

SWOT Analysis

- SWOT Settlement and Mobility

Editor: Susanne Franz, with the help of all project partners

Institution: Institute for Mobility and Transport, TU Kaiserslautern

- SWOT Laws and Policies

Editor: Andrej Gulič, with the help of all project partners

Institution: Urban Planning Institute of the Republic of Slovenia (UIRS)



Partners

Salzburg Institute for Regional Planning and Housing
Research Studio iSPACE
Munich - Department of Urban Planning
Institute for Mobility & Transport, TU Kaiserslautern
Urban Planning Institute of the Republic of Slovenia
Région Rhône-Alpes - Planning Department
Province of Mantua - Territorial Planning Department
Province of Belluno – Territorial Planning Department
Union of Mountain Municipalities of Piedmont Region
PACTE - University Joseph Fourier Grenoble

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1. SWOT Settlement and Mobility

1.1. Introduction

“A **SWOT Analysis** is a strategic planning method used to evaluate the **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats involved in a project or in a business venture. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieve that objective. [...]

- **Strengths:** characteristics of the business or team that give it an advantage over others in the industry.
- **Weaknesses:** are characteristics that place the firm at a disadvantage relative to others.
- **Opportunities:** external chances to make greater sales or profits in the environment.
- **Threats:** external elements in the environment that could cause trouble for the business.”

[http://en.wikipedia.org/wiki/SWOT_analysis]

The filled-out SWOT part of the partner questionnaire is the foundation for the following SWOT analysis of the pilot sites concerning their settlement structure and the mobility situation.

The SWOT settlement and mobility first gives an overview about the special location-dependent strengths, weaknesses, opportunities and threats of each pilot site. The mentioned aspects are categorized by the following topics:

Topic	Acronym
Demographic Development	DD
Settlement Development	SD
Infrastructure	IS
Traffic and Mobility	TM

These topics are the foundation for the derivation of the common results which have validity for the whole Alpine Space Region.

1.2. Situation in the Pilot Sites

1.2.1. Pilot Site City of Salzburg and District Salzburg Umgebung

Strenghts	Weaknesses
<ul style="list-style-type: none"> • Overall increase of population [DD] • In recent years implementation of concentration and densification strategies in urbanized areas (Salzburg city and surrounding municipalities) [SD] • Good accessibility of public transport along the transport axes in the pilot site; further away, accessibility decreases [TM] • Regional railway lines (S-Bahn and Lokalbahn) discussed new lines and planned extensions, cross-border connections and shorter departure intervals [TM] [SD] • Forced non-profit residential buildings and exemplary residential building support [SD] • Centralized employment structure (Salzburg city) may support effective public transport or commuter ride-sharing [TM] • Change in travel behavior towards bike and walk will lead to rise of traffic-security [TM] • Pilot region for e-mobility “Electro drive Salzburg” [TM] 	<ul style="list-style-type: none"> • General ageing of population [DD] • Settlement development often wastes precious landscape areas [SD] • Dispersed settlement structures cause long travel times and far distances [TM] • Partly decrease of public transport in unprofitable areas [TM] • The city of Salzburg and adjacent municipalities are strongly affected by transit-traffic [TM] [SD] • High costs for building land, apartments and real estate [SD] • Problems in concentrating the residential construction on central regions and agglomerations [SD] • Very extensive settlement area in Salzburg-Umgebung necessitates branched traffic network [TM] • More than half of the ways by car are shorter than 5km [TM] • Maintenance of infrastructure is cost-intensive because of disperse settlements [IS]

Opportunities	Threats
<ul style="list-style-type: none"> • Strong rise in population until 2030 (+6%) [DD] • Efficient land management to reduce the rise of sealed land [SD] • Several initiatives, e.g. building land designation in the vicinity of public transport axes [TM] • Rising motorization costs and travel time (traffic jam) force people to use public transport (acceptance) [TM] • Enhanced steering towards qualitative and sustainable development [SD] • Cross-border commuting-traffic Salzburg-Bavaria can enhance cooperation, common strategies [TM] • High settlement density and compactness reduces demand for streets, force people to walk [TM] • Focus of settlement development in areas where a sufficient social infrastructure is already existing [IS] 	<ul style="list-style-type: none"> • Spatially differentiated population development (rise in cities, decline in peripheral regions) [DD] • Lack of building areas [SD] • High prices of land force settlement development out of core regions in peripheral regions [SD] • Decentralized settlement development causes rising motorization [TM] [SD] • Negative cost-, environment- and quality-of-life-effects due to a intense urban sprawl and suburbanization processes [SD] [TM] • Negative effects of an insufficient mixing of workplaces and habitations in the old town of Salzburg [SD] • Main direction of commuters is mainly city of Salzburg and 3-4 adjacent municipalities [TM] • The upcoming elderly generation has grown up with a car oriented traffic → strong habits [TM]

