



WIKIAlps practical recommendations

Recommendations to policy-makers, civil servants, and the Alpine Space Managing Authority on how to integrate WIKIAlps project results in their work

Responsible:



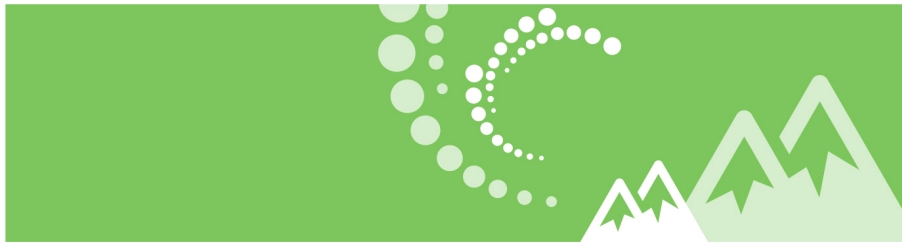
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1 Introduction

The projects carried out as part of the Alpine Space Programme have produced a large quantity of output that is barely manageable because the material was not collected at the same location. To overcome this barrier, the WIKIAlps project developed a WIKIAlps web-tool for easy access to all crucial information of selected projects in the Alpine Space Programme. In doing so, the partners have focused on sustainable spatial development and particularly on two thematic fields: 1) inclusive growth and 2) resource efficiency and ecosystem management.

To build a common framework for project assessment, the partners analysed international, binational, and national documents, and, by clustering their main priorities, they defined transnational needs that might also be applicable to projects in the Alpine Space Programme.

With transnational needs on the one hand, and broad knowledge on what has been attained in selected Alpine Space Programme projects on the other, the partners joined their experience in formulating recommendations for two different management levels:

- Recommendations to policy-makers and civil servants on how to integrate and use the WIKIAlps project results in their work; and
- Recommendations to policy-makers and the Alpine Space Managing Authority in order to place more emphasis on spatial development issues in 2014 and beyond.

Presented recommendations are relevant also for the EU Strategy for the Alpine Region, specially the chapter on Climate change, environmental protection, and natural hazards that tackles one of the main challenge of the Alpine region: the climate change.

The starting point for preparing recommendations was keywords from analysis of transnational needs, which were clustered into coherent topics. Afterwards the partners, who were each responsible for one topic, described the main background for each of the topics and formulated the recommendations. The recommendations were verified within the partnership and beyond.

By providing stakeholders with recommendations, we would like to help them solve Alpine spatial development issues and strengthen their knowledge of potential solutions and steps. On the other hand, recommendations to the Joint Technical Secretariat of the Alpine Space Programme and Alpine Space Managing Authority are meant to support them in fine-tuning the Alpine Space Programme for 2014 and beyond and its missions.

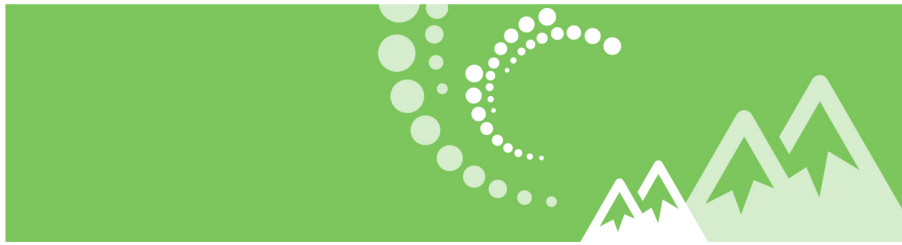
In this regard, recommendations were formulated for the following topics:

- 1) Networking;
- 2) The urban-rural relationship;
- 3) Accessibility to services;
- 4) Climate change, environmental protection, and natural hazards;



- 5) Governance and participatory planning; and
- 6) Sharing information via WIKIAlps.

Every topic is presented in own chapter, first with a short introduction of the challenges related to this topic and the Alpine Space Programme (or beyond), followed by two sets of recommendations: one for policy-makers and civil servants, and the other one for the Joint Technical Secretariat and Alpine Space Managing Authority. References are listed at the end of the document.



2 Recommendations

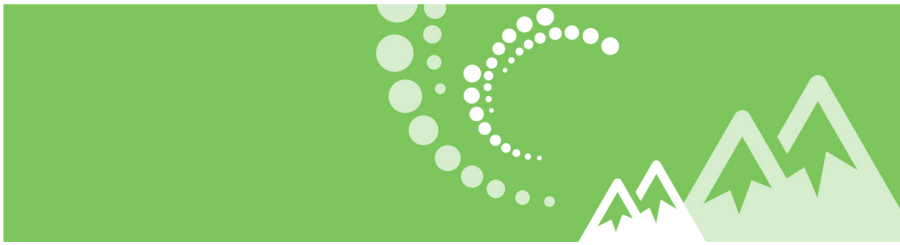
2.1 Networking

In the analysis of transnational needs across thirty-two planning documents, “networking and cooperation” turned out to be the activity that could be assigned one of the highest scores as a keyword. In most documents, networking and cooperation are therefore deemed to be a key element for satisfying transnational needs.

