car dependency – in the modal split, the share of car use is around 67% – and the decreasing use of public transportation, which presently accounts for only 13%. This configuration is inefficient, as high irrecoverable resources, such as fossile energy and space, are required, leading to external diseconomies. These external diseconomies are presently not internalized in the expenses of car use, but they lead to harmful effects to the environment and the people.

In the vision of the 20-minute Region, the systems of public and private transportation are rearranged gradually, so that the attractiveness of using public transportation rises rapidly and enables that the trips from the most important zones of attractions within the settlement axes can be conducted within 20 minutes by tram-train. At the same time, the attractiveness of individual motorization is no longer promoted. Moreover, infrastructural conditions for (e-)biking and walking are to be supported and strengthened.

This happens on different levels: from the city centre of Ljubljana, where access for individual motor traffic is very restricted and most trips are done by walking or biking, to the settlements in the periphery, where buses, (e-)bikes or cars cover the first and last miles. Thereby, intermodal transport is highly supported. Thus, in 2030, the use of public transportation will be the fastest alternative to the majority of commuters to reach their workplaces.

The financial basis for this rearrangement is a regrouping of investments in road infrastructure to public transportation infrastructure, hence offering opportunities for greater changes.

Povzetek

Za Ljubljansko urbano regijo je značilna visoka odvisnost prebivalcev od prevoza z osebnim avtomobilom – delež uporabe avtomobila v primerjavi z ostalimi prevoznimi sredstvi je približno 67 % – in zmanjševanje uporabe javnega prevoza, ki predstavlja trenutno le 13 % vseh potovanj. Takšno razmerje je neučinkovito, saj zahteva veliko finančnih sredstev, predvsem v povezavi s porabo neobnovljivih virov (fosilne energije) in prekomerno rabo prostora, kar lahko privede do negativnih eksternalij. Te eksternalije se trenutno ne obračunavajo pri uporabi avtomobilov, vendar povzročajo škodljive vplive na ljudi in okolje.

V viziji 20-minutne regije se sistem javnega in zasebnega prevoza preuredi postopoma, tako da se poveča privlačnost uporabe javnega prevoza, ki omogoča, da potovanja s sistemom „tramvaj-vlak“ med najpomembnejšimi območji trajajo do 20 minut, hkrati pa se zmanjša privlačnost potovanj z osebnimi avtomobili. Sočasno se razvija tudi infrastruktura za (e-)kolesarje in pešce.

Spremembe se dogajajo na različnih ravneh: v središču Ljubljane, kjer je dostop z avtomobili zelo omejen in kjer se večina potovanj opravi peš ali s kolesom, ter vse do predmestij, kjer avtobusi, (e-)kolesa in avtomobili predstavljajo transportno sredstvo prvih in zadnjih kilometrov poti. Pri tem je dobro podprt tudi intermodalni transport. V letu 2030 bo javni prevoz najhitrejša alternativa za večino dnevnih delovnih migrantov.

Finančno podlago za te spremembe bo predstavljala prerazporeditev vlaganj iz cestne infrastrukture v infrastrukturo za javni promet, to pa predstavlja večje možnosti za spremembe na bolje.



VIZIJA 2030: 20-minutna regija



Oskar imamo v LUR „tramvaj-vlak“, je čas, ki ga preživim za potovanja v mesto in na delo, veliko krajši kot vožnja z avtomobilom, veliko pa uporabljam tudi kolo, ki ga lahko prevažam tudi z novim „tramvaj-vlakom“. Zato imam sedaj več časa zase in za svojo družino.

Jože (32), direktor trgovine

PODJETJA

- * Avtobusna podjetja
 - LPP (Peter Horvat, direktor)
 - Kam-Bus (Sonja Zore, direktorica)
- * Slovenske železnice
 - (Dušan Mes, direktor)
- * Gradbena podjetja
 - Strabag (Dietmar Cerjak, direktor)
 - Vinci (Mojimir Pregeļ, direktor)
 - Alpine (Christian Trattmer, vodja)
 - Siemens (Peter Gottal, vodja)
 - Kooperacija slovenskih podjetij:
 - SGP Graditelj (Janez Zorman, direktor)
 - Železniško gradbeno podjetje (Leon Kostlov, dir.)
 - SGP Pomgrad (Tadej Ružič, direktor)

ADMINISTRACIJA

- * RRA LUR
 - direktor (Liljana Modjar)
 - asistent direktorja (Matej Gojčič)
 - Oddelek regionalnega razvoja (Liljana Drevenšek, vodja službe)
- * Ministrstvo za infrastrukturo in prostor
 - Direktorat za infrastrukturo (Boštjan Rigler, generalni direktor)
 - Direktorat za promet (Bojan Žlender, vd generalnega direktorja)
 - Direktorat za prostor (Tanja Bogataj, namestnica gener. direk.)
- * Ministrstvo za delo, družino in socialne razmere
 - Direktorat za delovna razmerja in pravice iz dela (Peter Pogačar, generalni direktor)
- * Ministrstvo za kmetijstvo in okolje
 - Celotna presoja vplivov na okolje (Vesna Kolar Planinšič, vodja)

1 *

Ustanovitev podjetja LURPP in predstavitev enotne vozovnice za vse vrste alternativnega transporta v LUR.

2 *

Začetek načrtovanja in nadgradnja železniške proge, kjer je potrebno.

3 *

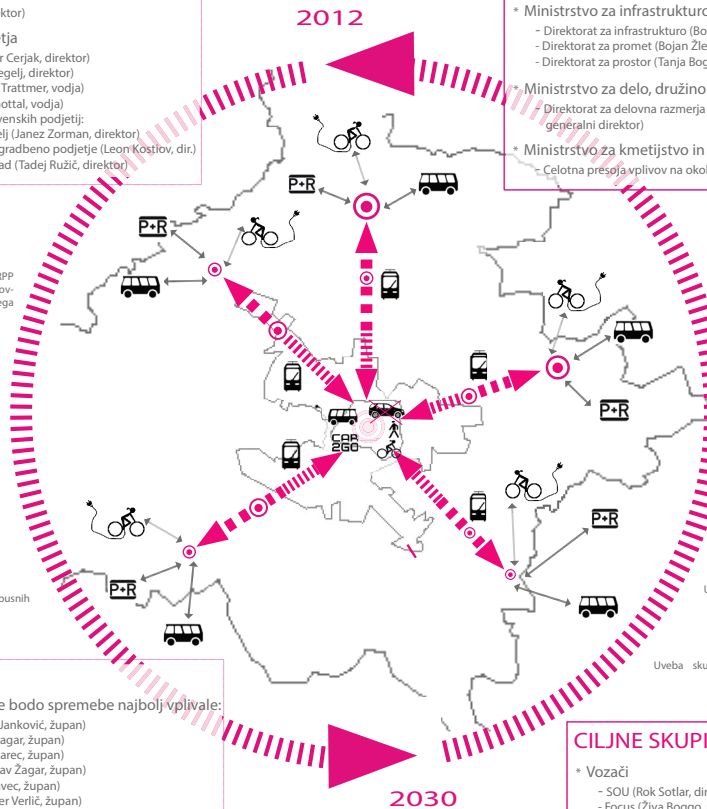
E + R postaje ob bodoči progi „tramvaj-vlaka“ in ob pomembnih avtobusnih progah. Gradnja P + R parkirišč.

4 *

Povečanje zmogljivosti avtobusnih linij.

OBČINE

- * Občine, na katere bodo spremembe najbolj vplivale:
 - Ljubljana (Zoran Jankovič, župan)
 - Domžale (Toni Dragar, župan)
 - Kamnik (Marjan Šarec, župan)
 - Medvode (Stanislav Žagar, župan)
 - Litija (Franci Rokavec, župan)
 - Grosuplje (dr. Peter Verlič, župan)
 - Brezovica (Metod Ropret, župan)
 - Log - Dragomer (Mladen Sumina, župan)
 - Vrhnika (Stejan Jakin, župan)
 - Škofljica (Ivan Jordan, župan)
 - Dol pri Ljubljani (Primož Zupančič, župan)



9 *

Na glavnih vpadnicah se postopno zmanjša prostor za avtomobile z namenom, da se uvede več vozniških pasov za avtobuse ter kolesarske.

8 *

Po izgradnji novega tramvajskega obroča in odprtju nadgrajenih prog se v središču mesta omeji dostop avtomobilom.

7 *

Začetek gradnje tramvajskega obroča okoli mestnega središča in povezave do železniške proge.

6 *

Uvedba alternativnih prevoznih storitev znotraj mestnega središča.

5 *

Uvedba skupnega voznega reda za celotno območje LUR.

CILJNE SKUPINE

- * Vozači
 - SOU (Rok Sotlar, direktor)
 - Focus (Živa Boggo, predsednica)
 - Umanotera (Vida Ogorelec, direktorica)
- * Oškodovano prebivalstvo in podjetja
 - Vodje združenj prebivalstva na katere bodo vplivale spremembe

AVTOMOBIL 67 %

AVTOBUS 13 %

KOLO 10 %

PEŠ 10 %

Delež uporabe različnih prometnih sredstev v Ljubljanski urbani regiji leta 2012

AVTOMOBIL 20 %

AVTOBUS 30 %

TRAMVAJ 20 %

PEŠ 30 %

Delež uporabe različnih prometnih sredstev v Ljubljanski urbani regiji leta 2030

Tracking Ljubljana Region

Fabian Dornier | Julian Thomas | Uroš Rozman | Matej Gregorcic | Eva-Maria Missoni-Steinbacher

2.2 Methodological approach

All visions of the Ljubljana Urban Region were developed using the same methodological approach:

Phase 1: Preparation

The process of formulating visions started in October, 2012, by gathering all known facts and figures about the Ljubljana Urban Region.

Phase 2: Grasping the Ljubljana Urban Region – Ljubljana Workshop, 10–16 October 2012

The aim of the Ljubljana Workshop was to explore the development characteristics of Ljubljana and its urban region and to prepare the first version of the 2030 vision on four different topics.

The process of gathering information on the development characteristics of the Ljubljana Urban Region, with a special emphasis on development problems, combined two different methodological approaches: (1) presentations from relevant professionals (ministry responsible for infrastructure, regional development agency, research institute, city municipality) and (2) field research done by students. There were two excursions, one through the city centre of Ljubljana and the other in the Ljubljana surroundings.

Parallel to the grasping process, the intensive 'visioneering' process took place. After the first impressions on the Ljubljana Urban Region development characteristics, a brainstorming session was used to define the four topics that were later developed into four visions. Each group of students was responsible for developing one vision. Their effort was supervised by tutors from the Vienna University of Technology and the University of Ljubljana, providing feedbacks, new ideas and new dimensions, both from theoretical and practical/contextual points of view.

The first draft of the visions was presented to stakeholders at a special workshop in Kamnik. After the presentation, the students had an opportunity to interview the experts to gather additional opinions, data and information.

The final result of the Ljubljana workshop was a poster per each group, containing a vision, logo and plan for the next steps. The first steps and achievements were presented at the final presentation which was held at the Faculty of Civil and Geodetic Engineering in Ljubljana.

Simon Kušar

Phase 3: Fine tuning 1

Between the Ljubljana and the Vienna workshops, the students continued to refine the visions, paying special attention to milestones and the methodology. Additional information and data were gathered, especially in the normative managing the Ljubljana Urban Region development trajectories. Despite being spatially separated, the students continued to work in groups using the ICT technology (e-mail, Skype etc.).

Phase 4: Grounding the vision: Vienna Workshop, 23–27 November 2012

The aim of the Vienna workshop was to define the stakeholders and to prepare an action plan for each of the four visions. This methodological step of the visioneering process is necessary to make visions realistic and feasible. The students used brainstorming techniques and various ICT sources to accomplish the task. The process was supervised by the teachers from the Vienna University of Technology and the University of Ljubljana. The workshop methodological approach was refined through both organized and individual field excursions around Vienna.

Phase 5: Fine tuning 2

The period after the Vienna workshop was used for final refining of the vision, which included writing the final report, preparing materials for a professional monograph and poster creation. The collaboration among the students, and between the students and the supervising tutors, continued through the use of the ICT technology (e-mail, Skype etc.).

Phase 6: Spreading: Udine Conference, 27–28 February 2013

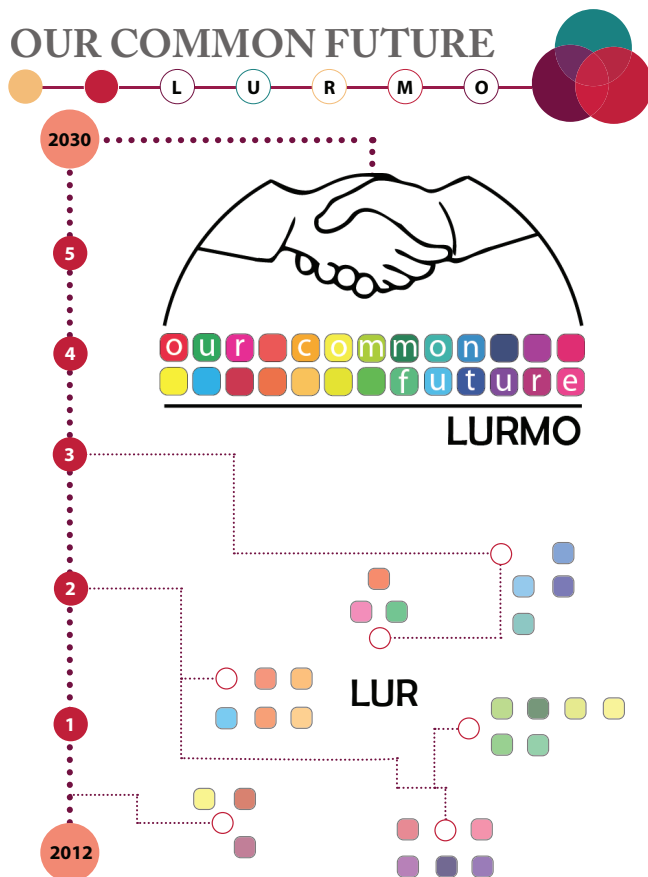
The process of developing the 2030 visions for the Ljubljana Urban Region reached its peak during the Smart Spatial Planning for Mega Transport Infrastructures international conference hosted by the University of Udine. The students presented their achievements to an international audience of stakeholders, academics and experts. During the conference, the monograph containing professional articles written by tutors and stakeholders involved in the workshops, along with a summary of the students' work, was presented.

LURMO 2030 – OUR COMMON FUTURE!

Students UL FF: Tamara Danijel, Štefan Rot

Students TU Vienna: Can Ceylan, Moritz Polacek

Erasmus student: Jakub Wabinski (Poland)



After the admission of the Balkan countries to the EU, not only is the urban region of Ljubljana now geographically located right in the heart of the European Union but it also plays an important role in European economy. In 2030, the LUR Regional Management Office, LURMO, constitutes the prolific and common future for the whole LUR.

The LURMO is developed through an advancement of the former Regional Development Agency, the RDA, and leveraged the region to be a strong and serious player in the global competition. Basically, **LURMO takes power** from the government and from the municipalities and **reallocates it equally and fairly** to the region again. Under the leadership of the LURMO, the municipalities of LUR work together in a more efficient and effective way than in the past. Through inter-coordination and regional concepts the region will be ready for the future.

There are three key elements that are essential for a working LURMO:

- ▶ Business Improvement Districts (BIDs),
- ▶ Living Laboratories ('living labs') and, finally,
- ▶ the regional management office itself (LURMO).

Combining these elements, three main goals are defined:

- ▶ Forcing bottom-up processes,
- ▶ International competitiveness and
- ▶ Using internal potentials.

By the application of internationally proven and tested concepts of Living Labs and Business Improvement Districts, weak areas can be strengthened and existing potentials can be capitalized. The new LURMO helps the stakeholders to participate in these concepts.