1.2.2. Pilot Site City of Munich and Munich Transport and Tariff Association Area

Strengths	Weaknesses
<ul style="list-style-type: none"> • Settlement structure generally still well structured, regional plan with guidelines for development [SD] • Dense network of different transportation means within the Munich region [TM] • Good public transport network [TM] • Comprehensive tariff and integrated timetable system of the public network [TM] • Munich's principles of settlement development: compact, urban, green [SD] 	<ul style="list-style-type: none"> • No consequent implementation of the regional plan[SD] • The public transport network is still strongly focused on the centre of the City of Munich [TM] • Relatively high prices for the public transport system [TM] • There is no lobby for regional planning [SD]
Opportunities	Threats
<ul style="list-style-type: none"> • Long-term vision of regional development with consequent implementation [SD] • Closing of still existing gaps in the public transport network [TM] • Improvement of tangential connections [TM] • Enlargement of the area served by the Munich Transport and Tariff System [TM] • Need for intra-municipal cooperation in a prosperous and still growing region [SD] 	<ul style="list-style-type: none"> • Urban sprawl because of overheated demand [SD] • Traffic congestion [TM] • High prices of real estate [SD] • Increasing amount of in-commuters, bottle-neck congestion [TM] • Centre-oriented overall development based on the suburban train axes [SD] [TM]

1.2.3. Pilot Site Alpine Corridor - Genève-Valence

Strengths	Weaknesses
<ul style="list-style-type: none"> • Strong demographic dynamics above the national average, mainly due to immigration [DD] • Strong renewal of population [DD] • Proximity of nodal points along the main south-west/north-east axis [SD] • Efforts to optimise real estate politics: beginning cooperation between municipalities [SD] • Generally high density of the public transport system [TM] • Good regional interconnections of the cities [TM] • Good national and international connectivity [TM] • Increased public transport facilities (e.g. <i>Transisère</i>) for inhabitants [TM] • Trend towards multi-modal transport [TM] • Settlement structure alongside the N/W – S/E axis allows rapid access to services for households [IS] 	<ul style="list-style-type: none"> • Disparities in population growth : the north-eastern part is much more dynamic than the south-western part [DD] • Disparity between punctual concentration of employments and the wide spreading of residential areas [SD] • High real estate prizes, especially in major towns and in the transborder region [SD] • “Tunnel effect” between major cities of the region: small and medium cities less integrated in the transport networks [TM] • Lack of access to increasing employment in peri-urban areas: public transport is concentrated in city centres [TM] • Lack of public transport linking rural and peri-urban areas [TM] • Some remote areas have poor quality of access to internet and mobile phone networks [TM] • Demographic growth in remote areas with lower density in services [IS]

Opportunities	Threats
<ul style="list-style-type: none"> • Strong population dynamic and renewal is favorable for changes in regional and local politics: opportunity to better link residential and transport politics [DD] • Intensified inter-communal co-operations [SD] • Scarcity of land resources may lead to improved management of regional development [SD] • Trends of rising motorization costs and “work from home” → may force less daily ways [TM] • Trend to more “integrated” transport politics [TM] • Cooperation between municipalities to maintain the accessibility of services, especially between rural and urban areas [IS] 	<ul style="list-style-type: none"> • Reinforcement of north-east/south-west demographic and social disparities [DD] • Relegation of lower income households in remote areas [SD] • Decentralized settlement development may cause increased motorization [TM] • Concurrence of railway development projects in the neighbourhoods [TM] • Overloading of the existing public transport system, financial problems [TM] • Risk of polarization between densely and less densely populated areas [TM] • Less dense areas with less services attract immigration of poorer household (lower real estate prices and taxes): increasing risk of social polarization [IS]

1.2.4. Pilot Site Urban Municipality of Novo Mesto and Jugovzhodna Slovenija Statistical Region

Strengths	Weaknesses
<ul style="list-style-type: none"> • Favourable natural increase of population [DD] • The region has the highest share of young population (aged 0-14) and the mean age of population is the lowest in the country [DD] • Polycentric development - a large number of individual settlements with well developed central functions [SD] • Relatively well developed urban bus network [TM] • Transport and telecommunications infrastructure as an attractive force for promoting economic development [TM] [IS] • Relatively well-functioning real estate market [SD]The recently improved accessibility to the motorway network has strengthened the gravitational role of Urban municipality of Novo mesto (UMNM) as a most important regional centre of Jugovzhodna Slovenija statistical region (JVS) [TM] [SD] • Higher education centre Novo Mesto with a wide array of educational programs [IS] 	<ul style="list-style-type: none"> • Increasing disparities in the provision of equal opportunities for all age groups [IS] • Strong dispersion of settlements, therefore expensive urban settlements equipping [SD] • Large number of small settlements (especially villages) at the regional level too [SD] • Relatively low intensity of bus use by the passengers [TM] • Poor access to the southern parts of the region [TM] • The prices of the newly built and existing residential property are very high [SD] • Lack of an adequate regional transportation network which is characterised by a large density of road network [TM] • Predominant use of the car at the expense of other transport means [TM] • Less developed research and development activities [IS]