Networks contribute to the exchange of knowledge and they work as multipliers. They provide information, contribute to organizing work, and establish contacts with the public.

There are already many well-organized and established networks in the Alps that cooperate at a transnational level. Some of them concentrate their work on a certain sector and others are more diversified. Some can be joined by anybody, whereas others are exclusive for special groups. Some examples are listed here:

- The Alpine Convention: the international convention of all Alpine countries and the EU, institutionalized by the Alpine Conference (ministers), the Permanent Committee, the Permanent Secretary, and several working groups and platforms. The working groups and platforms were established to create policy recommendations for issues specified in the biannual Alpine Conferences. It is not possible to join the Alpine Convention, but its output can be used.
- The Zurich Process: a network of the transport ministries of the Alpine countries and the EU. It is not possible to join the Zurich Process, but its output can be used.
- CIPRA International: an umbrella organization for NGOs (and people in Slovenia) with a clear commitment to sustainable development of the Alps. CIPRA fostered the founding of the “Alliance in the Alps” and “Town of the Year” networks for municipalities and towns and is still administering these. CIPRA works as a multiplier of information that always focuses on Alpine-specific issues and emphasizes Alpine issues. It is not possible to join CIPRA directly, but it can be used as an information platform, its public events can be attended, and so on.
- ISCAR (the International Scientific Committee for Alpine Research) is a network of research institutions and one ministry (in Italy). ISCAR promotes international cooperation in Alpine research. It is not possible to join ISCAR directly, but one can participate in the Forum Alpinum (a conference), Alpweek (for the general public), and workshops.
- ALPARC (the Alpine network of protected areas) brings together hundreds of protected areas in the Alps. Its main task is to promote and support Alpine protected areas by pooling the experience and know-how of the managers of these areas. Therefore it cannot be joined by any individual, but by professionals.



- Club Arc Alpin is an umbrella organization of eight hiking associations that focus on mountain sports, nature protection, and spatial planning.

In addition to the networks that concentrate on the entire Alpine area, there is some transboundary cooperation or networks active in only some regions of the Alps. Examples are EuRegion Salzburg, Berchtesgadener Land, Traunstein (Austria, Germany) or Espace Mont Blanc (in France, Italy, and Switzerland). Others such as Euromontana or the European Mountain Forum expand the scope to all mountain regions in Europe. Of course, there are also national networks in the Alps, mainly on a sectoral basis.

Transnational needs for spatial cooperation require transnational networking and cooperation. In particular geographical units such as water catchment areas, biodiversity corridors, or nature protection areas often go beyond national borders and require transnational cooperation for their sustainable maintenance. Otherwise national activities might jeopardize the achievements of activities on the other side of a national border.

However, transport networks, economic cooperation areas, or commuter relationships also extend across borders and require transnational cooperation. The task of managing these different but overlapping ecological, economic, and social relationships and integrating the various requirements is a challenge at the national level. At the transnational level, this management becomes even more of a challenge. Therefore, good transnational networks and cooperation are crucial for achieving sustainable spatial development.

2.1.1 Recommendations to policy-makers and civil servants

- **Become aware of and make use of networks**

Today, almost all networks are accessible and provide information via the internet. Become aware of the expert and stakeholder networks in your field, access the information they provide, and check the presentation on the internet, not only at your regional and national level, but also in neighbouring regions or across the border. Looking beyond one's own nose can be the first step in getting new ideas for your own work and tasks. Sometimes information from other countries may offer highly valuable information. Explore the websites of the networks in your field and make use of the contacts provided.

- **Participate in networking events and build your personal contacts**

Even if time is always short, do not underestimate personal face-to-face exchanges. There is a lot of unwritten background information that might support your understanding and decision-making and that is only available through personal contacts.



Personal contacts are still needed for building a confidence base and make later exchanges via phone or e-mail much easier. Other opportunities include attending conferences, workshops, or open project meetings to broaden your expertise and to exchange experiences. Visiting other network members is also a good opportunity to share your ideas and to gain new ones.

– **Expand your own network**

As a policy-maker or decision-maker, you are already involved in a network (in your political party, or with other policy-makers at various spatial levels), be it with a focus on the Alps or not. Expanding your network across administrative borders can offer new insights and provide new ideas. The idea of “functional areas” as described in the recommendations on governance and participatory planning indicates which institutions and people in other regions are working in the same fields or facing the same challenges. For example, a functional area could be a cross-border labour market. This would require a cross-border transport policy and a common public transport – or at least a harmonized schedule of routes ending at the border. As a civil servant, it can be useful to exchange experiences with other civil servants working on similar tasks. This can be either a direct neighbour at the same spatial level (municipality, region, county, etc.) or a person from another spatial level. In a further step, you could expand your network in the territorial sense and find contacts that might be spatially distant, but face very similar challenges.