Living Labs are forums for research and innovation applied to the development of new products, services and processes. These laboratories employ working methods to integrate stakeholders into the entire development process, like users (those who actually use a product or service, actually end-users, consumers and companies/organisations) and co-creators, and recognize the needs of users and the working conditions of service providers that may improve the product.

MILESTONES



“...A chain is just as strong as its weakest link...” - Our Common Future - The Game

Business improvement districts (BIDs) are specially created areas where a majority of business owners and commercial property owners decide to acquire special benefits and to pay for those benefits by themselves (for example paying for facilities that were requested by customers of the shopping facility/street). In this way, individual communities are able to have a direct impact on what is going on in the district. This attracts them to use these districts and spend their money there, which leads to mutual benefits.

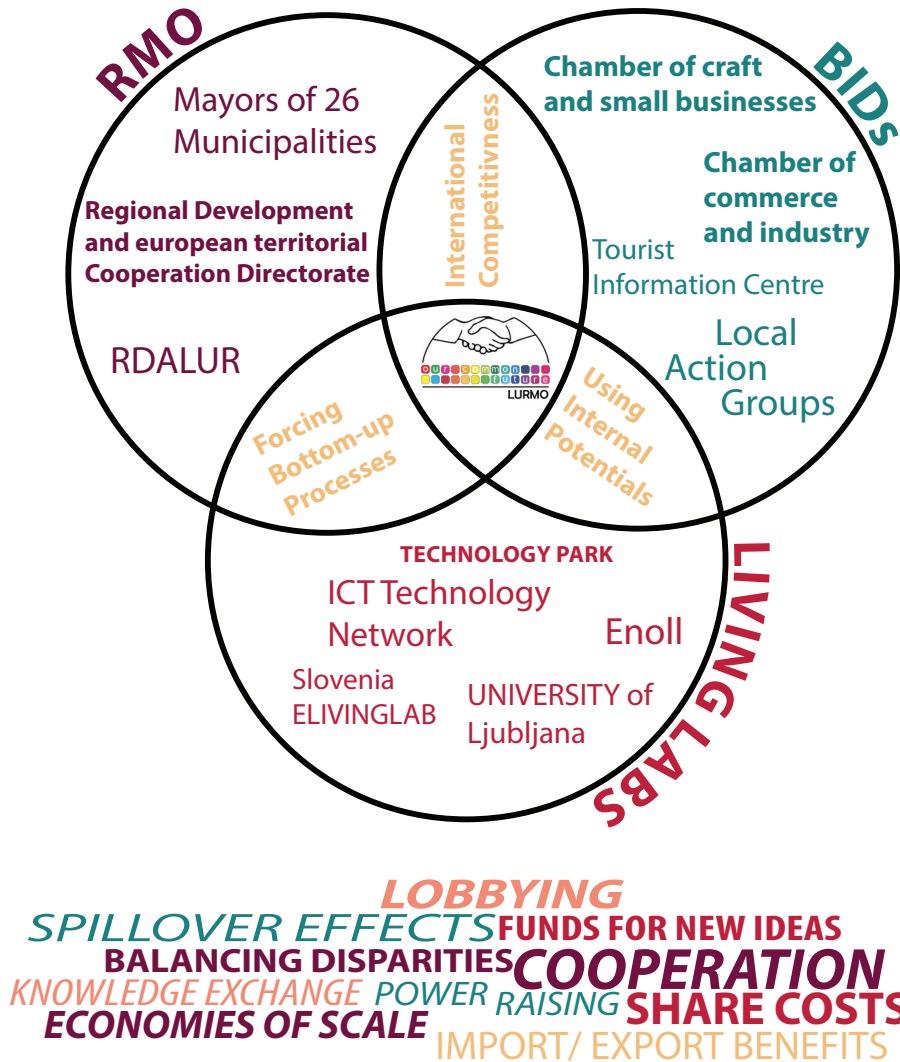
The Regional Management Office (LURMO) is the third platform that has to be implemented. It differs from contemporary type of organization of LUR in its decision making strength. It is also the combining element, which tries to connect LUR with other stakeholders. LURMO, as a legal institution, should be a notable factor and information office and stand for the first supply step of every citizen, company and institution in and outside of the region, concerning planning activities, legal instructions and sponsorships.

To increase the coherence in the region, the leadership in the LUR changes in periods, so every municipality gets the chance to represent LUR outwards. The location of the headquarters of LURMO remains at the same place and it provides relevant resources to the municipality which is currently holding the leadership of LUR. At the end of the period (which is planned to be 6 months long), there will be a closing conference in the relevant municipality where all representatives of the region come together to discuss the proceedings and future plans as well as to evaluate former projects and happenings.

The Logo of LURMO shows the vision of a well organized and cooperative atmosphere between the municipalities, led by a strong regional level. The municipalities are each represented by a certain colour. The different colours stand for retaining the



STAKEHOLDERS



profile of the particular municipalities, on the one hand, and their **specific strengths** on the other hand. Led by LURMO, the municipalities come together to build a **common future**.

In order to make the vision come true, the following five milestones have to be accomplished:

- ▶ From LUR to LURMO (2025–2030)
- ▶ Achieving international competitiveness (2020–2025)
- ▶ Using internal potentials (2015–2020)
- ▶ Forcing bottom-up processes (now–2015)
- ▶ Engagement and information (now–2015)

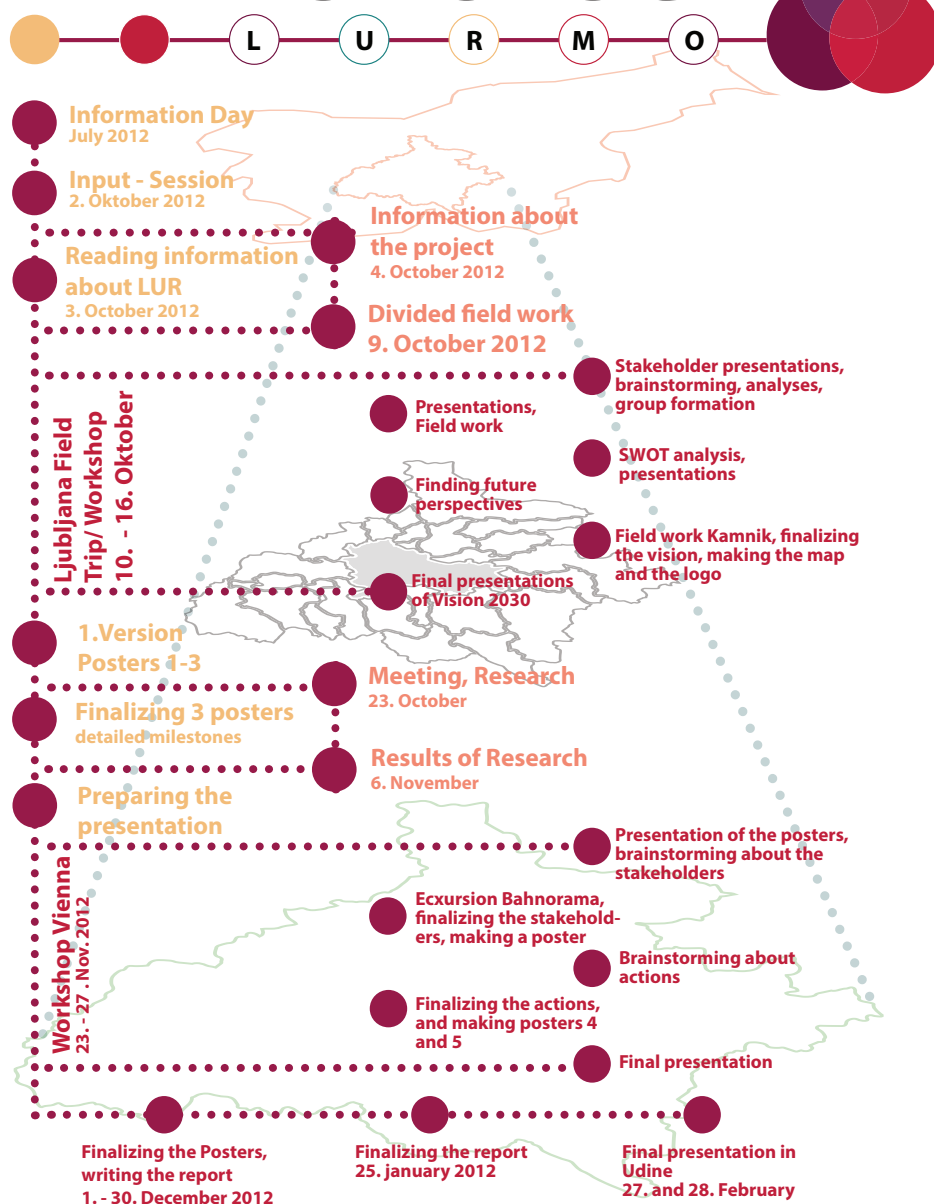
The way to LURMO 2030

Taking a brief look at the project area nowadays, there are 26 municipalities connected by the statistical region of LUR. The common problems that currently exist in the region are the driving forces for cooperation. Right now there is a lack in finding common solutions for the region. The situation could be worse, because, indeed, there are some well running cases of cooperation in LUR. Let us take a look at the current situation:

Many cooperations among the municipalities are, in fact, artefacts of the former municipalities from the time when there were bigger municipalities.

The most common one is the administrative unit, the unit normally bigger than a municipality (almost always the area of the former municipality), for which the government has local offices. The next level consists of all public services like public schools, public infrastructure and waste companies, cultural institutions, health services, and inspectorates. Indeed, many municipalities kept the area they covered before; the only change now is that the municipalities share the ownership or even control. Examples are the intermunicipal inspectorates of Trzin, Komenda, Lukovica, Mengeš, Moravče;

METHODOLOGY



the Grosuplje library that has departments in Ivančna Gorica and Dobrepolje; and the Public Utility Company Vrhnika which also covers the area of some other municipalities.

Efficient cooperation as an engine for new projects

There are also some new projects that represent the cooperation topic and offer a totally new source of motivation to cooperate. The most recent one is the LPP's extension of city public transport to the settlements outside the City municipality of Ljubljana, even though there were existing intermunicipal lines. But those did not fulfil the needs of people. The next successful cooperation project is the Ljubljansko barje regional park. It covers the marsh area in the south of Ljubljana and it is an area of natural and cultural importance. It contains special ecosystems and habitats for endangered species like the European pond turtle and archeological remains like prehistoric pile dwellings (now listed as UNESCO's world heritage), which were recognized important enough to be preserved by local municipalities.

Top-down governance ends in successful bottom-up story

The National program for rural development 2007–2013 was the basis for a new type of cooperation among the municipalities. The new LEADER program introduced the bottom-up development of the rural areas, while one of the fundamental actions was the introduction of the so-called local action groups (LAGs), which are a kind of public–private partnerships. A few of them have been formed in LUR, but there is only one that is really successful, i.e. **LAG – The Heart of Slovenia**. It started as a project of 29 partners and five of them were municipalities from the northern and eastern parts of LUR. Other partners were other public institutions and private companies. Their goal was to improve the quality of life, farming, economy and environment in the rural areas. Later the name

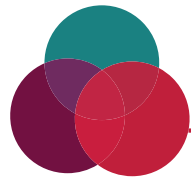
ACTION PLAN

of the LAG became a recognized brand representing the successful story of **cooperation and quality of relations** among stakeholders, which expanded over its primary expectations. It is also a brand for local products. Nowadays, 16 municipalities from LUR and further are part of this project and there are even more other stakeholders. Their main preoccupations are local food self-sufficiency, a better economic situation and cultural heritage as a basis for tourism, but they still work on several other projects which try to improve the situation in 'the heart of Slovenia'.

In summary, cooperation forms like LAGs could be seen as a breeding ground for stronger regional cohesion and an increased regional identity.

MILESTONES

Ljubljana is a European city. The region itself connects the Alps with the Mediterranean coast. This leads to many possibilities that can only be reached together. Important steps such as building a region and initialising a regional development plan are already undertaken. These instruments, however, were not a result of local communication and cooperation. The acquisition of European regional funds is a European duty. These funds are a fundamental instrument to equalize the unequal distribution of money, knowledge and infrastructure. Moreover, the main purpose is to raise the competitiveness of regions by raising their cooperation on different levels. The Ljubljana Urban Region, therefore, can only compete in the global market if they create a regional identity which is supported by as much stakeholders and citizens as possible. To find this common attitude and to reach the goal of a competitive region, the concept of LURMO 2030 includes five essential steps. These five steps aim to connect the region, a region where each community is unique, but still aiming for a common future. The main rule to be con-



Living Labs

BIDs

RMO

PROVIDING INFORMATION

Now - 2015

Public Exhibition

Information Meetings

Vacancies database

GATHERING PEOPLE'S THOUGHTS

2015-2020

Workshops

Assesment Survey

CREATING HEADQUARTER

2020- 2025

Assembly Hall

RegLabs

Offering Gadgets

Moving Leadership

INTRUDING REGIONAL MEDIA

2025-2030

Newspaper, TV Channel, Improving Website

Mobile Apps



sidered: "A chain is just as strong as its weakest link." The international regional playfield can be conquered when each municipality reaches the highest step.

1 Engagement and information

Since nowadays local interests overbalance regional interests, it is essential to use European funds for the regional level. Meetings, courses, action plans and workshops are needed to connect the stakeholders and establish a network which is mutually complementing. The introduction of new ways of cooperation crucially depends on a dialogue between politicians and citizens, while internal potentials need to be used. Moreover, it is important to discuss and find the strengths of a region. The search for a common path that everyone wants to follow, including the formulation of rules and structures, which cannot be changed by political takeovers, leads to an obligatory regional development programme, which is the guideline for a common future.

2 Forcing bottom-up processes

To reach a sustainable development, the participation and political integration of citizens are necessary. This includes structures and rights that, on the one hand, satisfy the citizens and, on the other hand, create a trustful atmosphere for investors and foreign investment capital. Decisions should be taken at the level of their influence, by people who know, and are familiar with, the topic and who are affected by the consequences. An expertise about the situation of medium-sized European cities, concerning their structure and situation in the smart city movement, performed by the Technical University of Vienna, the University of Ljubljana and the Technical University of Delft, shows Ljubljana's weakness in the 'Smart Governance'. Hence, implementing bottom-up processes is a first step to a more efficient and sustainable development of the region. New methods and instruments are going to be introduced, to not only inform the people about results, but also integrate them in the planning process.

3 Using internal potentials

As mentioned in the introduction of the topic, Ljubljana is situated in an important part of Europe. The best example for this importance is the planned TEN-T Corridor 10 and Corridor 5. These Corridors will meet in the Ljubljana Urban Region and can be seen as an essential factor for the settlement of new companies. Also, LUR is characterized as a young region with a natural diversity caused by different geographical zones. However, these chances can only be used if the region can manage to set up a well working network, which will be reached by the three key elements of the vision of LURMO. Living Laboratories are a good instrument to make innovation possible, Business Improvement Districts raise local economic transactions and the Regional Management Office as a Controlling Instrument is capable to counteract negative regional developments. On balance, a sustainable development can be reached when the dependence on foreign investments can be

lowered and local movements can be advertised. A perfect example is the Heart of Slovenia Project where local goods are propagated with a collective distribution structure and are, because of that collaboration, already exported out of the region. Furthermore, they are connected with the RegioMarket project of the alpine area, where regional marketing is strengthened and combined with other important sectors like tourism or the renewable energy sector.

4 International competitiveness

Based on the cooperative atmosphere and the innovation processes of the Living Laboratories, Ljubljana Urban Region is using its internal potentials. The flourishing region of LUR with its tourist centres, its economically strong capital and the regional industries, is becoming an important location in Europe's economy. Local action groups are connecting with other regions. Possibilities (for example created by the Living Laboratories), like high knowledge concentration, are leading to international exchange. The different communities create their own strength, but still feel connected to the region. A part of this new ideology is the moving leadership of the regional management platform, which is getting more and more structured and formalized. Both the self-confidence of the communities and of the regional level is raised.