Opportunities	Threats
<ul style="list-style-type: none"> • Introducing a »compact city model« in the region [SD] • Future development and increased use of urban and regional public transport [TM] • Favourable location along the X th. Pan-European transport corridor which is gaining more importance [TM] • Preparation of a regional mobility plan [TM] • Improving public transport services - improved services with better frequency and surface coverage, introducing new bus lines, more efficient terminals and more efficient land use [TM] • Planning the majority of new settlements and housing schemes in the vicinity of social infrastructure [SD] 	<ul style="list-style-type: none"> • Continuation of suburbanization processes with occupation of former agricultural land bringing improper urban and architectural patterns in the countryside and causing unsustainable traffic flows [SD] [TM] • The current system of taxation, public finance and the pricing of services forces car use [TM] • Delays in the construction of the third intermodal development axis [TM] [SD] • Establishment of a motorway link between Ljubljana and Zagreb will influence the property market in the vicinity of the motorway in the future, consequently will rise property prices [SD] • Lack of financial resources to improve the quality and effectiveness of social services [IS]

1.2.5. Pilot Site Union of Mountain Municipalities of Pinerolese Area (Piedmont)

Strenghts	Weaknesses
<ul style="list-style-type: none"> • Demographic balance with positive trend [DD] • Well-developed & diversified infrastructure [IS] • Well-developed bus network [TM] • Presence of many transport modes [TM] • Mountain areas have good density of first and second level roads [TM] 	<ul style="list-style-type: none"> • Negative population trend in the higher surroundings [DD] • High residential costs [SD] • Not all areas are served by public transport [TM] • Less coordination between the existing different transport modes [TM]
Opportunities	Threats
<ul style="list-style-type: none"> • Tourism as important economic factor [IS] • Several projects to improve the bus network [TM] • Synergies between public transport society and local institutions [TM] • Current tenders for the maintenance of roads [TM] • Former tourists often decide to live in the Pilot Site [DD] • Trend to car sharing and other innovative transport modes [TM] • “Provibus”-Project [TM] 	<ul style="list-style-type: none"> • Depopulation leads to declined neighbourhoods [SD] • Less money to increase public services and to promote new ideas (like “Provibus”) [IS] [TM] • High traffic volumes and pollution [TM] • Increasing use of private vehicles [TM]

1.2.6. Pilot Site City of Mantova and Mantova Hinterland

Strenghts	Weaknesses
<ul style="list-style-type: none"> • Presence of immigrants with families in the pilot areas with incidence on birth-rate [DD] • High urban quality in the historical centre of Mantova (especially for pedestrians and bikers) [IS] [TM] • Environmental, functional and landscape criteria in the most recent planning actions [SD] • Good accessibility of public transport with bus passing through centres of municipalities and in the main roads [TM] • Sufficient motorway links [TM] • Presence of multimodal exchange places: (railways – roads - water) [TM] • Limited density of construction in Mantova and low density in hinterland [SD] • Short to medium commuting distances [TM] [IS] • Three year program of public services of the Province of Mantova (e.g. indentifies transport mobility trends, potential needs etc.) [TM] [IS] • Sufficient spread of scholastic, administrative and health services [IS] • High presence of services in the main centre [IS] 	<ul style="list-style-type: none"> • Increasing average age [DD] • Urban population is getting older [DD] • Spread, oversized urbanizations, with inadequate primary public services [SD] • Overaged railway system [TM] • Not well providing bus system [TM] • Bad connection between Mantova and the periphery [TM] • High road traffic passing through the city centre of Mantova and in the main roads [TM] • Lack of cycling lines between municipalities [TM] • Lack of public transport services = more use of private cars [TM] • Province of Mantova is a big area with a weak demand, public transport is likely to be ineffective compared to the real needs of the area [TM] • The peripheral location of shopping centres causes an increase in traffic on existing roads [IS] [TM] • Low awareness of alternative transport economic advantages [TM]

Opportunities	Threats
<ul style="list-style-type: none"> • Regional, provincial and municipal planning coordination [SD] • Early “customer satisfaction” analysis and analysis of potential request [IS] [SD] • Surface metro to Verona airport [TM] • New projects for cycling lines [TM] • Rehabilitation of inland port Porto Catena [TM] • More attention to sustainability and energy consumption in buildings construction [SD] • Strengthen public transport influencing the quality of houses [SD] 	<ul style="list-style-type: none"> • Progressive decline of zones with inhabited buildings [SD] • Increasing use of public transport vehicles [TM] • Less money for public investments (infrastructure) = money only used for maintenance [IS] • Risk of degradation linked to low number of residents [SD] [TM] [IS] • High traffic pollution [TM] • Alternative systems of transport (as the taxi-bus) already tested in some areas of the Province are very expensive for the user and for the Province [TM]