5 LUR to LURMO

The installation of the regional planning programme leads to a cooperative and sustainable development. The Ljubljana Urban Region Management Office with its new gained power from the municipalities has also the legitimacy of the state level. The regional planning programme is obligatory and forces the municipalities to set up a local development plan, which has to be confirmed by LURMO. The requirement for the efficient use of materials, land, natural and financial goods is recognized.

STAKEHOLDERS

Based on the three key elements of LURMO 2030, i.e. Business Improvement Districts (BIDs), Living laboratories (Living Labs) and the improved Regional Management Office, the participation of the following stakeholders is necessary.

1 Regional Development Agency of LUR (Lilijana Madjar)

The participation of the Regional Development Agency is obligatory because the whole idea is related to this organization. First of all, there will be a transformation from LUR into LURMO (Ljubljana Urban Region Management Office) which will be more formal than the already existing association, with a wider range of rights and power. In order to achieve this, personal changes have to be done, along with the relocation of the headquarters to a more suitable localization (some well recognized place). The purposeful procedure of changing the name is designed to gain interest in the work of the organization among citizens. This will improve the importance of the agency at the regional and national levels.

2 University of Ljubljana

The University of Ljubljana, as any other educational institution, should be interested in cooperation with companies and local authorities. There is an obvious connection with the milestone 'using internal potentials'. First of all the students can present their projects and works to a wider audience, not only to their teachers and professors. They can present them in the new assembly hall situated in the future LURMO headquarters. This will allow them to take part in the development process of the region. Moreover, professors who are trying to run some projects that may interest stakeholders will be able to gain funds from the mentioned companies. As some of the companies and other types of stakeholders need know-how centres, they may be interested in investing in the university development, to be applied in certain faculties of Slovenian universities, which will allow the stakeholders to test new technologies (see also the concept of living labs).

3 Technology Park Ljubljana (director Iztok Lejsak)

Even though the Regional Development Agency of LUR is already a partner of the Technology Park Ljubljana, there are still many opportunities to seize. The Technology Park Ljubljana is organizing national and international events for stakeholders. Hence, LURMO can redirect stakeholders to these meetings. Furthermore, the use of the already existing brand, 'Made in Technology Park Ljubljana', should be taken into consideration to make it more recognizable in the region as well as abroad. As one part of the cooperation, the municipality of Ljubljana can also provide vacancies in the LURMO headquarters, which will be much better located than the existing location of the Technology Park Ljubljana in the outskirts of Ljubljana.

4 ICT Technology Park (member of the European Network of Living Labs)

As discovered, the Information and Communications Technology Network in Ljubljana is not yet an effective member of the ENoLL community, which is the international head organization of Living Labs. By cooperation with LURMO, it may be easier to become an important player in the network and gain voting power, which will raise the international competitiveness. Moreover, the LURMO can provide some advertising actions in order to raise awareness among citizens about the ICT Technology Park. Even though the network was established in 2005 and it is already successful, it is not widely known in the region. As the ICT Technology Network is focusing on establishing living labs, LURMO can provide already existing connections, contacts and even space to the Network.

5 Mayors of 26 municipalities (LUR council)

The advantages of cooperation between mayors of certain municipalities are pretty obvious. Every mayor wants the best for his/her own municipality, but it is usually not possible to achieve ambitious goals alone. By cooperation with other mayors (mostly between neighbours), they can accomplish some ambitious projects that cannot be

done without outside support (such as building a new school or fire station). Moreover, by raising the voting power of individual mayors, their ability shall be raised to impact the region's life, engaging them into the process of development of the region. Nowadays, the LUR council is considered to be divided into two main parts: the Ljubljana municipality and another few important municipalities. This has to be changed; LURMO takes actions that will change the view of the whole council, mostly by introducing a moving leadership and organizing region-wide conferences. Besides it is very important for mayors of the municipalities to become the 'voices' of local communities, so that they will have a feeling of helping the region. In the same way, the citizens can get the feeling of being represented properly by certain politicians.

6 Ljubljana Tourist Information Centre (TIC)

Cooperation with LURMO can help raising the attractiveness of the region in the global scale. People who are coming to Slovenia and particularly to Ljubljana are not well informed about the region. There are some must-see points in Slovenia (Ljubljana, Piran, Postojna etc.). The local government of Ljubljana should, in cooperation with the Ljubljana Tourist Information Centre, launch a more intensive and sustainable advertising campaign so that people will stop perceiving Slovenia as just a by-the-way visited country, but as a serious tourist attraction among other European countries. This can be done by gaining funds from the European Union, which are provided for the development of tourism, also involving the residents of the municipalities of the region who have some ideas about the tourism in their areas (agricultural tourism is becoming more and more popular nowadays). Moreover, some LURMO gadgets will be introduced, which could be closely related with the Slovenian gadgets provided by the Ljubljana TIC.

7 Chamber of Craft and Small Businesses of Slovenia (Alojz Kovšca)

The main goal of this association is to gather small investors together in order not to be pushed away from the market by the so-called 'bigwigs'. In order to become even stronger they should be interested in cooperating with LURMO because it allows easier contact with local authorities, like mayors who may be interested in inviting local businessmen to invest in their municipalities by providing vacancies and making all new-company-establishing formalities easier and faster. They can also take an advantage of advertising in the new regional media so that they will become more competitive on the local and national markets. Moreover, runners of small businesses should be interested in accessing a vacancies database which will bring mutual advantages, such as establishing businesses. It also helps keeping the city centre full of shops and other facilities instead of spreading the city and leaving the city centre empty (making it more attractive).

8 Slovenia E-Living Lab

Even though the main focus of this project is Gorenjska, a statistical region in the north-western part of Slovenia, it has a lot to do with the Central Slovenia region (Osrednjeslovenska region) which borders the

mentioned region. Gorenjska is a place where the Pan-European corridors 5 and 10 are crossing. The project already brings together the universities and companies from Slovenia and neighbour countries, but is still looking for more partners which can be provided by LURMO. Annual workshops can take place in Ljubljana or other municipalities of the region providing new stakeholders for the region and perhaps new technology testing areas. The advantage of the European corridors crossing should also be taken into account as a part of raising international competitiveness.

9 Heart of Slovenia (Local Action Group)

The project involves many municipalities, of which several are lying within the borders of the Central Slovenia region. The main aspect of cooperation between LURMO and the Heart of Slovenia could be the usage of internal potentials. There shall be a meeting established by LURMO where individual municipalities could present their local products and furthermore gain the interest of the Heart of Slovenia regional brand which should be more recognizable in the country. The cooperation of a higher number of municipalities will also raise the international competitiveness of the region.

10 Regional Development and Regional Territorial Cooperation Directorate (Marko Drogenik)

The main objective of the organization is to reduce development disparities in Slovenia by preparing development plans on the national level. There is a need for the cooperation between the Regional Development and European Territorial Cooperation Directorate and LURMO to achieve an equal future development of the Ljubljana Urban Region and to reduce the developmental disparities between different municipalities as well as increase the cooperation among them, which is the fundamental goal. These two organizations would also produce a Regional Development Program for a specified period by combining and implementing local, regional and national goals. The organization could help in the development in all areas, coordinating the various activities of all stakeholders in the region. As a helping arm for the LURMO, it would become the main body connecting all stakeholders in the region.

11 Chamber of Commerce and Industry of Slovenia (Samo Hribar Milič)

This organization represents the interests of its members at all administrative levels: municipal, regional and national. It enables networking of businesses throughout the region, and deepens exchanges and cooperation among them and also with companies from other regions. Members can also use the chamber as a promoter of their products, and by using it to acquire new knowledge in a particular area. The chamber also monitors the economic development of the region, particularly those municipalities that are less developed, and then prepares the necessary information for the development of new activities, where the potentials of the region could be used. It also provides know-

ledge-sharing events (workshops, seminars, etc.) and literature, information and statistical data for its members. Hence, as in many other cases, LURMO can be a sort of an intermediary between the chamber and its members and other associations and organizations that can provide essential information, facilities and money for potential investors and stakeholders.

ACTION PLAN

All of the actions affect the already mentioned elements, i.e. Living Labs, BIDs and the RMO. Each of these three concepts has its special actions, but in some cases similar actions could be used in two or all of the concepts. For example, workshops and information meetings are actions that could be successfully applied in all of the platforms but, on the other hand, there are some actions which are useful only in one concept, because of their specific function in the process of achieving the goals of the concept.

All goals can be summed up in four main groups of actions:

- ▶ Providing Information,
- ▶ Gathering People's Thoughts,
- ▶ Creating Headquarters, and
- ▶ Introducing Regional Media.

Providing Information can be further separated in three actions. One way of distributing the information is a Public Exhibition. Arranging Public Exhibitions means to inform people, companies, institutions and other kinds of stakeholders about the Living Lab and BID concepts and about possible advantages and benefits they can achieve. This kind of exhibitions would take place on public places like parks, squares, streets, fair areas or in the vacancies of the LURMO headquarters. This kind of actions is suitable for Ljubljana, because the city already has a tradition of hosting exhibitions (e.g. Tivoli Park and Congress Square).

Information Meetings have a general character and, therefore, have effects in any area. These meetings should be organized periodically by LURMO and every stakeholder should be represented. Politicians and stakeholders should be informed about the activities of the other stakeholders and should inform others about their activities. The main goal of this action is engagement and information for stakeholders.

The third action is creating a Database of Vacancies, which affects mainly the topic of BIDs. This database would be the information source for potential investors, where they can find locations of existing infrastructure or areas which are meant for business use suitable for their needs. This action helps to use the potential that already exists in the region.

The second group of actions, Gathering People's Thoughts, consists of two actions. Workshops are a proper action to get people together but

they highly depend on the free will of the participants. The mission is to introduce and to implement all three concepts that are proposed: Living Labs, BIDs and RMO. The participants can exchange opinions on whether there is a need for BIDs in some areas or just discuss the regional development concept.

Assessment Surveys are a crucial tool for stakeholders like Companies collaborating in Living Labs and BIDs to receive feedback from costumers about certain products or services. By participating in these surveys, on the one hand, people can consume new and innovative goods and, on the other hand, they help the producers to improve them. It is an essential step in the iterative process of a product or a district life cycle.

Another main element for LURMO 2030 is the Creation of New Headquarters. The main objective is to make LUR more recognizable, bringing it closer to people and making it more visible in space. In other words, creating new headquarters means establishing a successful and trustful regional management office located in a visible and prominent place (for example next to the new train station which is planned in Ljubljana or maybe in the most dynamic area in the region – BTC).

An important part of the new headquarters is the assembly hall. It would be the place where the presentations of the projects, press conferences and workshops could take place and it would become the interaction point for stakeholders.

Besides the central headquarters, there will be institutions called RegLabs, which are basically small offices in the region where people and other stakeholders could get information about the regional projects, where they can find partners for projects and other activities and hold meetings, smaller workshops, etc. In summary, RegLabs are smaller versions of the LURMO headquarters and shall introduce bottom-up processes in the municipalities.

Offering gadgets is an action which shall promote LURMO and its activities. By distributing useful articles like T-shirts or coupons, LURMO will get closer to the people and should motivate them to take part and participate actively in the development of the region (for example they could win these gadgets by participating in public surveys).

The fourth action is oriented to the management of LUR and its leadership. Introducing a moving leadership of LUR, as is known in the EU, constitutes a big chance for smaller municipalities to equally take part in the development of the region. In this case, leadership is understood as a representative function. During a period of six months the municipality which is currently holding LUR's leadership represents the region. This action decreases the impact of the city of Ljubljana and promotes the contribution of smaller municipalities in LUR. It can be understood as a way to engage the smaller municipalities into the decision making process.

Last but not least, LURMO as a regional platform, which has also the function of information brokering, will also introduce regional media. By improvement of the internet appearance and the founding of a regional newspaper and even a regional TV channel, the municipalities move together also in people's minds. Submitting mainly regional content, the media make development and successes of LURMO visible to the people and give them the feeling that things are proceeding in the region. They can interchange and inform themselves about what is going on in LUR and closely experience the successes. 'New' media like internet and smart phones applications would introduce a new level of participation (which also means information) to the working population, students and other young population, who are the most vital parts of the society and could change the perception of LURMO in the future.

Finally, why should a mayor of LUR take part in our vision? LURMO provides the know-how, awareness and experience, especially for smaller and weaker municipalities which lack these properties. Certain circumstances and problems that go across administrative borders, like education and tourism planning, will be now seen at a bigger scale and therefore also threatened as an inter-regional issue. As Nataša Pichler - Milanović from ESPON said during a presentation in Ljubljana: "... common problems are the driving forces for cooperation".

FUTURE

Kamnik, 23 January 2032

Since 2012, the population of the city increased to 40,000. The mayor of the city walks, whistling and happy, along the main street. He passes a lot of small and colourful shops and does not have to be aware of the cruising cars anymore – the street was transformed into a pedestrian zone five years ago. When he walks along a tiny market stand, he reads a sign: "Fresh and tasty apples – Heart of Slovenia". He buys some fruits and sits down on a bench. Actually, he should not worry about the current situation in the city at all. But there is one major problem which he could not yet solve in the last days and weeks. Due to the increased quality of life in the region, more and more people moved to Kamnik and there is a big lack of child care facilities.

A few days later he mentions this issue at the LURMO conference, which is luckily happening in his municipality because Kamnik is currently holding the Leadership of LURMO. After some discussions, he shakes hands with the mayor of the neighbour municipality and again walks through the main street – now without worries, because he just fixed an agreement with the neighbour municipality, which just built a new education centre at the border of Kamnik. It still has dozens of kindergarten places available.

BALKAN_HUB

Student UL FF: Tina Rakuš

Student UL FGG: Špela Žohar

Students TU Vienna: Alexander Jabur, Richard Klimeš, Denisa Rummelová

BALKAN_HUB

VISION 2030

Vision balkan_hub establishes **Ljubljana urban region (LUR)** in 2030 as the **attractive gateway** with fast and efficient connection to the **Balkans and Adriatic Sea**.