1.2.7. Pilot Site Val Belluna and Val Boite e Ciento Cadore

Strenghts	Weaknesses
<ul style="list-style-type: none"> • High environmental and living quality [IS] • Settlement frameworks distributed on well-defined, hierarchically structured axes [SD] • Availability of buildings to rescue and renovate for future accommodation [SD] • Several main axes in transport network, yet defined by land structure into a hierarchy [IS] [TM] • Particularly good connection to highway network [TM] • Presence of unused buildings [SD] • Presence of limited traffic axes [TM] 	<ul style="list-style-type: none"> • Shrinking and ageing population [DD] • Population relocation from mountain valleys to valley bottoms [DD] • Presence of high-fractioned towns on municipal level [SD] • Lack of competition on the service providing market [IS] • Low public rail transport quality [TM] • Lack of knowledge/tools to coordinate policies for School and for Job Market [IS] • Small number of public transport users [TM]
• Opportunities	Threats
<ul style="list-style-type: none"> • Compared with the neighbouring municipalities, some municipalities can offer low rents and selling prices, and they are near to points of high interest [SD] • Tourism in the mountain areas creates new jobs [IS] • Recognition of the area as a UNESCO world heritage site [IS] • Increasing price of petrol could encourage people to use public transport services [TM] 	<ul style="list-style-type: none"> • Progressive removal of services particularly in mountain valleys [IS] • Difficulties in planning the new urbanization axes according to geographic problems and hydro-geological risks [SD] • Small catchment area of the public transport system [TM] • Dearth of public investments for maintenance & services [IS] [SD]

1.3. Common Results

The collected results of the partner questionnaires have been combined concerning their categorization. The editor tried to find some generic terms to structure each categorization. These generic terms are the foundation for the common results of the SWOT analysis.

1.3.1. Common STRENGTHS

Demographic development

- Mostly an increase of the population
- New population due to immigration and attractive environment

Settlement development

- Several well-working strategies to tackle future settlement challenges
- Polycentric and axis-oriented settlement structures in most of the Pilot Sites
- Real estate reserves due to idle buildings and densification potentials

Infrastructure

- Good living quality
- Mostly good availability of public services and infrastructural offers in cities and central settlements

Transport and Mobility

- Axis oriented transport development
- Good connections to superior transport networks, good interregional accessibility
- Good accessibility conditions to the local public transport system around the cities and central settlements
- Improvements by future transport development plans, innovative forms of transport planning

1.3.2. Common WEAKNESSES

Demographic Development

- Ageing of population
- Unequal distribution of the population in the regions → centres are growing while peripheral and suburban regions are shrinking

Settlement development

- High residential costs (especially in the cities)
- Wide dispersion of settlements, waste of landscape areas and expensive infrastructure
- No consequent implementation of regional plans

Infrastructure

- Dispersed settlement structure forces problems and costs (maintaining in remote areas, expansion in the centres)
- Special public services in some remote areas are not on a high level
- Lack of knowledge/tools for coordinating public needs

Transport and Mobility

- Bad quality of special branches of the public transport network, especially in remote areas
- Dominating car-based mobility of the population (especially in the peripheral and suburban areas)
- Dispersed settlement structures cause strong increase of traffic
- Low density of the public transport network in some areas, very big differences between cities and peri-urban/remote areas
- Bad circumstances not favourable to force the people to use sustainable transport means, like for example the not well-providing public transport system in special areas

1.3.3. Common OPPORTUNITIES

Demographic Development

- Rising population trends in the Alpine Space Region give the opportunity to introduce an innovative residential and transport development
- landscape, employment and the central location in Europe attracts people to move to the Alpine Space Region

Settlement Development

- “Rethinking” towards a sustainable and integrated coordination on the regional and municipal planning level
- Increased consideration of sustainable planning guidelines
- Awareness of natural resources forces innovative planning practice
- Availability of affordable residential locations close to points of high interest

Infrastructure

- Increasing tourism as a foundation for economic growth
- Long term coordination of settlement development and of infrastructures

Transport and mobility

- Trend to innovative and sustainable projects and transport modes
- Increasing prices for the individual transport (energy, taxes etc.) may force people to use public transport system
- Trend to coordinated transport and settlement planning which works across administrative and even across national boundaries
- Awareness of the importance of sustainable transport planning leads to a general improvement of the public transport system
- General improvement of the transport network

1.3.4. Common THREATS

Demographic Development

- Spatially differentiated population development (rise in cities, decline in peripheral regions)
- Reinforcement of north-east/south-west demographic and social disparities

Settlement Development

- Geographical and hydrological problems may complicate the planning of new public transport oriented urbanisation axes
- Real estate market does not match spatial planning ambitions, prices enforce development on car-dependent locations
- Shift towards a negative balance of mobility and settlement costs, environmental situation and quality of life for the inhabitants of the Alpine Space Region
- Increasing real estate prices lead to problems like urban sprawl and relegation of lower income households in remote areas

Infrastructure

- Difficulties in maintaining public services and attendances, especially in the mountain areas
- Depopulation and segregation leads to declined settlement areas

Transport and Mobility

- Decentralized settlement structure may force increasing motorization
- Difficult financial situation for maintaining and improving public transport system
- Increasing individual mobility and commuting raises general traffic volumes and pollution
- Car-oriented attitudes of the elderly generation may slow down the trend towards an increased use of public transport systems
- Risk of neglecting less densely populated areas

1.4. Common challenges tackled with MORECO

The SWOT analysis shows that there is a wide variety of framework conditions in the different Pilot Sites. The constitution the settlement development and the public transport system depends very strongly on the location and the size of the area and other parameters. This means that there is also a wide range of problems which need to be solved in each Pilot Site.

Thought there are common challenges concerning the settlement structure and the mobility situation. MORECO tries to tackle these issues like for example:

- High residential costs (especially in the city centres)
→ *Give possibilities to minimize residential and induced mobility costs*
- unsustainable mobility behaviour of the population (especially in the peripheral and suburban areas)
→ *Point out the relations between residential location and mobility costs, lead people to chose the most efficient location, support coordinated mobility services*
- car-oriented attitudes of the upcoming elderly generation may slow down the trend towards an increasing use of public transport systems
→ *Demonstrate the possibilities to save money and time by choosing the most effective (public) transport means*
- Decentralized settlement structure may force increasing motorization
→ *Force people to move to locations which are well-connected to the public transport system, force planners to develop sustainable settlement structures and connect peripheral regions*

These challenges are going to be managed by different activities realised from the project partners in the Pilot Sites. These activities are defined in the “**MORECO action plan**” which each partner filled out during Work Package 5 “MORECO Methodology and Tools”. The foundation for the further work are among other things the developed Appendixes “**Fact sheets of the Pilot Sites**”, “**Motivations of residential site and mobility mode decisions**” and “**Good Practice Collection of Tools**” as well as the “**Good Practice Collection of Multidisciplinary Approaches** (all WP4).

2. SWOT laws and policies

2.1. Purpose and structure

The purpose of this overview is to present an overview of the regulative background in the Alpine Space Programme Cooperation Area (hereinafter referred to as ASP) based on pilot sites questionnaire analysis results. The MORECO project team is, among other objectives, wishing to inquire in to what extent the regulatory instruments of the states, regional and local communities of the ASP create the legal conditions for improving accessibility and fostering sustainable mobility by an optimized polycentric settlement development. Since between the laws, regulations and plans in the field of spatial planning and transport at different territorial levels of the ASP considerable systemic differences exist, it was decided to present in continuation those contents which are related to the purpose and objectives of the MORECO project and are of common concern for the AP as a whole.

The overview is structured in the following chapters:

- National laws and regulations on settlement development.
- Regional laws and regulations on settlement development.
- Local regulations on settlement development.
- National laws and regulations on transportation (mobility and accessibility).
- Regional laws and regulations on transportation (mobility and accessibility).
- Local regulations on transportation (mobility and accessibility).
- Sustainable Urban Mobility Plans.
- Spatial plans.

2.2. National, regional and local laws and regulations on settlement development in the Alpine Space Programme Cooperation Area

In the following chapters some common characteristics of national, regional and local laws and regulations on settlement development are presented in the form of the categories of benefits (strengths / opportunities) and problems (weaknesses / threats) associated with the law's (regulation's) implementation in the ASP as a whole.

2.2.1. National laws and regulations on settlement development: a synthesis view

Benefits (strengths / opportunities) associated with the law's and regulation's implementation

- Ensuring rational land use.
- Facilitating sustainable settlement development.
- Avoiding unsustainable and inefficient spatial development.
- Prevention of uncoordinated development causes additional costs for infrastructure and mobility.
- Ensuring sustainability, spatial solidarity and competitiveness.
- Prevention of urban sprawl and waste of space.
- Preparation of incentives to encourage a mix of urban functions and social classes.
- Implementation of an urban mobility policy favouring sustainable development.
- Ensuring interconnection of urban settlements with their hinterland through more efficient mobility supported by public transport.
- Raising the quality of the living environment through an appropriate and rational provision of infrastructure.

Problems (weaknesses / threats) associated with the law's and regulation's implementation

- In some countries (e.g. Austria) national spatial development documents are not obligatory which causes problems for their consistent implementation.
- Lack of political will.
- Partly present obsolescence (out-of-dateness) of national laws and regulations according to current needs and circumstances.
- Lack of adequate mechanisms and instruments to implement legal provisions.
- Inadequate land policy and land use practices.
- Housing construction policy not considering accessibility by public transport, spontaneous development in suburbanized areas.

2.2.2. Regional laws and regulations on settlement development: a synthesis view

Benefits (strengths / opportunities) associated with the law's and regulation's implementation

- Common principles, aims and spatial determinations especially in the fields housing, business, green land and transport.
- Promotion of territorial cohesion through a more balanced spatial regional development.

- Better opportunities for defining regional spatial projects.
- Promotion of a more balanced transport accessibility.
- Provision of a spatial vision and possible directions of what is possible and desirable in various contexts.
- Enabling efficient use of resources which are in short supply (land, environment, energy, etc.) and their wise use to ensure maximum synergetic benefits.
- Consideration of ecological principles to guide settlements development and land use.
- Ensuring the achievement of a greater mix of land uses and densities in the urban structure that provide a full range of urban functions – housing, employment and services – in a pattern which minimizes the need to travel great distances to work, shop or conduct business.
- Enabling the improvement and expansion of the transport system to meet the challenges of readjustment in the urban economy and sustaining the competitiveness of public transport.
- Enhancing broad participation, improving community involvement and building support for sustainable planning policies and programmes, also with regional stakeholder networks.
- Guarantees the balance between regional and local policies.