Alexander Jabur, Richard Klimeš, Tina Rakuš, Denisa Rummelová, Špela Žohar
 TU Wien - Department für Raumentwicklung-, Infrastruktur- und Umweltplanung
 Universita v Ljubljani - Fakulteta za gradbeništvo in geodezijo

Project Tracking Ljubljana Region
 Group International Mobility and Accessibility

Balkans

fast and efficient connections

HUB station in Ljubljana

development of the Balkan rail corridor
cooperation of North Adriatic Ports

economic attractiveness of LUR
connecting sea ports and the Balkans

Adriatic Sea

VISION

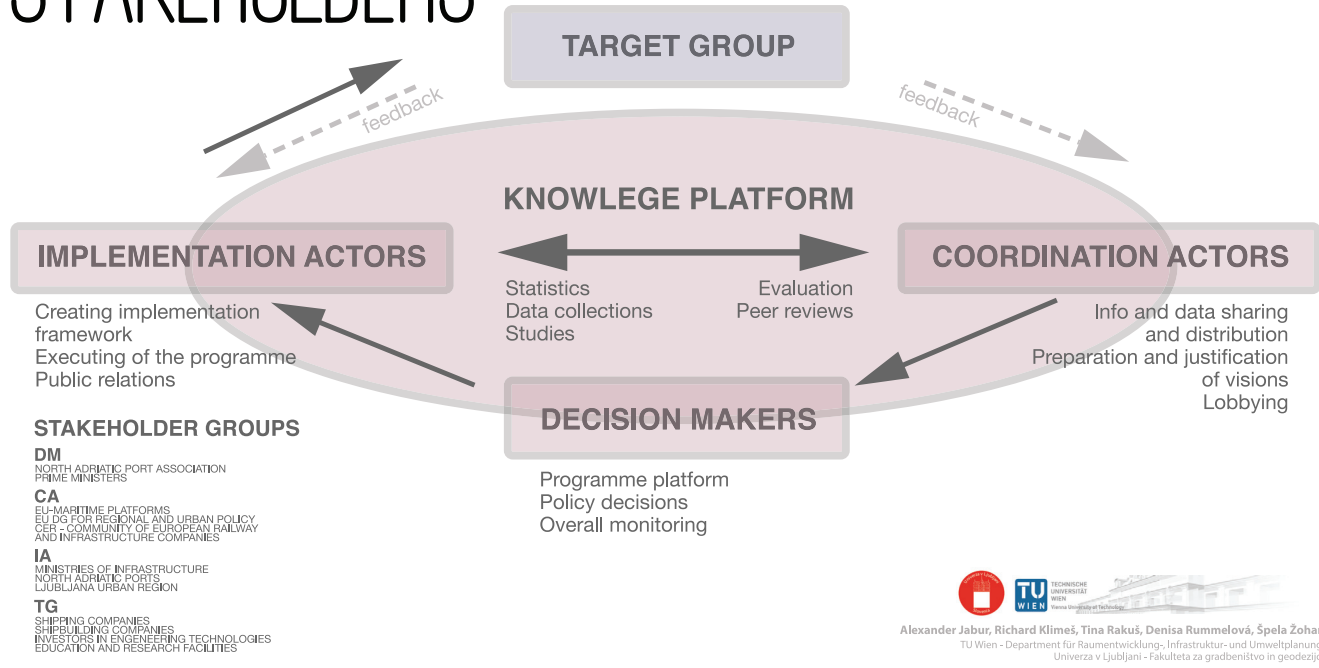
The poster shows the position of Slovenia in Europe and highlights its proximity to the Balkans, Adriatic Sea and other countries, such as Austria, Italy and Germany. In the centre is the Ljubljana Urban Region – a recognizable region with a clear vision. Dominant are also the ports of NAPA, which are represented as one unit, and the railway links that are necessary to enable the implementation of the vision balkan_hub. Their colour difference, which symbolizes the importan-

ce of transport flows, clearly shows the stronger focus on the Balkans and the Adriatic Sea. The description of the vision in one sentence is positioned at the top, the pictures on the right side of the poster point at the handled area, hub station and the train and ship transport. The cut of this collage is to be found on every single poster as an associated graphic element.

BALKAN_HUB VISION 2030

STAKEHOLDERS

URBAN REGION Project Tracking Ljubljana Region
Group International Mobility and Accessibility



Alexander Jabur, Richard Klimeš, Tina Rakuš, Denisa Rummelová, Špela Zohar
TU Wien - Department für Raumentwicklung, Infrastruktur- und Umweltp lanung
Univerza v Ljubljani - Fakulteta za gradbenitvo in geodezijo

STAKEHOLDERS

The main point of this poster is a simple and self explaining scheme of the interconnections and influences between the four stakeholder groups (Decision Makers, Implementation Actors, Coordination Actors, Target Group). The members of the stakeholder groups are written out on the left bottom side of the poster.

TIMELINE

Project Tracking Ljubljana Region
Group International Mobility and Accessibility

Alexander Jabur, Richard Klimeš, Tina Rakuš, Denisa Rummelová, Špela Zohar
TU Wien - Department für Raumentwicklung-, Infrastruktur- und Umweltplanung
Univerza v Ljubljani - Fakulteta za gradbeništvo in geodezijo



2025

innovation campus

using synergies between engineering & maritime industries and universities, new opportunities in Ljubljana

excursions

development projects, for students, public and different target groups, awareness building

moving exhibition

moving boat exhibition between Adriatic ports and train exhibition travelling between important economic points, promotion of activities

2019

North Adriatic Ports Association: NAPA

institutionalized cooperation between ports, their specialization and extending of NAPA to all relevant ports in the region

sponsorship

support of cultural events, scholarships, cooperation with industries and universities, international competitions

island platform

exhibition on an artificial island, place for workshops, information, tourist attraction

2015

railway connection to Adriatic ports

improvement of railway connection to Koper, construction of a new link to Rijeka and a direct link to Trieste

railway connection to Balkan and Europe

improvement of existing railway connection to Balkan via Zagreb and to Europe - corridors 5 & 10 and link to Baltic-Adriatic corridor

hub station in Ljubljana

efficient railway station as a hub between different transport flows - gateway to Balkan

website

vision website with news, development updates, discussion boards and important contacts

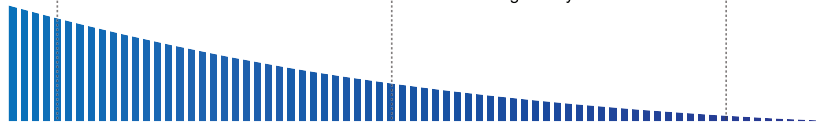
cruiseship conferences

periodic meetings of stakeholders, decision makers, target groups and public

cooperation platform

platform for potential investors to participate in development projects, cooperation between public and private sector

2030



2013

MILESTONES

The goal of establishing the Ljubljana Urban Region as an attractive gateway with fast and efficient connections to the Balkans and Adriatic Sea is based on several milestones and actions. The poster 'timeline' divides these actions and milestones into four sections spread across the period from 2030 to now. These sections symbolize also the approximate time frame, in which the contained actions are implemented. However, to describe the poster, the actions are explained in chronological order from now to the year 2030. The reason for this decision is the continuity of actions, which is more easily understandable when described chronologically.

METHODS

U Project Tracking Ljubljana Region
Group International Mobility and Accessibility

Learning through experiencing

- grasping and discovering Ljubljana as well as Ljubljana Urban Region
- networking and partnership building with Slovenian colleagues
- visiting the seaside of Koper and Trieste
- discovering economic development and growth in the region
- sightseeing the natural beauties of Slovenia

Methodology

- lectures, discussions and interviews with experts for spatial planning as well as with Slovenian teachers, students and Slovenian citizens on different approaches towards regional development
- group brainstorming, mind mapping, SWAT analysis
- collecting pros cons, thinking of new options, searching new points of view, finding out the specifics of the region
- literature research, searching for best practices and lessons learned
- drawing posters and creating PowerPoint presentations
- consulting the topic with friends and family

Working methods in our group

- allocation of responsibilities within the group
- identifying the working phases
- fixing the working deadlines
- setting up regular group meetings

Work results

- 5 posters
- 1 report
- CV of every group member
- final presentation in Udine



TU
WIEN

TECHNISCHE
UNIVERSITÄT
WIEN
Vienna University of Technology

Alexander Jabur, Richard Klimeš, Tina Rakuš, Denisa Rummelová, Špela Zohar
TU Wien - Department für Raumentwicklung-, Infrastruktur- und Umweltplanung
Univerza v Ljubljani - Fakulteta za gradbeništvo in geodezijo

METHODS

In the poster 'Methods' we defined three categories of actions and one category of results, as follows: learning through experiencing, methodology, work methods in our group, and work results. These categories are symbolized on the poster through a background picture of four puzzle pieces matched together. Each puzzle piece is representing one of the working parts of the group balkan_hub.

ACTIONS

WEBSITE

- Electronic platform with easy accessibility and availability
- Publishing of news, development updates, discussion boards
- Interactive map of North Adriatic Region with 3 moving targets – cruise ship & exhibitions

COOPERATION PLATFORM AND CRUISE SHIP CONFERENCES

- Meeting and cooperation platform for potential investors in development projects
- Public and private sector
- Periodic meetings on a cruise ship in different locations
- Discussion of stakeholders, decision makers, target groups and public

MOVING EXHIBITIONS

- Promoting of projects and activities - boat and train exhibition
- Moving boat exhibition in ports of North Adriatic Sea
- Train travelling between important economic points in Slovenia and abroad

ISLAND PLATFORM

- Exhibition on an artificial island
- Place for workshops, summer camps
- Regional maritime information center and tourist attractions

SPONSORSHIP (NAPA FOUNDATION)

- Scholarships
- Universities in Ljubljana and Koper: study programmes in maritime & engineering studies and transport
- Cultural events, excursions and field trips
- International competitions



TU
WIEN

TECHNISCHE
UNIVERSITÄT
WIEN
Prinzipalstraße 25, 1040 Wien



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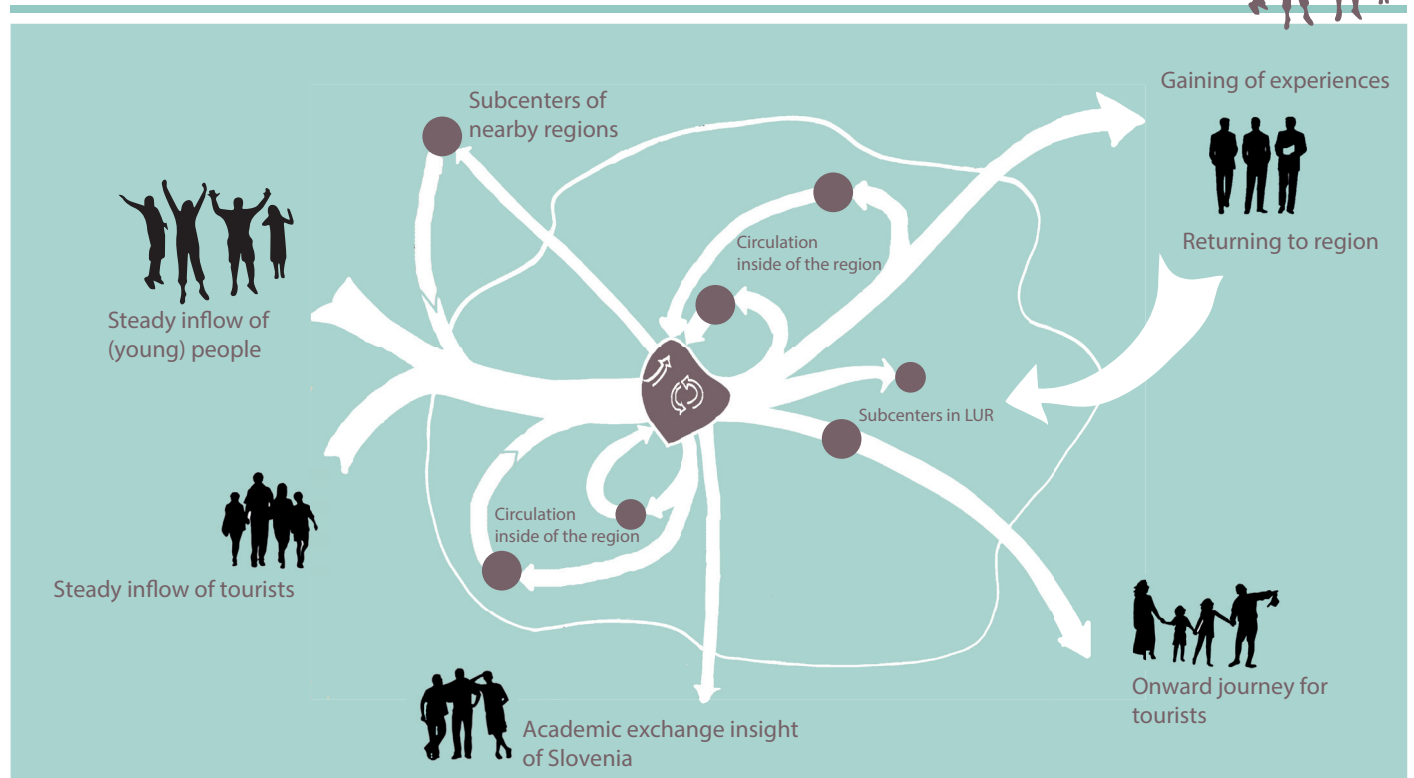
ACTIONS

The poster 'Actions' consists of five main actions. These actions are narrowed down and described in several points. On the right side of the poster, some of these actions are accompanied by a picture.

FOREVER YOUNG

Student UL FGG: Nadja Kmetič
 Students TU Vienna: Frank Mario Kierdorf, Felix Kortung, Tamara Vlk
 Erasmus student: Ewelina Więckiewicz (Poland)

Ljubljana Urban Region Vision 2030



P3 Tracking Ljubljana | Technical University of Vienna & University of Ljubljana | Wintersemester 2012/13
 Authors: Kierdorf Mario, Kortung Felix, Vlk Tamara, Kmetič Nadja, Więckiewicz Ewelina

Implemented actions in 2030

LUR Studio

- ▶ association of locals and stakeholder
- ▶ physical and virtual platform
- ▶ exchange of human resources
- ▶ available in each municipality
- ▶ regional meetings twice a year
- ▶ publisher of the LUR journal

LUR Day

- ▶ activities in every municipality
- ▶ feeless transportation inside of LUR
- ▶ awareness campaign for a sustainable development
- ▶ activities organized by LUR Studio and locals

LUR O'Run

- ▶ orientation run through different municipalities
- ▶ knowledge about the region's potential
- ▶ awareness about sporting activities and health care
- ▶ participation of all classes

LUR Parade

- ▶ internship programme for students and trainees
- ▶ cooperation between university and companies

LUR IP

- ▶ spring parade in Ljubljana
- ▶ for identifying hidden traditions
- ▶ organized by the LUR Studio



P3 Tracking Ljubljana | Technical University of Vienna & University of Ljubljana | Wintersemester 2012/13
Authors: Kierdorf Mario, Kortung Felix, Vlk Tamara, Kmetič Nadja, Więkiewicz Ewelina

Introduction

As a main part of the Master's Programme at the Technical University of Vienna, this project focuses on the Ljubljana Urban Region (LUR) and its development until 2030. The students have to develop four different visions for the region. Therefore, Viennese and Slovenian students work together to bring an external and an internal view into the project's activities.

The students were asked to form four groups and had to choose one main topic that they wanted to focus on.

The main goal of this group's work was to develop a vision for the Ljubljana Urban Region with the main focus on the 'identity' aspect.

Twenty-six municipalities, including the capital city, are part of the project. The aim to develop a vision for this region, in the horizon until 2030, is the recent development of the TEN-T 10 corridor, which will cross LUR when it is part of the Poly 5 project, which also includes the cities of Vienna, Bratislava, Budapest and Prague. In this context, Ljubljana and its suburban region has to undergo a development process to survive in the competition with big cities such as Vienna or Prague.

One very important external condition for creating the vision was to not only focus on the capital city itself or suburban centres but also on the rural regions and its small villages. The implementation of the



Ljubljana Urban Region Vision 2030 *target groups and stakeholder*



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vision also requires the involvement of all relevant stakeholders and target groups to which the vision should be addressed.

With the main actor, the Regional Development Agency of the Ljubljana Urban Region, other partners should be acquired and taught to work in cooperation on the same, and different, scales. By pursuing this way of development the whole community of LUR can become a more profitable and stable region.

POSTER – VISION

An interregional young lifestyle established by an on-going circulation flow of human and social capital as well as experiences and activities is the image of the Ljubljana Urban Region in the year of 2030.