Problems (weaknesses / threats) associated with the law's and regulation's implementation

- Lack of affordable building plots at strategically good positions.
- Lack of appropriate type of penalty for non-compliance with the law.
- Lack of appropriate binding list of topics for the cooperation of different stakeholders.
- Very few planners have grasped the opportunities offered by the innovative sustainability and partnership aspects.
- Regional spatial laws and other regulations are not always optimally matched with other regional sectoral laws.
- Lack of an appropriate system of incentives for promotion of cooperation among municipalities as well as among other levels of governance within the regions.

2.2.3. Local laws and regulations on settlement development: a synthesis view

Benefits (strengths / opportunities) associated with the law's and regulation's implementation

- Ensuring better control of urban sprawl.
- Achieving partnership approach between local actors.
- Develop better knowledge of local spatial problems and situations.
- Establishing the priorities for action on spatial development for the local area in partnership with local stakeholders, neighbouring municipalities and regional bodies.

- Engaging with the community on the preparation of planning policies and proposals and ensuring that local concerns are appropriately accounted at the regional level.

Problems (weaknesses / threats) associated with the law's and regulation's implementation

- Information on good practices of cooperation between municipalities on spatial planning and mobility issues are not adequately widespread within the ASP.
- The existence of rigidity of the regulation, which is too detailed in certain aspects and often prevents adapting the actions to the specific urban/regional context.
- The adaptation and updating of the regulation to the effective territorial needs and to technological and cultural innovation is frequently too slow.
- The existence of innovative concepts, approaches, instruments, and solutions to deal with problems that are not addressed by legislative regulation are still rarer.
- Approaches in management of municipalities' development are very often reduced to a narrow minded approach from a single municipality perspective.

2.3. National, regional and local laws and regulations on transportation (mobility and accessibility) in the Alpine Space Programme Cooperation Area

In the following chapters some common characteristics of national, regional and local laws and regulations on transportation (mobility and accessibility) are presented in the form of the categories of benefits (strengths / opportunities) and problems (weaknesses / threats) associated with the law's (regulation's) implementation in the ASP as a whole.

2.3.1. National laws and regulations on transportation (mobility and accessibility): a synthesis view

Benefits (strengths / opportunities) associated with the law's and regulation's implementation

- Internalisation of external costs incurred by transport.
- Reaching the social optimum in the part referring to the transport sector.
- Increased transport safety and protection.
- Efficient energy consumption and clean environment.
- Increased volume and quality of public passenger road and rail transport.
- Raising awareness and providing information to population on sustainable mobility.
- Rational use of physical space and increased management of negative environmental impacts of

transport.

- Appropriate placement of transport infrastructure in physical space in order to ensure sustainable development.

Problems (weaknesses / threats) associated with the law's and regulation's implementation

- Suboptimal cooperation among transport service operators.
- Dispersed settlements and consequently expensive transportation infrastructure which would satisfy the needs of inhabitants.
- Suboptimal developed and connected public passenger transport.
- Less competitive railway network (in comparison to the road network) and suboptimal organisation of railway transportation.
- Problems with financing of construction and maintenance of public transportation networks.
- Lower rate of the use of public transport.
- Nonrealization of projects for the construction of the public transport network.

2.3.2. Regional laws and regulations on transportation (mobility and accessibility): a synthesis view

Benefits (strengths / opportunities) associated with the law's and regulation's implementation

- The existing Regional Mobility Plans provides strategies and implementation measures in the fields spatial planning and mobility planning, traffic management, mobility infrastructure and potentials.
- Possibilities for better integration of transportation systems with the dynamics of urban and regional spatial planning with the promotion of the construction and use of multimodal systems and innovative transport equipment.
- In some city regions (like Vienna, Zurich, Munich, Geneva, Lyon, Milan etc.), the existence of harmonised regional development from the aspect of appropriate allocation of economic operators and main supply centres with appropriate transport connections.

Problems (weaknesses / threats) associated with the law's and regulation's implementation

- Problems with financing of construction and maintenance of public transportation networks.
- Lack of the strong involvement of relevant regional and local stakeholders.
- Because the negative effects of suburbanization the existence of suboptimal capillary system of the railway infrastructure.

2.3.3. Local laws and regulations on transportation (mobility and accessibility): a synthesis view

Benefits (strengths / opportunities) associated with the law's and regulation's implementation

- The existence and use of specification of measures in the fields of public transport, stationary traffic and the local traffic network.
- Preparation and implementation of local regulation documents which have positive effects on the:
 - a) increase in use of public transport and alternative transportation modes compared with road traffic;
 - b) better configuration of public spaces;
 - c) new vision of alternative transportation modes;
 - d) better management of downtown parking.

Problems (weaknesses / threats) associated with the law's and regulation's implementation

- Frequently the existence of too many transportation authorities which causes lack of visibility and understanding of public transportation systems and networks and deepens the problems of transportation systems management.

2.4. Sustainable Urban Mobility Plans

In the framework of ASP countries there are quite a few of experiences in the field of development and implementation of Sustainable Urban Mobility Plans (hereinafter referred to as SUTP). Although there are differences between them, considering different developmental circumstances and planning practices, through the analysis of questionnaire results, we have found many common characteristics, which are in continuation presented in the form of benefits (strengths / opportunities) and problems (weaknesses / threats).

Benefits (strengths / opportunities) associated with the SUTP implementation

- Better quality of life.
- Environmental and health benefit.
- Improved mobility and accessibility.
- Potential to reach more people.
- Improved public awareness of sustainable urban mobility.
- Well-balanced spatial development.
- Enhancement of eco-mobility (bus, train, bicycle, walk).
- Upgrading of public transport services.
- Expansion of the cycle path network.
- Settlement development and re-densification in accordance with infrastructural potentials.
- Improvement of governance, with better information and greater public participation.
- Cooperation between local authorities, responsible for urban planning and development, and the regional authorities, responsible for regional public transport.

Problems (weaknesses / threats) associated with the SUTP implementation

- Predominant car infrastructure orientation.
- Resistance from established planning and engineering officials, and a lack of cooperation between sectors, particularly transport and land use.
- Problems with the consequent implementation, partly with the mobilisation of building land, stronger and more binding co-operations between the city and its surrounding municipalities within the regional community.

2.5. Spatial plans

In this chapter the common characteristics of regional and local spatial plans, which we have obtained through the analysis of questionnaire results, are presented. The results of the analysis are illustrated in the form of benefits (strengths / opportunities) and problems (weaknesses / threats) too.

Benefits (strengths / opportunities) associated with the spatial plans implementation

- Limiting dispersed settlement development.
- Promoting sustainable land use.
- Developing polycentric urban system.
- Improving site-related attractiveness of settlements (towns and cities).

- Planning traffic nodes for public transport.
- Polycentric settlement structure in order to strengthen specific central municipalities/cities and axes.
- Realisation of the principle of short distances regarding working and housing.
- Densification of settlement structures along efficient public transport axes.
- Better coordination between urban planning and transportation, steps to control urban sprawl and to limit consumption of agricultural land.
- Rules to limit sprawl, guidelines for developing polycentric urban system, attractiveness of centres according to the peculiar characteristics.

Problems (weaknesses / threats) associated with the spatial plans implementation

- Lack of consequent consideration of regional spatial and sectoral plans guidelines and proposals in some municipalities.
- Lack of appropriate monitoring systems and ex-post evaluation of the regional (local) plan implementation.
- Still the dominant existence of top-down planning approach.
- Scarcity of guidance for the governance and for the implementation of strategies in more detailed scale.
- Lack of knowledge among citizens in dealing with local and supralocal spatial issues.
- Difficulties with the preparation and implementation of the regional spatial strategies and plans due to the lack of adequate planning culture about supralocal spatial issues among local politicians.
- In some countries (e.g. Slovenia) regional spatial plans – expert basis does not have an obligatory / binding status for the preparation of municipal spatial plans.

2.6. Conclusions

Qualitative analysis of the responses to the questionnaire has shown that in all three territorial levels (national, regional and local) in pilot regions there are laws and regulations which stress the importance of the improving of accessibility and fostering sustainable mobility by an optimized polycentric settlement development.

The following guidelines, among others, can be highlighted for the settlement development and mobility issues at the national level:

- Implementation of an urban mobility policy favouring sustainable development.
- Ensuring interconnection of urban settlements with their hinterland through more efficient mobility supported by public transport.
- Prevention of urban sprawl and waste of space.
- Appropriate placement of transport infrastructure in physical space in order to ensure sustainable development.

At the regional level the most relevant guidelines for the settlement development and mobility issues are:

- Ensuring the achievement of a greater mix of land uses and densities in the urban structure that provide a full range of urban functions – housing, employment and services – in a pattern which minimizes the need to travel great distances to work, shop or conduct business.
- Enabling the improvement and expansion of the transport system to meet the challenges of readjustment in the urban economy and sustaining the competitiveness of public transport.
- Promotion of more balanced transport accessibility.
- Possibilities for better integration of transportation systems with the dynamics of urban and regional spatial planning with the promotion of the construction and use of multimodal systems and innovative transport equipment.

The following guidelines for the settlement development and mobility issues stand out at the local level:

- Ensuring better control of urban sprawl.
- Establishing the priorities for action on spatial development for the local area in partnership with local stakeholders, neighbouring municipalities and regional bodies.
- Engaging with the community on the preparation of planning policies and proposals and ensuring that local concerns are appropriately accounted at the regional level.
- Preparation and implementation of local regulation documents which have positive effects on the

increase in use of public transport and alternative transportation modes compared with road traffic.

On the other hand, the analysis showed that there are a number of problems and weaknesses, which at least partly limit the realization of development guidelines.

The following weaknesses, among others, can be highlighted for the settlement development and mobility issues at the national level:

- In some countries national spatial development documents are not obligatory which causes problems for their consistent implementation.
- Lack of political will.
- Lack of adequate mechanisms and instruments to implement legal provisions.
- Nonrealization of projects for the construction of the public transport network.
- Problems with financing of construction and maintenance of public transportation networks.