The polycentric Ljubljana Urban Region is faced with the requirements for being a regional exchange area of the young and the old as well as research and practice. With the conditions of providing the young academics and trainees with constant new experiences and keeping the level of healthcare and lifelong learning high, the number of LUR inhabitants increasingly grows. Besides a high academic

GRASPING

Ljubljana, Oct. 2012

*Fine-tuning of the vision
Vienna, Oct. 2012*

First get-together of the international student group - **Grasping** through Ljubljana - Input of the stakeholder **First impression** of the planning region

Workshop - **Teambuilding** - Grasping through Ljubljana and its suburbs with particular attention to the **identity's potential** - Intensive visioneering process - **First vision** with focus on natural heritage and suburban region

Change of plans - **New inputs** from colleagues and stakeholder - Implementation of the 'key facts': architecture, culture, education, sports and nature - Idea of **constant flow**, drawn by actions on these topics

Generation of a young LUR, drawn by constant **student flow**, supported by specific actions, which keep people in the region and produce a **young lifestyle**

vision: forever young

GROUNDING

Vienna, Nov. 2012

*Fine-tuning of the actions
Vienna, Nov. & Dec. 2012*

Second get-together of the international team - **Merging** of ideas and concepts, which have been worked out meanwhile

New input from teachers - New to-do's: **Definition of stakeholder and target groups**

Research on target groups and definition of age classification with the background to address the vision to **all generations**

Definition of **main actions to implement the vision**, milestones and benefits into the concept

Development of an **actionplan** including involved stakeholder and target groups - Exchange with other groups - More input from the teachers and new impressions about the **importance of the stakeholder** and their functions

*Fine-tuning of the description about the proper actions,
Vienna, Jan. 2013*

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living standard for students, high living standards for families and older people are provided.

The overall objectives of the vision 'Forever Young' are the following:

- ▶ Ljubljana Urban Region is well known as a young lifestyle region
- ▶ LUR is the new brand of awareness for people with a young lifestyle
- ▶ LUR is the place where you feel ease, independence and self-fulfilment, all at once
- ▶ LUR is the region of exchange
- ▶ LUR is the region of innovation and education

- ▶ LUR is a centre of health and active life
- ▶ LUR is the region united in natural and cultural diversity
- ▶ LUR is the region of participation and cooperation
- ▶ LUR is high in demand by people and economy

POSTER – ACTION PLAN

This chapter shows an overview of the actions to be planned to implement the vision in the Ljubljana Urban Region, causing benefits for the target groups and stakeholders. Therefore, a table for these actions is elaborated, showing time as periods of implementation (i.e. action plan). Besides the actions, we show how to implement the visi-

Ljubljana Urban Region Vision 2030 *effects*



LUR Day



LUR Parade



LUR O'Run



LUR Studio



LUR IP

Benefits for people

Seasonal **joy-ride** local culture and sport events, organised by the municipality's inhabitants

Annual **spring parade** for representing the **social cohesion** of the 'forever young' LUR

Participation in a regional marathon and **experiencing** the **potential** of some municipalities

Association of all generations for **volunteering** and **networking actions**

Best possibilities for **gaining experience** and having better chances for a job

Benefits for stakeholder

Advertisement for CINDI and SUSA activities, by organising local culture and sport events

Creation of **awareness** about the use of **sport, health care and education** facilities in the region

Possibility for companies to show their **company profile** through actions during the marathon

Platform for **connecting** people and companies on social affairs

Guarantee of having young, fresh and energetic human labour for the next decades

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on and which benefits are given to stakeholders and people in general. Moreover, these actions should not only keep the intention of the Forever Young Lifestyle. Permanent actions always remind people of the on-going development process in their region. The general goal of these actions is the creation of awareness for the region as a whole as well as the creation of a sense of cooperation inside of the region.

The action box shows, in short, the implementation time, the measures and the actions. The actions are structured on a local and on a regional level. Furthermore, the box shows the level and frequency of implementation.

LUR Studio

Initiated by the RRA, the Regional Development Agency of LUR, the founding of the LUR Studio is assisted by financial support and by build up of expertise. It is an association of volunteers and stakeholders. One aim is the creation of a network for volunteering actions and requests. The platform also pursues the goal to connect citizens from different parts of the region and create a 'common-ground' strategy. Besides the role as an awareness campaign, the LUR Studio is the most important implementation measure for the realization of the vision, because it enables the connection between people through workshops and organization of events. At the beginning, meetings on the municipality level will be organised. At this stage, members

on the local level should be acquired. In the next stage, meetings for merging the issues of each of the 26 LUR Studios take place. In the best case scenario, the meetings which will include the representatives of all 26 LUR Studios, will be held twice a year, i.e. once in spring and another time in the fall term. The location will vary. The initiative of the LUR Studio also includes a regional social network which will be hosted by the Regional Development Agency (RRA); however, there is also the idea of having representatives of each LUR Studio, who would be responsible for the operation of the social network. People can exchange their opinions, services, messages or information on the platform of common workshops. Finally, once a year the Studio will publish a LUR journal, consisting of information and announcements about upcoming events and the developments in LUR. In this way, people will stay informed and, even if they will not be able to volunteer, they will feel included in the on-going processes in the region. Finally, the LUR Studio also has its own Internet platform, built like a social network. People from the region can register and have their own profile, which they can use for messaging, sharing, exchanging and communicating. In this case, the physical location of the LUR Studio is not required.¹

LUR Housing

LUR Housing is a LUR Studio initiative related to the generation of accommodation for common living for students, single people and retirees. This accommodation model is based on a shared flat model and takes into consideration the lifestyles of both students and retirees. It is a project encouraging social cohesion between the two generations. For this case, it should meet the needs of each generation, on the one hand, and, on the other, to consider the use of built structural conditions to integrate this initiative's accommodation into LUR. The Houses and Flats are named after their location, e.g. 'LUR House Kamnik'. The kickoff will be at the beginning of the new term for students and trainees. This happens in the fall term of 2015.²

LUR Parade

LUR is a region shaped by different traditions and identities. The LUR Parade is a seasonal event throughout LUR, representing its traditions and local culture. The concept of the Parade is focused on the traditional richness of LUR. The colourful annual spring parade with the aim of representing the unique social cohesion of the 'forever young region' in LUR takes place in Ljubljana once a year and highlights the hidden traditions of the region. In addition, regional companies have the possibility to showcase their company profile on the parade.³

¹ City of Chemnitz (2013), Planning Workshop, <http://www.chemnitz.de/chemnitz/de/die-stadt/chemnitz/stadtentwicklung/stadtentwicklungskonzept/stadtwerkstaetten/>

² Studentenwerk Chemnitz (2013), Accommodation, <http://www.swcz.de/de/wohnen>

³ Carnival of Cultures Berlin(2013), About, <http://www.karneval-berlin.de/de/concept.180.html>

LUR O'Run (LUR Orienteering Run)

»Orienteering is a sport that combines both a physical and a mental element. The basic idea in orienteering is to proceed from start to finish by visiting a number of control points in a predetermined order with the help of a map and a compass. In order to choose the best possible route, the orienteer looks at the characteristics of the terrain, while the fastest competitor to complete the course is the winner. What is unique to orienteering is that an orienteer must navigate and make quick decisions while running at high speed.«⁴

The sport provides the perfect, low-cost, possibility for people of all ages to participate at a regional orientation run through different municipalities, while getting to know the region's potential along the way.

LUR Day

It is generally believed that sustainable development is a vogue notion. To reach sustainability, public awareness should be raised, using a campaign where the challenges of sustainability are shown. Therefore, the LUR Day is a seasonal joyride through LUR with fee-less public transportation and local cultural and sport events organized by the municipality LUR Studio and by locals. It is the driving force for an incentive to discover the different features of LUR and the habitat in general. The involved stakeholders for sponsoring and advertising are the CINDI and SUSANA organisations.

LUR IP (LUR Internship Programme)

The LUR Internship Programme is intended for trainees and students and their career aspirations in LUR. The aim of this programme is to enable new motivation and, in addition, to enhance the level of ability of the locally available trainees and students. The LUR Internship Program for students and trainees is a permanent action during term holidays, hosted by local and regional companies, or during the term as a joint study programme. This programme is obligatory in new study curriculums. To students it offers the chance to take a closer and, especially, a more practical look at their desired professional field. It supports students to fix their goals to focus on a further course of study. This provides a new facility for students and trainees to broaden their experiences and to fulfil their expectations. Furthermore, offers to apply at the host companies are potentially gained. The Internship Programme is a cross-linkage between academic and vocational sixth-forms and employment.

LURPP (20-Minute Region – Report)

To summarize, »Making public transportation travel throughout the region easier is the main goal of LURPP. LURPP is the association of LPP, different regional bus operators and the national railway company in the Ljubljana Urban Region. The aim is to increase the

⁴ IOF (2013), International Orienteering Federation, About Orienteering, <http://orienteering.org/about-orienteering/>

amount of passengers by offering one ticket for all buses and trains in the region, which will later be extended to other services, such as park-and-ride or car sharing. The number of passengers should also be increased through advertising and improvement of bus and train schedules.«

This idea is adopted and modified. With the new concept of the public transportation system, the service is extended through the cooperation of other regional public transport companies, while LUR transportation association (LURPP) is the public transportation service for the whole LUR. The main aim is a coordinated network of routes and schedules. Furthermore, as a result, common standards and infrastructure investments are developed. These investments and developments are implemented through the participation of all individual companies. On the other hand, the municipalities could keep their own public transport companies independent as far as possible but still benefit from LURPP, e.g. common investments for eliminating social and physical barriers. The underdeveloped infrastructure is fixed by common investments of the municipalities and the LURPP. Finally, a strategy for easy payment offers a barrier-free possibility using the public transport, by also providing information in English on how to use the LUR Card and the possibility of buying a ticket from the bus driver directly.

POSTER – TARGET GROUPS AND STAKEHOLDERS

The target groups are defined by their main activities and the assumed age affected by the activities and consumption.

Target groups

Students and trainees:

The Slovene students start their study careers between the ages of 17 and 18. During their studies, most of the students live in nearby dormitories in the city of Ljubljana during the week and drive home for the weekend or holidays. On the one hand, this occurs because of the cultural background and family relationships and, on the other hand, because of the lack of events during weekends or holidays in Ljubljana.

The group of students and trainees is characterized by the possibility and motivation for further education, internships, mobility, travelling, and self-fulfilment. Mobility is what makes the region accessible and interesting for international students and trainees. This target group also includes exchange students. The task here is to affect and keep them in LUR. The potential for promoting the region across borders has to be explored. In this case, Erasmus, Leonardo and other exchange programmes are the events that involve the surrounding regions and affect them to support LUR as the hot spot of a new lifestyle. Once people move to LUR, they need to be attracted to settle down.

With the economy and education crumbling, people go abroad to create a base for further life.

To keep the students in the region during their studies, it is very important to offer internships, good living conditions and, in the case of LUR, diverse and attractive leisure time events.

Senior Citizens:

In this vision, the target group of senior citizens is an important one. The 'forever young' lifestyle should affect the young and, of course, also the elderly. Senior citizens are people from the age of 50 onwards. This means that senior citizens, on the one hand, are still working and, on the other hand, they are retired and subsequently have plenty of time for leisure time activities. The second group, especially from the age of 80 onwards, is characterized by 'less independence' and 'less mobility'.

In the whole Ljubljana Urban Region in 2012, there were 13.9% (73,791) people between the age of 61–75 and 6.8% (36,325) aged 76 or higher.⁵ But in the context of the general increase in the percentage of elderly people, this target group will increase until 2030.

Tourists:

The age of the target group of tourists varies. To attract young people to visit the city of Ljubljana it is important that their first impression of Slovenia is positive. Interesting destinations outside the city can give reasons to visit other parts of LUR. In this way, young people can see that the suburban and rural areas of LUR can be highly interesting. Some of them still lack a fixed objective for their future, so they have to be attracted to come again, for as long as possible. On the other hand, middle-aged and elderly people have found their middle point of life. They come for their holidays and to see something different. The benefits that these people bring into the region are versatile. Guests from outside the region are very welcome and beneficial for the region. The holiday makers give the inhabitants the feeling of importance and of being well known. They help to strengthen the feeling of inhabitants' identity. However, visitors want to feel good and they need to be attracted. The building of infrastructure is useful for both the inhabitants and visitors. To attract tourists, many aspects have to be considered; however, the Ljubljana Urban Region has much strength to draw upon.

Young families:

This group comprises adult couples between the ages of 26 and 35, which are in the process of creating a family and have special needs related to this future plan. In the process, they have to decide what kind of a career they want and where to settle down. The requirements of the children are also taken into consideration.

⁵ Statistical Office of the Republic of Slovenia, 2012

The assumption of the age of the families is based on the average age of women who get their first child between 27.3 and 28.8 years (2001–2011).⁶ Referring to the high amount of female and male graduates with higher education, which is a typical age of building a family. Vocationally trained people often start to work earlier than students, so often it is easier for them to organize their lives when starting a family. In the region, children presented nearly 14.9% (79,388)⁷ in 2011. It is important to realize the concepts and measures which make it easier for the parents to manage their daily lives with children, work and household. Facilities for education, jobs, leisure time, mobility and accessibility are requested. These are the basics, which are supplemented by the concepts of sports, tradition, architecture and nature. In this respect, the foundation of the Generation's Club is a highly important measure.

Employees:

More than a half of the inhabitants of LUR are employed (69.4 %, 368,153 in 2011). To increase the number of employed people and to keep them in the region, new capacities in job categories are needed, which are not represented in the case of the region. It has to be worked out in detail which special qualities of the region can be used as an employment engine. As a milestone, further measures have to continue the idea and measures that are part of the realization process of the Regional Development Programme of the Ljubljana Urban Region 2007–2013. In the future, the focus should be on natural heritage and other aspects of tourism.

Stakeholders

Stakeholders are an important part of the Ljubljana Urban Region development. The stakeholders who participate in the implementation of the vision are divided in three groups. The first group comprises quality assurers which are responsible to keep the level of potential of the region, for example of educational capacities. Secondly, executive organisations are mainly responsible to enable the goals, for example by organisation of new internship partnerships. Finally, the investors have the responsibility to take part in the implementation of actions, benefiting from win-win situations, for example from the internship programme (action plan).

The ten most important stakeholders are:

- ▶ University of Ljubljana
- ▶ Third Age University
- ▶ Regional Development Agency of the Ljubljana Urban Region
- ▶ Ministry of Labour, Family and Social Affairs
- ▶ National Institute of Public Health Chronic Diseases Prevention Centre

- ▶ Slovenian University Sports Association
- ▶ Slovenian Tourist Information Centre
- ▶ Technological Park Ljubljana
- ▶ Employment Service of Slovenia
- ▶ Municipalities of LUR

POSTER – GENERAL BENEFITS

Benefits for people

Importantly, every target group should be provided with the benefits of attractive activities, attractive LUR participation, attractive public transport and attractive awareness-raising. The attractive activities are developed to offer facilities for leisure time activities. The participation in LUR is a central benefit of the vision, promoting the feeling of 'one common-ground region', which gives the population the feeling that the design is in their hands. An attractive public transport is also the result of the new system (see also LURPP). Public awareness is, last but not least, another central idea of the vision and a means to enhance and especially to use LUR's different potentials (see also LUR Parade). The raising of public awareness is a passive way to use LUR's potential, while an active one is, for example, when the attractiveness of the region is shown to target groups directly, e.g. LUR Day.

National and international students are affected by being offered better study conditions and study programmes. This means that they have a chance to present themselves through the internship program (LUR IP) during term holidays or during the study period as part of the obligatory university curriculum. Trainees are also affected by the internship programme LUR IP. They can choose to stay in the region or go abroad on European exchange programmes, like Erasmus, or with the help of AIESECs or IAESTEs.

In terms of the labour market, the internship programmes raise the level of ability.

Senior citizens have a modern region to live in. They can spend time with the young through LUR Studio; additionally, there is the availability of outdoor activities and facilities that offer them the possibility of shared living or spending their free time.

Young families have a modern, clean and safe environment and the conditions to stay in LUR and to raise their children there. Furthermore, attractive activities through events and facilities for health care and active life are given.

Tourists that decide to come to LUR are met with a modern city and suburbs with a lot of activities, accommodation facilities and pure nature that is only a few minutes away using public transport.

⁶ Statistical Office of the Republic of Slovenia, 2012

⁷ Statistical Office of the Republic of Slovenia, 2012

Benefits for stakeholders

The Third Age University and the University of Ljubljana are faced with students (young and old) who want to study in high quality conditions. This means not only additional money for the universities and more study programmes but it also makes them more student and teacher friendly. Their programs and experiences from other students can be advertised on different public occasions throughout LUR.