At the regional level the most striking weaknesses for the settlement development and mobility issues are:

- Regional spatial laws and other regulations are not always optimally matched with other regional sectoral laws.
- Lack of an appropriate system of incentives for promotion of cooperation among municipalities as well as among other levels of governance within the regions.
- Lack of the strong involvement of relevant regional and local stakeholders.

The following weaknesses for the settlement development and mobility issues stand out at the local level:

- The existence of rigidity of the regulation, which is too detailed in certain aspects and often prevents adapting the actions to the specific urban/regional context.
- Frequently the existence of too many transportation authorities which causes lack of visibility and understanding of public transportation systems and networks and deepens the problems of transportation systems management.

Based on the presented analytical findings it is possible to conclude that the objectives and guidelines referring to the need of improved integration of sustainable mobility and optimized polycentric settlement development are essentially of declarative nature.

For the sub-optimal implementation of the presented guidelines it is possible to expose, in addition to

the weaknesses identified in the responses to the questionnaire, a number of different sorts of (potential) barriers, which may be structured in the different groups, such as: financial, institutional, instrumental, physical, political, procedural and legal, but also social, psychological and technical (adapted from ISIS et al., 2003; May et al., 2005; Banister, 2008; Hull, 2009). The overcoming of them is of key importance for improving accessibility and fostering sustainable mobility by an optimized polycentric settlement development.

Type of barriers	List of barriers
Financial	<ul style="list-style-type: none"> • Distinctive budgets of different ministries and other governmental bodies • Inefficient and unstable taxation system • Insufficient resources and inefficient procedures to access funding to design and deliver sustainable transport solutions • Limitations on the flexibility with which revenues can be used to finance the range of potential instruments
Institutional / Governance related	<ul style="list-style-type: none"> • Weak institutional capacity and weak/contradictory incentives for cooperation • Poor inter-sectoral coordination • Lack of effective public accountability • Lack of stability and integration of the administrative structure • Reluctant departmental culture and / or the lack of efficient management mechanisms • Different procedures • Inadequate regulatory policies • Unsupportive legal framework and jurisdictional boundaries which inhibit joint collaboration in scheme delivery • Institutional structures that favour economic development and car traffic • Lack of legal powers to implement a particular instrument, and legal responsibilities which are split between agencies, limiting the ability of the authorities to implement the affected instruments
Instrumental	<ul style="list-style-type: none"> • Shortages of transport staff in local authorities and specific skill gaps • Lack of coherence of the planning and implementation system • Lack of data and decision support tools to support the design and implementation of sustainable transport modes

Physical	<ul style="list-style-type: none"> • Mono-functional settlements from the past planning tradition • Inadequate national transport infrastructure
Political	<ul style="list-style-type: none"> • Lack of political or public acceptance • Fragmented government approach towards transport service deliver • Poor linkages within national, regional and local authorities between spatial planning, transport and other departments • Priority given to competitiveness and attraction of new commercial developments • Historical break in autonomy of the regional and local governments • Uncontrolled privatisation • Immature democratic institutions and citizens awareness
Procedural and legal	<ul style="list-style-type: none"> • Unclear land ownership regulation and ineffective land use control
Social	<ul style="list-style-type: none"> • Opposition of specific stakeholders categories • Car ownership as a status symbol • Corruption • Absence of the appropriate explanation of the need for sustainable mobility, emphasising the positive economic, social and health benefits to the individual and businesses • Lack of suitable education, awareness campaigns, and promotion through media and social pressure
Psychological / Behavioral	<ul style="list-style-type: none"> • Reluctance to accept ecological driving and increase occupancy levels • Non-adherence to speed limits • Reluctance to the use of alternatives to cars • Lack of trust and cooperation between key stakeholders as a result of their different values and views on appropriate transport solutions
Technical	<ul style="list-style-type: none"> • Overload of professional duties with daily routine

Fig. 1. Barriers to the realisation of integrated land use and transport choices (adapted from ISIS et al., 2003; May et al., 2005; Banister, 2008; Hull, 2009)

The preparation of the transnational governance strategy envisaged within the MORECO project will need to reflect and find answers to the noted problems and barriers.

- 3. SWOT-Appendix 1: Factsheets: Overview of Pilot Sites (additional document)**

- 4. SWOT-Appendix 2: Motivations for residential site and mobility mode decisions (additional document)**

5. Bibliography and List of figures and tables

5.1. Bibliography

- **Banister, D. (2008).** The sustainable mobility paradigm. *Transport Policy* 15 (2008) 73–80. Elsevier.
- **Hull, A. (2009).** Implementing Innovatory Transport Measures_What Local Authorities in the UK Say About Their Problems and Requirements. *EJTIR - European Journal of Transport and Infrastructure Research*, Issue 9(3), September 2009, pp. 202-218. Delft. The Netherlands.
- **ISIS et al. (2003).** TRANSPLUS. Achieving sustainable transport and land use with integrated policies. Final Report. European Commission. The 5th Framework Programme, Key Action “City of Tomorrow and Cultural Heritage”.
- **May, A. D., Shepherd, S. P., Emberger, G., Ash, A., Zhang, X. and Paulley, N. (2005).** Optimal land use and transport strategies: Methodology and application to European cities. *Transportation Research Record*.

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