AIESEC and IAESTE are affected with more possibilities for exchanging students since LUR is promoting its universities in the region and also outside the region. Foreign students who are located in LUR get to know it and tell their friends about it and, later, they can come back as tourists.

The National Institute of Public Health Chronic Diseases Prevention Centre – CINDI is affected by the chance to bring awareness to people through different sport activities in LUR and through lectures given as part of study programmes or on conferences. To bring even more attention, they are offered to promote their activities in events.

The Slovenian University Sports Association – SUSAA is affected by organization of sport events for students and other inhabitants, for example the LUR Orientation Run (see also LUR O'Run). They are able to offer their knowledge to other organizers of similar events.

The Employment Service of Slovenia (ESS) is affected by a wider range of jobs. A successful cluster of educational institutions and companies is a reason for the lower unemployment and the higher number of versatile new-age job positions.

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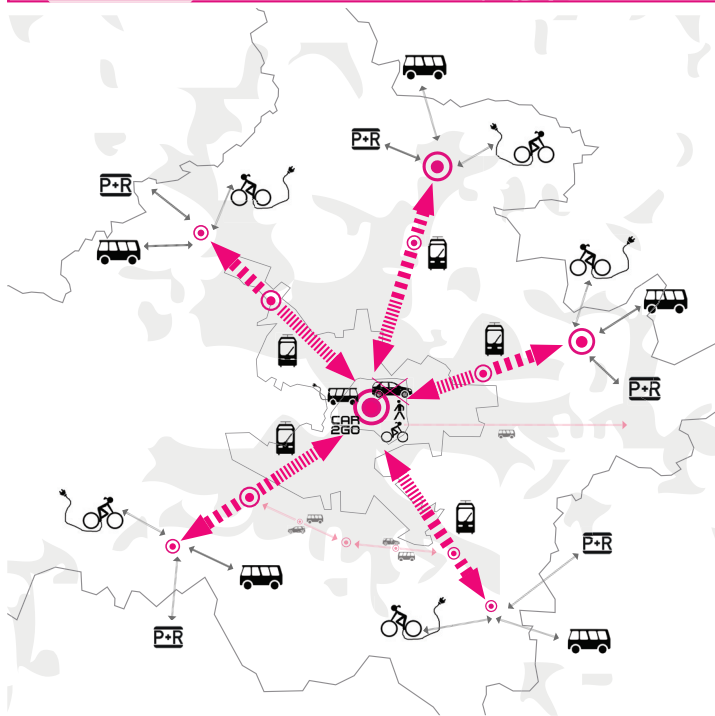
SURS, Statistical Office of the Republic of Slovenia, <http://www.stat.si/letopis/> (October 2012– January 2013).

20-MINUT REGION

Student UL FF: Matej Gregorič

Student UL FGG: Uroš Rozman

Students TU Vienna: Fabian Dorner, Eva-Maria Missoni-Steinbacher, Julian Thomas



Tracking Ljubljana Region Fabian Dorner | Julian Thomas | Uroš Rozman | Matej Gregorič | Eva-Maria Missoni-Steinbacher

POSTER – VISION

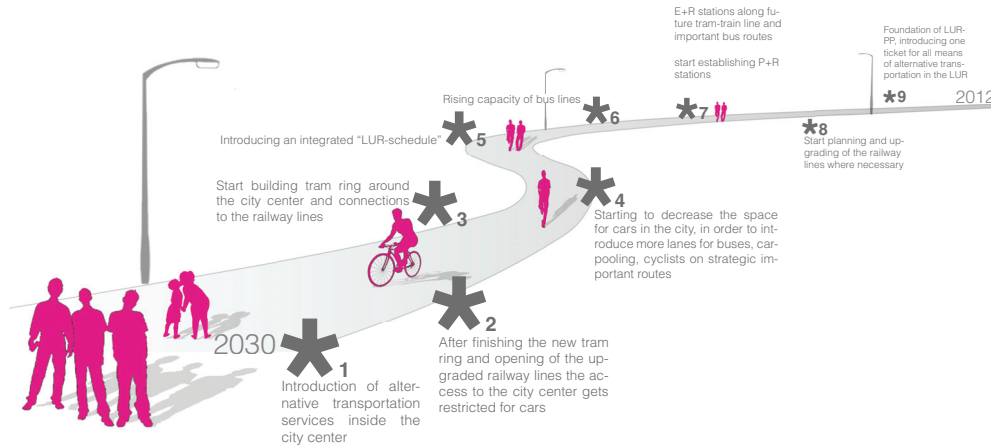
The first poster shows the essential parts of the vision of the 20-minute region.

In 2030, the Ljubljana region will provide a fast, comfortable and clean integrated transportation network for its inhabitants, which will make it possible to offer connections between the centres of different towns in the region and Ljubljana within 20 minutes.

The vivid city centre of Ljubljana is designed almost traffic-free, with very restricted access for cars. Exceptions are, for example, car sharing or e-cars that run emission-free on electricity. Public space is designed to serve the needs of pedestrians and cyclists who have a lot more space now, as access for cars is restricted, green and rest areas are provided and there are easily accessible bike parking stations which are sheltered, burglar-proof and provide plugs for e-bikes.

To support fast transportation within Ljubljana, one lane of the roads is reserved for buses, while the tracks of the tram-train run on a separate level of the street, i.e. independently from car traffic. This means of active mobility is supplemented by compact e-buses (such as from Siemens; they need 15 minutes for recharging and have a range of 120–150 kilometres). Thereby, space can be reclaimed for leisure, enjoyment and consumption: green areas, playgrounds, outdoor cafes and dining areas.

The backbone of this system is a tram-train, which provides a fast connection between towns and villages along the settlement axis (indicated by the grey ranges) and the Ljubljana region, mainly by using the already existing trails. These axes connect the towns of Domžale, Medvode, Litija, Grosuplje, Vrhnika and Kamnik with Ljubljana. The aim is to ensure fast and comfortable public transport for a large number of commuters, as Ljubljana features the highest gravity for the



working population and at the same time safe non-renewable resources, as traffic has the strongest share (about 34%) in energy consumption. Each kilometre, cars produce 10 times more emissions than buses and 30 times more than trams per passenger.

The ring around the city centre is the base for interconnecting the lines and it enables to change from one line to another – on the basis of an integrated schedule, so that uncomfortable waiting periods are minimized. At the main railway stations, passengers can change to national and international rail services. Buses serving the city (not just in the centre) are not affected by car traffic, as there is a lane reserved for buses only.

When the tram-train is leaving the city, it changes to train tracks where it can go faster. Another benefit of this system is that passengers do not need to change between different means of transportation on their way from Ljubljana to other parts of the region. Tracks along the axes that connect the relevant towns and villages with Ljubljana mostly already exist, but there is a need to upgrade and electrify some of the tracks.

To provide fast connections, it will be inevitable that additional express trains travel along the route in order to ensure a fast link between the bigger towns in the region (that hold more commuters) and the centre in peak hours. These tram-trains will also offer storage space for bikes to make inter-modal travel tram-train-bike possible.

In the periphery of the Ljubljana region, different types of services allow the passengers to travel easily the last mile from the tram-train stop to the final destination of the trip. Regional buses are serving towns and villages

B e s t P r a c t i c e

A bus only powered by battery-stored electricity is in service in the city centre of Vienna

*1



In the Vauban settlement in Freiburg, Germany access by car is only allowed for residents and only for unloading

*2



In Kassel, Germany regio-trams are connecting the city with rural areas

*3



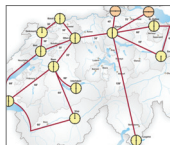
Separate lane for buses and cyclists in Kiel, Germany

*4



Switzerland is establishing an integrated public transportation all over the country

*5



In Hamburg extra-long buses are serving highly demanded routes

*6



At this bike station in Washington D.C. e-bikes can be recharged while being stored during the day.

*7



The „OV-chipkaart“ is a contactless smart card system for all public transport in the Netherlands

*9



Cargo bikes allow you to carry almost everything by bike

*1



which are further away from the next tram stop. Thanks to the integrated system, people do not have to wait more than five minutes to reach their connecting bus. These buses are also running between the axes of the tram-train lines in order to provide a dense network.

Where it does not pay off to use buses because places are too small, hailed shared taxis are an alternative. This system is attractive especially for elderly people, as there is no need of operating an own car; also, future demography counts with an increase of elderly population, as life expectancy is growing and birth rates are decreasing.

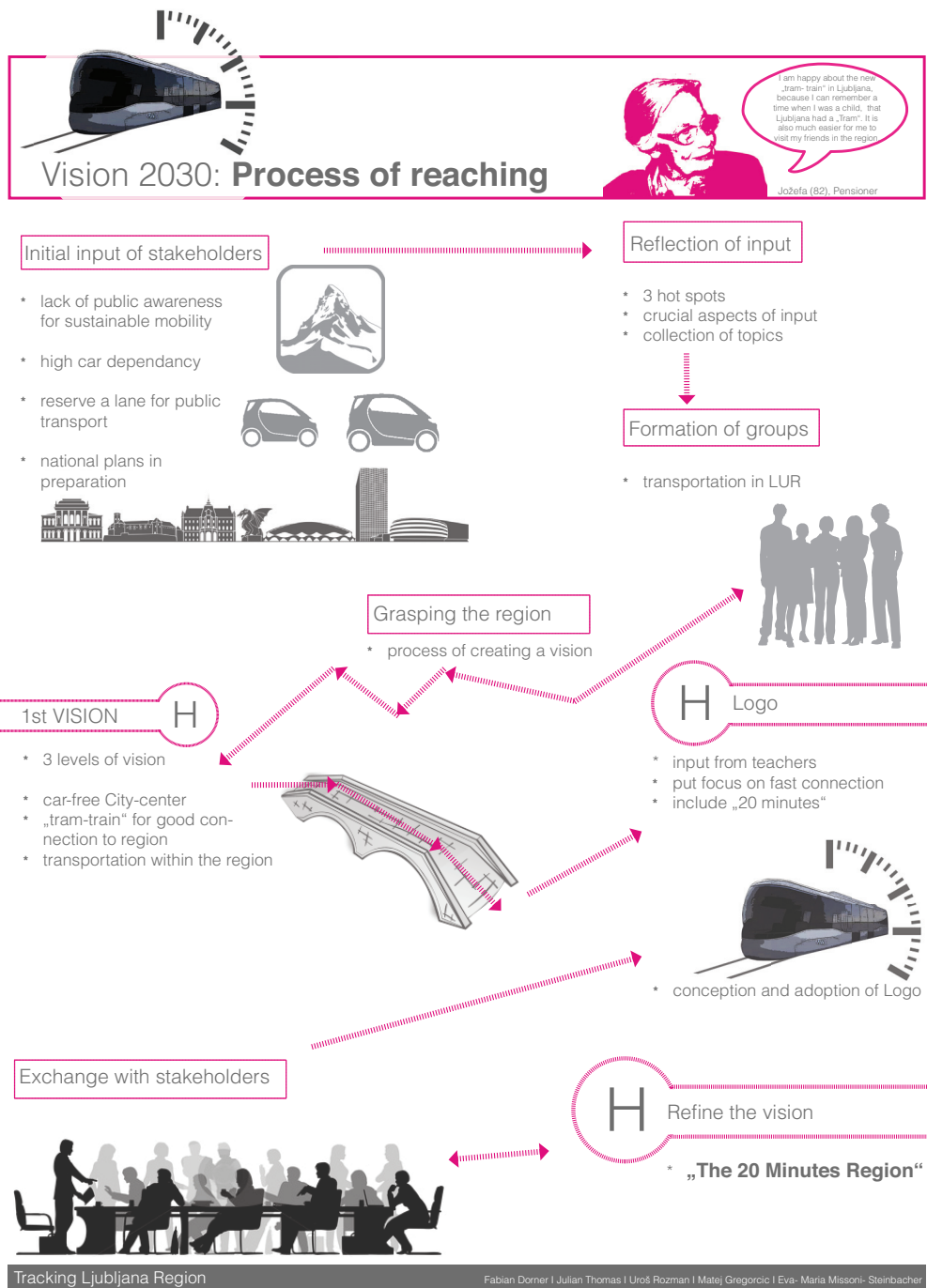
Walking, bikes and e-bikes are other alternatives to reach tram-train stations and foster fitness and health. The average accepted time to reach a station is about 10 minutes. To raise the usability of e-bike in the region, bike-parking spaces/garages are equipped with plugs to facilitate recharging, while owners are at work or at other activities.

Finally, the stops of the tram-train outside Ljubljana will be equipped with park-and-ride zones to offer access to the network for those people whose place cannot be efficiently covered by public transportation and where distances for cycling are too big.

Thus, public transport will be number one choice of transportation for commuters in the region.

Modal split will change in the following way:

- ▶ Trips performed by public transportation: from 13% to 30%
- ▶ Trips performed by bicycles: from 10% to 20%
- ▶ Trips performed on foot: from 10% to 30%
- ▶ Trips performed by car: from 67%



to 20%; this means a reduction by 47% in car use.

The decrease of car traffic leads to several improvements for the population and the environment, such as reduction of greenhouse gas emissions, car accidents, traffic-related noise impact and land consumption for traffic infrastructure, whereas at the same time free space in the towns and cities of the region will be gained.

POSTER – MILESTONES

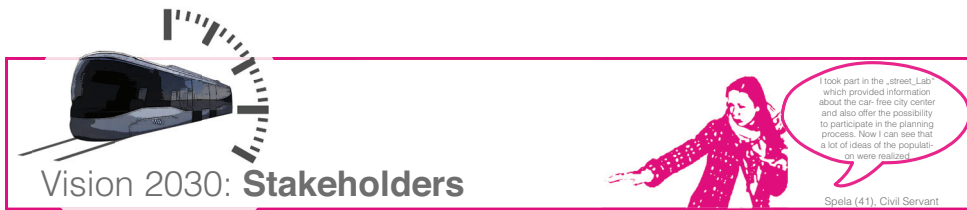
Due to the complexity of the network and the changes to the towns of the region, it is necessary to introduce it in different steps. This poster shows the most important steps of the establishment of the 20-minute region.

2030

2030 is the year of the finalisation of the project. The tram ring around the city centre of Ljubljana gets completed, which makes it possible that the tram-train network goes into operation. Along with that, the access for cars to the Ljubljana city centre gets restricted, only residents, transportation services and emergency services are allowed to enter. Though some cars are allowed to enter, they have to be parked in the lots outside the centre. Because of this, much space is gained in the centre which can be used by pedestrians, cyclists and residents. To guarantee mobility to all groups of people, a public transportation system run with electric buses connects the city centre with major public transportation hubs, such as the main railway station.

2025

The construction of the tram lines in the city centre starts, which will follow the ring around the city centre and connect along major roads to the outskirts of Ljubljana, where they meet the train tracks leading to different towns in the



Companies

* Bus Companies

- * LPP (Peter Horvat)
- * Kam- BUS (Sonja Zore)

* National Railways

- * (Dusan Mes)

* Building Companies

- * Strabag (Dietmar Cerjak)
- * Vinci (Mojimir Pregelj)
- * Alpine (Christian Trattner)
- * Siemens (Peter Gottal)
- * **Slovenian Cooperation**
- * SGP Graditelj (Janez Zorman)
- * Železnisko Gradbeno Podjetje (Leon Kostjov)
- * SGP Pomgrad (Tadej Ruzic)

Administration

* RRA LUR

- * Director (Liljana Modjar)
- * Ass. Director (Matej Gojicic)
- * Department for regional Development (Liljana Drevemsek)

* Ministry of Infrastructure

- * Directorate of Infrastructure (Bostjan Rigler)
- * Directorate of Trafik (Bojan Zlender)
- * Directorate of Spatial Matters (Tanja Bogataj)

* Ministry of Labour, Family and Social Offers

- * Directorate of Labour and Labour Rights (Peter Pogacar)

* Ministry of Environment and Agriculture

- * environmental impact assessment division (Vesna Kolar Planjinsic)

Municipalities

* most affected Municipalities

- * Ljubljana (Zoran Jankovic)
- * Domzate (Toni Dragar)
- * Kamnik (Marjan Bavec)
- * Medvode (Stanislav Zagar)
- * Litiija (Franci Rokavec)
- * Grosuplje (Dr. Peter Verlic)
- * Brezovica (Metod Ropret)
- * Log- dragomer (Mladem Sumina)
- * Vrhljica (Stejan Jakin)
- * Skofljica (Ivan Jordan)
- * Dol pri Ljubljana (Primoz Zupancic)

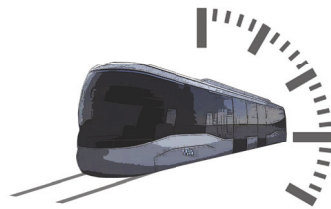
Target_Groups

* Commuters

- * SOU (Rok Sottlar)
- * Focus (Ziva Boggo)
- * Umanotera (Vida Ogorelec)

* affected Population and Businesses

- * Leaders of citizens initiatives connected to measures of the vision



Vision 2030: The 20 minutes Region

Ljubljana Urban Region. Even though lanes on these roads will have to be closed for car traffic, this does not necessarily mean that the traffic system will be collapsing. One reason is that the capacity of bus lines is raised further, but the major reasons are in the changes which happened in the years before, so that streets are used more efficiently now; furthermore, there is an increased use of bikes for trips around the city.

2021–2024

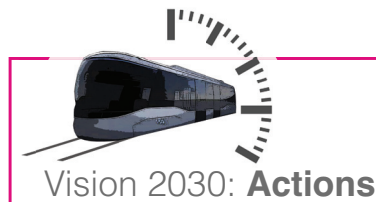
In order to improve bus services and to make cycling and walking in Ljubljana more comfortable, on many streets around the city centre lanes for cars are reduced. These lanes will be reserved for buses, cycling or car pooling. Apart from that, the improvement of bike lanes and pedestrian connections is going on.

2018–2019

Bus and rail operators change their schedules in order to improve the integration of the transportation network to make the system more efficient and passenger-friendly. Different lines are no longer competing against each other because they were serving similar routes; nodes in the network allow quick changes between different services as they arrive and leave at the same time. On many lines, the number of services is raised to offer a higher capacity and better service for passengers.

2017

After the construction of many park-and-ride and e-bike stations in the towns of the Ljubljana Urban Region, the number of users of public transportation is rising. This makes it necessary to increase the frequency of bus lines connecting Ljubljana with the towns where park-and-ride stations were established.



Everyday I am cycling to the „Tram, Train“ Station in Groszeuge which is 2.5 km from my house away on my e-bike. In one year I lost 7 kils of weight and now I feel much more healthy.

Marjan (53), Lawyer

Expert_Level

* Stakeholder Workshops

- * Municipalities
- * Ministries
- * RRA_LUR
- * Bus Companies
- * National Railway Company

Stakeholder workshops **inform** stakeholders about the benefits of the projects and serve as **planning and coordination tool**.

* Excursions

- * Municipalities
- * Ministries of Infrastructure / Environment
- * Bus Companies
- * National Railway Company
- * Focus

Excursions in order to **visit best practise examples** (e.g. regio tram Kassel, Vauban settlement Freiburg, cycling policy Copenhagen) and thinking how this could be reached in Ljubljana.



Public_Level

* Participation / „Street_Lab“

- * Affected population
- * Commuters

The **street lab** in Ljubljana and **workshops** all over the LUR allows people to **inform** themselves about the vision and the different projects and **share their ideas**.

* Promotion

- * Commuters
- * General Public

Actions to convince the population of the **benefits of alternative transportation** and to **rise awareness** about the impact of car traffic including cooperation with TV stations and newspapers, advertising „mobility days“ and the introduction of LURBANA CARD.

2015

The railway branches, which will be the branches of the tram train network, start to get upgraded. They will be electrified, some stops will be added to enhance accessibility and, partly, there will be a second track built, in order to raise the capacity to meet the demand caused by more frequent services in the future. At some point, the tracks also get straightened to allow travel with higher speeds. Car-sharing operators start to offer their services in the Ljubljana Urban Region, which allows people to sell their cars if they were not used frequently.

2013

In 2013 LURPP starts operating. LURPP is the association of LPP, different regional bus operators and the national railway company in the Ljubljana Urban Region. The aim is to increase the amount of passengers by offering one ticket for all buses and trains in the region, which will later be extended to other services, such as park-and-ride or car sharing.

Best practice

These are the solutions in other European cities, which serve as examples for the measures of our vision. It shows that innovative ideas can help to establish good and affordable transportation services. Some of these projects need to be adapted when used in Ljubljana, which can lead to other innovative and potentially even better solutions.

Poster – Stakeholders

In order to realize the new transport system in the Ljubljana Urban Region, it is necessary to identify and convince important stakeholders and target groups about the benefits of this project. It is not only important to convince them, but also involve them into the development process of the project, as they might offer important input and have good ideas. We identified four types of organizations and target groups which are relevant for our project.

Companies

This group includes transportation companies and building companies. The transportation companies, including LPP, KamBus and Slovenian Railways, need to cooperate in the future in order to offer good service for their customers. The first step will be the introduction of LURPP and the LURBANA Card. This means that they have to change their ticketing system and adapt their timetables in order to work together in an integrated system. Later, the buses of these companies will serve as feeder lines for the tram-train or travel on routes between the tram-train lines. Moreover, it is especially important to convince the Slovenian Railways of the project as the tram train would partly run on the tracks of this company.

National and international building companies could be partners in a PPP model, which could help to finance this project, as it could be

quite hard to acquire enough money in a short time. A PPP model can help to reduce costs for the municipalities; especially in the first twenty years the infrastructure could be maintained by a private company.

Administration

Cooperation with public institutions and organizations is essential for several reasons. On the one hand, they have the know-how on the topic and can provide important information, on the other hand, they can offer financial support to the project; maybe changes in the legal framework are also necessary. A special role has the RDA LUR, which could be, as the leading partner, in charge of the project.

Municipalities

As all municipalities in the Ljubljana Urban Region are affected by this new transportation system, all of them are important stakeholders. It means a deep change in the traffic policy in LUR but also in Slovenia. It can be difficult to convince car drivers who are also an important group of voters why enforcing the use of public transportation is better for almost everyone. Finally, they will be the main investors in this system and, due to the building of new infrastructure, some changes in the structure of these municipalities will have to be made.

All 26 municipalities are important stakeholders in the realization of the project, but 11 of them have a special function as the tram-train will have its tracks in their terrain. So they are more affected by the new system, also because the stops of the tram-train will become the nodes for feeder services and will host park-and-ride and e-bike stations.

Target groups

Commuters are an important target group because they are very frequent users of transportation systems, while the change, as it is planned in this project, means also a big change in the daily routine of commuters. Those who are already using public transportation or are cycling or walking to work or their place of education can easily see the benefits of the new system. But it will be hard to convince of the benefits of the system those who are using cars and who will probably only see the restrictions which come along with the project.

As they are all some kind of experts in the transportation system, it is not only important to inform them about the benefits but also to give them the possibility to share their ideas for the improvement of the system. There are some organizations which are working in the traffic sector. To cover another big group of commuters, it is also planned to invite the student's union ŠOU to participate in the planning process.

Another target group is the people who are affected to a great extent by the change in the transportation system. This influence might be regarded as negative, for example by those who live next to future park-and-ride stations or people and businesses in the city centre of Ljubljana who might consider a restricted access for cars as loss of

mobility. They might initiate movements and citizen initiatives to fight against it. Our approach is that they are a very important part of this group of stakeholders and that they should be invited to share their ideas and opinions and even to search for different solutions.

It is important to inform the population at an early stage of the planning process and make the process itself as transparent as possible in order to gain support and understanding for the project and keep emotions down.

Poster – Actions

After identifying the important stakeholders and target groups, it is important to find a strategy to convince them of the benefits of the project to make the realization possible.

This strategy is working on a public level and on an expert level. On the expert level, different experts who have already some knowledge in planning and building traffic infrastructure are invited to inform themselves about the project and share their ideas to make it even better, whereas, on the public level, everyone who is interested can take part in the project development. This participation process will be coordinated by LURMO, the Ljubljana Urban Region Management Office, which will replace the RDA LUR according to the plans of the group which is working on the topic of cooperation.

The expert level

There are two ways to involve stakeholders in the development of this project.

Excursions

These excursions will take stakeholders to places around Europe in order to take a closer look at the different best-practice examples. There they can learn more about the project, about its realization and how the operation works. In workshops, they will have the possibility to discuss if this was a suitable solution for Ljubljana and, if it was, how it had to be adapted to make it work.

Destinations for these excursions could be the car-free settlement of Vauban in Freiburg, the Regio Tram in Kassel, Germany, to see how an integrated public transportation system can be established even in rural areas, or Copenhagen to learn how the cycling policy of the city is working.

Stakeholder workshops

Different kinds of workshops will be organized to inform the stakeholders about the different projects about the vision, offering them the possibility to take part in the planning process. Planning and realizing such a big project is really complex and therefore it is very important that experts from different backgrounds are working on it together. So possible problems can be detected at an early stage of

planning, giving them the possibility to search for solutions together. Moreover, they might have ideas how these visions and its projects can be further improved.

The public level

The public level is based on informing and promoting the project to the public and on participation of the people who are interested.

Information and Promotion

Different steps are taken to inform and convince the population about the benefits of alternative ways of transportation and to raise awareness about the impact of car traffic on the environment, health and the costs for the public sector.

In order to reach these goals, cooperation with TV stations and newspapers could be established to raise awareness for traffic issues. Another important issue is to advertise public transportation and the use of bicycles. Car drivers are the main target group, so posters along motorways or other places, which are easily seen from streets, would be good places for that. Free rides on public transportation on 'mobility days' could invite people to test the system which will be improved from year to year. Events could be organized where you can try out e-bikes. Finally, the introduction of the LURBANA CARD will make it easier to use public transportation in LUR.

Participation

In order to support the participation of citizens in the planning process, a street lab in the Ljubljana city centre is planned. This could look like a future tram and inside people could get information about the vision and the planned measures. People would be invited to share their ideas for the use of the space which will be gained by restricting car traffic in the city centre.

Moreover, there will be different workshops in the municipalities of the LUR. Apart from getting information about the vision, people can share their ideas about the best way of connecting their municipality to other towns in the region.

Andreas Dillinger, Mojca Foški, Petra Hirschler, Simon Kušar, Alma Zavodnik Lamovšek, Gašper Mrak, Geli Salzmann

The focus of the international student workshop 'Tracking Ljubljana Region' was to examine the role and function of a particular planning tool, i.e. 'visioneering', within the planning cycle of a major transport infrastructure project.

The awareness of existing regional developments and a common view concerning further development possibilities provide the groundwork of successful regional planning and vivid development processes. Regions – even when determined by administrative borders – are not clearly bounded in our minds and in their function. In order to serve as spatial units for political and planning formations, they must, first, exist in people's consciousness as a planning subject. Visioneering operates by designing comprehensive and inspiring pictures of regions in order to stimulate the political, public and professional discourse. This technique, i.e. the visualization of regional facts, connections and visions, is used as a communication tool in order to open and exceed the local perspectives. Visioneering unites different methods of envisioning and engineering and operates at the interface of creative design, methods of communication and technical / scientific spatial analysis. This situation, where the students get the chance to contribute to the scientific debate of planning, makes the master project 'Tracking Ljubljana Region' highly innovative.

In three acts (grasping, grounding and spreading), the students were asked to approach the special challenges of the Ljubljana urban region from the multilateral level, in the context of the European Main Transport Infrastructures. Based on both the opportunities and risks of the implementation of such major infrastructure projects for the Slovenian urban region, bilateral student groups developed visions of the region. These visions were the starting point to design a planning process from 2030 backwards – to the present. Actions, milestones and stakeholders were defined and integrated in their concepts to reach their futures of the Ljubljana Urban Region. In the process, the spatial dimension of the European infrastructure network – with the focus on the Ljubljana region – was taken into account.

All groups identified several different potentials of the region and figured out how to strengthen and develop the area. The results of the

discussion and design of the groups, under the supervision of Slovenian and Austrian teachers, were four visions:

- ▶ The 20-minute Region: An intermodal mobility concept
- ▶ Balkan_Hub: Gateway to the Balkans and the Adriatic Sea
- ▶ LURMO: Inter-regional cooperation
- ▶ Forever Young: Attractive regional identity of the Ljubljana Urban Region

Next to the professional tasks of visioneering, while handling the inputs and demands from 'real' decision-makers, i.e. the City of Ljubljana and the town of Kamnik, the students worked within an international setting. With the background of different planning schools, not knowing each other at the beginning, and the language barrier, the students found themselves engaged in a personally challenging process as well – both tasks were mastered by all students successfully!

The master project 'Tracking Ljubljana Region' provided both universities with an added value in their fields of research, especially that related to visioneering. With the workshops in Ljubljana and Vienna, the cooperation between both universities was deepened and new aspects and topics for future activities were identified.

Finally, the University of Ljubljana and the Vienna University of Technology want to heartily thank the people who supported and enabled the success of this workshop:

- ▶ Sandro Fabbro | University of Udine
- ▶ Matej Gojčič | Regional Development Agency of the Ljubljana Urban Region
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- ▶ Maša Šorn | Regional Development Agency of the Ljubljana Urban Region
- ▶ Ivan Stanič | City of Ljubljana

4 ABOUT THE AUTHORS

CHIARA ANDREOTTA

graduated in Architecture and Industrial Design (Bachelor's Degree) at the University of Udine in 2010, and she is now pursuing her master's degree. In 2004, she published an essay concerning the architectural development in Borca di Cadore (Italy). She has several years of national and international work experience. Currently, she is writing her master's thesis at the Vienna University of Technology about the Visioneering approach in urban regions.

ANDREAS DILLINGER

graduated from the Vienna University of Technology in 2006 (MSc/ Dipl.-Ing. in Spatial Planning) and is now a PhD student. He has gained experience in cross-border and regional planning as well as regional development. For eight years he worked at Mecca-Consulting Engineers in the fields of rural and endogenous development, Learning Regions, funding advice and moderation. He started to work on research projects and teach at the Vienna University of Technology in 2011.

THOMAS DILLINGER

completed in 2003 his PhD thesis Endogenous Regional Development in Border Regions. Since 2005, he has been head of the Centre of Regional Planning and Development at the University of Technology. He is a lecturer and researcher in the fields of regional planning instruments in Central and Eastern Europe, cross-border and inter-regional planning and endogenous regional development. Since 2010, he has headed the study commission for spatial planning.

SANDRO FABBRO

Sandro Fabbro graduated in Urban Planning at the Istituto Universitario di Architettura (IUAV) in Venice (1978) and completed his PhD in Territorial Planning (IUAV, 1993). Since 1992, he has worked at the University of Udine, Italy. Now, he is Associate Professor and teaches 'Urbanistica' and Territorial Planning in the courses of Civil Engineering and Science of Architecture. Currently, he is president of the National Commission for Infrastructural Policies of the Italian Istituto Nazionale di Urbanistica.

MOJCA FOŠKI

was born in 1968. A geodetic engineer by profession, she completed her master's studies (2000) in Spatial Planning at the Faculty of Civil and Geodetic Engineering, University of Ljubljana. She is employed as a senior lecturer at the University of Ljubljana, Faculty of Civil and Geodetic Engineering, at the Chair of Spatial Planning. Her main interests of study are spatial planning at national and, particularly, at local levels, urban development and land development with land policy instruments, land use planning, rural development and village renewal, and other topics connected with spatial planning at local levels. Her research work has been mainly oriented in national/local projects. She is a member of the Association of Surveyors of Slovenia and the Town and Spatial Planning Association of Slovenia

MATEJ GOJČIČ

was educated in Architecture and Spatial Planning. In the past, his work involved 3D modelling & animation for computer games and TV commercials, Preparation of National Spatial Plans for Highways & High Voltage Power Lines and development of a GIS database for the Slovenian Civil Aviation Authority. Currently, he is the Deputy director of the Regional Development Agency of the Ljubljana Urban Region, responsible for steering regional development projects in the right direction and towards a common goal.

PETRA HIRSCHLER

graduated in Urban and Regional Planning from the Vienna University of Technology. She worked with a consultancy for 10 years, specializing in regional development projects in Central and Eastern Europe. Today, she is employed at the Vienna University of Technology, Center of Regional Planning and Regional Development. She teaches Regional Planning and Regional Development and organizes international student projects. Fields of research: regional planning and development, cross-border cooperation, European Union policies and gender mainstreaming.

SIMON KUŠAR

is an assistant professor at the Department of Geography at the Faculty of Arts, University of Ljubljana. The fields of his research and educational work include, in particular, regional and spatial planning, and economic geography. His main research interests are questions related to defining regional problems and problem regions, spatial potentials, location of manufacturing and the institutional approach in economic geography.

ALMA ZAVODNIK LAMOVŠEK

graduated at the Faculty of Architecture, University of Ljubljana (1990), and continued her postgraduate studies in Spatial Planning at the Faculty of Civil and Geodetic Engineering, University of Ljubljana, where she obtained her M.Sc. (1997) and PhD (2007) degrees. Since 1997, she has been employed at the Chair of Spatial Planning, Faculty of Civil and Geodetic Engineering, University of Ljubljana. Her current position is head of the Chair of Spatial Planning. Since 1992, she has been involved in different types of research, planning and urban design projects – for local communities, the ministries (e.g. spatial planning policy of the Republic of Slovenia) and EU-funded projects. She has published a variety of articles, book chapters and reports in Slovenia and abroad.

GIANNICOLA MARENGO

is a Transport Planning Manager within the Province of Turin. He is a member of the Lyon–Turin new rail link Observatory and a Lead Partner representative for the POLY5 project.

GAŠPER MRAK

was born in 1976 in Ljubljana. In 2005, he graduated in Architecture from the Faculty of Architecture in Ljubljana. Since 2001, he has worked on several architectural and design projects. From 2001 to 2011 he worked as an outsourced designer for the Delo revije company. Since 2010 he has been employed as an assistant at the Faculty of Civil and Geodetic Engineering, at the Chair of Spatial Planning. In October 2010, he enrolled in PhD studies at the Faculty of Architecture and is currently working on his PhD. His PhD topic focuses on spatial development of tourism in rural Slovenia.

GELI SALZMANN

MAS ETH, graduated in Architecture from the Vienna University of Technology and in Urban Planning from the ETH Zürich. After working in Vienna for four years as an architect with Prof. Anton Schweighofer, in 1996 she founded her own atelier in Dornbirn, Vorarlberg, specialising as the interface of architecture and town planning. Besides the practice in her office, she teaches at universities (e.g. UT Vienna, Universität Innsbruck, Polis University Albania). She is also a member of the Advisory Council for Housing, Federal State of Vorarlberg, and a board member of the Architectural Institute in Vorarlberg, Austria.

MAŠA ŠORN

received her undergraduate degree in Landscape Architecture at the University of Ljubljana, followed by an MSc degree in Theory and Practice of Sustainable Design at the Welsh School of Architecture, Cardiff University. Before joining the team at RDA LUR, she worked as a landscape architect and research assistant in the fields of urban planning and landscape design.

IVAN STANIČ

graduated from the Faculty of Architecture in Ljubljana. He was a research assistant at the Oxford Brookes University on a Chevening Scholarship of the British Council. He worked at the Urban Planning Institute of the Republic of Slovenia on various regional and local planning issues. Also, he was editor-in-charge of the planning journal *Urbani izziv* (1996–2006). He has lead and participated in many domestic and international local planning projects as a planning consultant. Since 2007, he has headed the Administrative and General Affairs Office at the Department of Spatial Planning of the City of Ljubljana.

NINA SVANDA

completed her master's degree (Dipl.-Ing.) in Urban and Regional Planning at the Vienna University of Technology and is working on her doctoral thesis with the topic: Building Bridges – The Contribution of Planning for Bridging the Gap between Emergency Recovery and Longterm Development Cooperation. She is a lecturer and researcher at the Vienna University of Technology, Department of Spatial Development and Infrastructure & Environmental Planning, Centre of Regional Planning and Regional Development, specialised in national and international municipal and regional planning and regional development in developing countries.

LENČA HELENA ŠOLAR

born in 1969, graduated in Geography in 1994 and got her master's degree in Regional Planning in 1999. She has been employed as Secretary at the Ministry of Infrastructure and Spatial Planning since 1994.

The main fields of her activities are:

- ▶ Preparation of legislation, methodologies and strategies concerning spatial planning and development;
- ▶ Preparation of national and regional spatial plans and regional development programmes.

Besides her work at the Ministry, she gives lectures and publishes articles from the main fields of her activities.

SIBYLLA ZECH

graduated in Spatial Planning at the Vienna University of Technology. In 1991, she founded 'stadtland', a private planning office. Since 2008, she has been Professor of regional planning and development at the Vienna University of Technology, particularly focusing on planning processes and planning design. Her current research focuses on the fields of national spatial strategies, energy planning, mobility management, regional governance and visioning.

CAN CEYLAN

(24) is from Vienna, Austria. The name is of Turkish origin: Can means 'soul' or 'life', Ceylan means 'gazelle'. Currently, he studies Spatial Planning at the Technical University of Vienna. He joined the Ljubljana project mainly because he likes the exchange of knowledge and ideas between international students. Furthermore, this was a good chance to familiarise himself with professional English vocabulary. This project was a great experience. His message is: "Thank you Vienna, thank you Ljubljana, thank you Europe."

TAMARA DANIJEL

is from Mozirje, Slovenia. She was born on 29 November 1990 in Slovenj Gradec. She attended primary school in Mozirje, and then completed high school in Celje. She holds degrees in Geography and Spanish Language and Literature, and is currently enrolled in the master's degree in Geography at the Faculty of Arts, with majors in Regional Planning and Rural Urban Studies and Geography of Tourism. Her greatest interests are tourism and rural areas, as well as foreign languages, such as Spanish and English. Her message is: "Enjoy life and learn as much as you can!"

FABIAN DORNER

was born on 29 July 1988. He comes from Hittisau, Vorarlberg, meanwhile feeling like home in Vienna. The two of his most important interests are regional planning and getting in touch with different countries. During his studies, he has joined several projects and excursions focussing on regional planning issues. He spent the summer semester 2012 as an Erasmus student in Prague, where he learned to work together with people from all over Europe and beyond. His message is: "Live your dreams, don't dream your life."

MATEJ GREGORČIČ

feels that the problems with the mobility within the Ljubljana urban region are paralysing the future development of the region. The 2030 vision of sustainable mobility, with the touch of the reality nowadays, will put an end to a standstill situation and hopefully encourage the further development of the soon-to-be modern and, in terms of sustainable mobility, fully functional region. It gives him an immense sense of pride and responsibility to be part of the group of talented students trying to find a possible solution to the problems that he personally faces as an active member of the lively Ljubljana urban region community. His bachelor's degree in Geography, the future master's degree in Urban Studies and Geoinformatics and a great deal of personal observations and experiences about the region motivated him to take part in the workshop.

ALEXANDER JABUR

is a student of Spatial and Regional Planning and Development at the Vienna University of Technology, with interests in transport planning and sustainable forms of transport. As a foreign student born in Slovakia, he has always been fascinated by working on international topics in the countries of Central and Eastern Europe. During the last years of his studies, he has focused on different modes of transport and project evaluation, for example the combination of bicycle and public transport or the evaluation of flight noise pollution around the Vienna airport.

FRANK MARIO KIERDORF

graduated in February 2011 from the Nürtingen-Geislingen University (Hochschule für Wirtschaft und Umwelt Nürtingen-Geislingen) with a bachelor's degree in Engineering Landscape Planning. In March 2012, he began studying for a master's degree in Regional Planning and Development at the Vienna University of Technology. One of the reasons for choosing the master's programme was his interest in the development of the human mind in order to overcome the difficulties that come up during the year. He finds group work really interesting and, particularly, the projects that demand empathic communication. The LUR-Project was an outstanding professional experience and a great opportunity to work with highly interested students from different branches, each from a different country. Regarding his future, Mario is looking forward to working as a consultant or for a consulting company, based on his constant interest to investigate things further in order to improve in the subject matter. His message is: "Congratulations to all of us! Kind regards, Mario."

RICHARD KLIMEŠ

was born on 4 May 1989. He lives in Bratislava, Slovakia. He graduated with honors from a bilingual Slovak-German high school in June 2007. Afterwards, he enrolled at the Technical University of Vienna, where he is presently studying. In his studies, he focuses on the lectures related to handling regional development issues. In 2011, he had the honor to take part in a student project 'Visioneering Oman', where the students were given the possibility to work on the vision of the future development of the Sultanate of Oman. His mother tongue is Slovak, but he also speaks English and German fluently and knows some basics of Spanish and Italian.

NADJA KMETIČ

is from Ljubljana, Slovenia. Presently, she is attending the master's programme in Spatial Planning at the University of Ljubljana. She graduated in 2008 with the graduation thesis entitled Photogrammetric capture and data processing for generating a 3D model of a traffic accident scene. After learning that the International Student Workshop would consist of international students expected to communicate in English only, she decided to take part. For the future, she is hoping to find a suitable job in a spatial planning company.

FELIX KORTUNG

attends the master's programme of Spatial Planning and Development at the Technical University of Vienna. Interested in international exchange, he took part at the Erasmus programme and attended two terms at the Istanbul Teknik Üniversitesi. With students from Turkey, USA and of other European nationalities, he developed a Regional Development Plan for a Turkish region near the Black Sea and obtained motivation to focus on international team work and European Spatial Planning. In the Tracking Ljubljana Region project, he regularly assumed the role of the main speaker and presenter.

MORITZ POLACEK

(25) was born and grew up in Vienna, Austria, and he is currently a third-term student of the master's degree in Spatial Planning. He also works at the Austrian Curatorship for Traffic Safety, where he is mainly concerned with projects and studies in relation to urban traffic issues. He took part in this project because he was very interested in interdisciplinary work and wanted to collaborate with students from other countries. His message is: "Enjoy your life, you only live once!"

TINA RAKUŠ

is from Ptuj, the oldest city in Slovenia. She was born on 26 February 1990 in Ptuj. She attended primary school in Videm, and then finished high school in Ptuj. She holds a degree in Geography. Tina is currently enrolled in the master's programme in Geography at the Faculty of Arts, with majors in Regional Planning and Rural Urban Studies and Geoinformatics. She is interested in rural areas and regional planning. She wants to be successful and do everything perfectly.

ŠTEFAN ROT

(22) comes from Trebnje, Slovenia. He completed his primary education in his hometown and his secondary education at the Poljane Grammar School in Ljubljana. In 2009, he enrolled at the Faculty of Arts of the University of Ljubljana, where he studied Geography and Sociology, and graduated in 2012. Currently, he is a master's student in Geography at the same faculty, specialising in regional planning, urban-rural studies and political geography. He is also a formally educated musician and an active drummer. His message is: "Think, but keep the beat going!"

UROŠ ROZMAN

(24) comes from Maribor, the most beautiful city in Slovenia. He first studied Civil Engineering at the Faculty of Civil Engineering, University of Maribor. After graduation, he continued the postgraduate studies of Spatial Planning at the Faculty of Civil and Geodetic Engineering of the University of Ljubljana. The International Student Workshop inspired him because he saw it as an opportunity to get more experiences, to improve his English and to explore new cities. He likes travelling a lot. He considers every additional experience as beneficial for his future career.

DENISA RUMMELOVÁ

was born and grew up in Bratislava, Slovakia. She is a student of the master's programme in Spatial and Regional Planning at the Vienna University of Technology. Presently, she is working on her thesis and the Tracking Ljubljana Region project. She also works as an assistant at a building company in Bratislava. In her free time she is learning to play the guitar and tennis, she reads, travels, does sports, draws, and likes walking her dog and listening to music.

EVA-MARIA MISSONI-STEINBACHER

was born on 5 May 1985. She comes from the outskirts of the city of Salzburg. She studied Applied Cultural Studies and Geography at the University of Klagenfurt, did an internship at the Goethe Institute in Ethiopia and an Erasmus semester at the Aristoteles University Thessaloniki. While finishing her master's degree, she enrolled in the programme of Spatial Planning at the TU Vienna as her second studies. Regional planning is her favourite discipline and she intends to focus on it further. Presently, she is working for the VCÖ, a nationwide organization that is dealing with sustainable mobility in Austria. The LUR-project was a great chance to delve further into regional planning, combined with an international background. Her message is: "The only stable thing is change."

JULIAN THOMAS

was born on 20 March 1987. He was born and raised in the great city of Berlin-Kreuzberg. While studying 'urban planning' at the Brandenburgische Technische Universität, he acquired skills in urban design and visualization. After completing his Bachelor of Science he decided to begin his master's at the TU-Wien, in order to broaden his horizons and to be able to work at a larger scale. He likes travelling around the world, surfing and cooking for his friends. His message is: "Imagination is more important than knowledge."

TAMARA VLK

is attending the master's programme in Spatial Planning at the Technical University of Vienna. Last year, after finishing her bachelor's degree, she moved to Madrid, Spain, for six months to experience one semester in a foreign country with a different culture, language and academic work procedures than those in Vienna. This experience was one of the reasons why she wanted to attend the interdisciplinary master project about Ljubljana. She was excited about working with foreign students from the origin country of the project region and their access to the visioning theme, with all their background knowledge. It turned out that although the workshops and the way of online communication were really tough, the cooperation worked very well. Moreover, in her opinion, the constellation of the group could not have been better.

JAKUB WABINSKI

(20) is currently an Erasmus student in Ljubljana. He comes from Pyrzyce, a small town in West-Pomerania in Poland. He is studying Geodesy and Cartography at the Maritime University in Szczecin. He is interested in travelling, which is one of the reasons he decided to take part in the Erasmus programme. Moreover, he is fond of sports, particularly football, and music. In his spare time, he likes reading books and doing Airsoft (a recreational activity similar to paintball but using different types of weapons and bullets).

EWELINA WIĘCKIEWICZ

is a fourth year student of Land Management at the Faculty of Geodesy and Land Management at the University of Warmia and Mazury in Olsztyn, Poland.

Presently, she is preparing for the defense of her engineering thesis. The topic of her diploma project is Management of monuments in Malbork. After the defense of the thesis, she plans to continue her studies in the field of Property Management. Currently, she is on a study visit under the Erasmus programme in Ljubljana, Slovenia. Owing to Assist. Prof. Alma Zavodnik Lamovšek, she had an opportunity to participate at the International Student Workshop. This was a new and inspiring experience. It was a time of intense work, which she documented by taking photographs in all stages of the work.

ŠPELA ŽOHAR

(23) is a postgraduate student of Spatial Planning at the Faculty of Civil and Geodetic Engineering of the University of Ljubljana. First, she studied Geography at the Faculty of Arts in Ljubljana, where she discovered her passion for spatial and urban planning. She saw this workshop as an opportunity to extend her knowledge in the field of spatial development and gain experience from collaborating with foreign students.



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A 2012/2013 international student workshop
Professional monograph, first edition

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