– **Use the WIKIAlps database of stakeholders**

The WIKIAlps database offers a stakeholder section in which the WIKIAlps team included all institutions that participated in the two thematic fields “inclusive growth” and “resource efficiency and ecosystem management” of the last programme period. In other words, the database offers the Alpine Space Programme stakeholder network from the last programme period as a first step to hooking up into a network. To find institutions with a certain thematic focus or within a certain geographical scope, you may use the filter as described in the mini-guide “Matrix of Competences”. Further functionalities of this stakeholder database provide information on contact data, and the thematic and regional influence of the various stakeholders.

2.1.2 Recommendations to the Alpine Space Managing Authority

– **Use the existing project partnerships**

The partnerships formed during the preparation phase of an Alpine Space Programme project and strengthened during the working phase often dissolve after the final conference and the end of the project. This is a loss of expertise, working dynamism, and cooperation already achieved. It might be



useful to offer post-project meetings after one to two years, in which the partnership can reflect on the work carried out with the experiences after that and offer feedback.

– **Offer exchange workshops**

Enhance the exchange of stakeholders by offering thematic workshops. Although the Alpine Space Programme generates many different project outputs, there is a lack of links between projects focusing on similar issues. The Managing Authority could stimulate such a professional exchange by offering (and financing) a framework for thematic workshops. Project partners could present their work and exchange experiences, thus finding and creating synergies between the projects. If such workshops are open to the general public, especially local and regional administrations and policy-makers, the potential user groups could express their needs directly. Insights and acceptance of project results might also be strengthened through practical exercises using tools, databases, methodologies, and so on. In this sense, sustainable behaviour change as an empowerment of civil society and administration could be used. This could support involving additional stakeholders outside the current partnership networks.

– **Support the horizontal extension of networks within the same field of expertise**

Even within an existing network there may be important actors that have not been involved in Alpine Space Programme issues so far. One example of the potential extension of networks is the administration for rural development in Germany, which is an important player in rural areas but has not yet been involved in any of the projects. Therefore extending networks is a permanent process and task for the Alpine Space Programme.

– **Support vertical extension of networks**

Within one field of expertise, networks should extend from the national level to the regional and local levels. Concrete tasks at the local level thus face requirements and limitations at the national level. Again, this might offer opportunities for finding partners, funding, or simply support from a different administrative level. Another vertical dimension reaches from the strategic level to a practical implementation level. Even at the local level, challenges cannot only be solved in a practical way, but will also need a strategic element such as developing visions for the future development of a municipality or only parts of it.



2.2 The urban-rural relationship

In recent decades, the traditional boundary between urban and rural areas has been blurred, including in the Alps (see Wandl et al. 2014). Urban regions, Alpine agglomerations, and small and medium-sized towns have concentrated the majority of the population: more than two-thirds of the population live in “functional urban regions”, and even more if one takes into account the Alpine Space Programme area. These encompass both urban centres and often vast surrounding countryside made up of rural areas with a diverse character; for example, regarding residential, tourism, and production (industrial and agricultural; see Hilal et al. 2011). This development has led to an increased interdependence between urban and rural territories that challenges territorial cohesion and sustainable spatial development.

Rural-urban links might be perceived as both a normative instrument of public policy and as a wider thematic field that relates to contemporary rural-urban structure, and to urban and rural issues at the same time. By definition, rural-urban links are the functional relationships that exist between urban centres and their hinterlands. Such interdependencies exist in diverse dimensions, based on the complementarities of urban and rural assets that lead to the mobility and exchange of goods, services, and human capital.

In the Alpine Space Programme area, two scales of interdependencies overlap. At local scale, there are considerable links between urban centres (from inner-Alpine agglomerations such as Grenoble, Bolzano, or Innsbruck to medium-sized or small towns) and their surrounding rural, valley, and mountainous areas (Perlik et al. 2001). At a larger scale, there are links between inner-Alpine territories (e.g., as covered by the Alpine Convention) and metropolitan zones in the peri-Alpine belt, notably the large metropolises of Munich, Vienna, Milan, Turin, Lyon, Geneva, Zurich, and Ljubljana (Perlik 2010; Baetzing 2003). In both cases, rural-urban interdependencies exist in many regards. They are based on the assets of metropolitan and urban job markets, service provision, and other urban amenities on the one hand, and Alpine rural assets on the other, offering high-quality leisure, tourism, and residential landscapes, water and energy supply, and regional food production. These interdependencies, however, cause economic and spatial polarization, and thus have negative effects on spatial development and contribute to spatial disparities. The outcomes are increased mobility, passenger and freight traffic, ongoing urban sprawl, decreasing accessibility to services in remote areas, social exclusion, and segregation. Consequently, one of the major contemporary challenges of spatial development in the Alps is to integrate urban and rural assets in order to better manage rural-urban interdependencies and foster territorial cohesion.

The contemporary EU and Alpine policy agendas underscore the necessity to account for rural-urban links. Recent orientations – for instance, the European Spatial Development Perspective



(European Spatial Development ... 1999), the Green Paper on Territorial Cohesion (2008), the new orientations of the Common Agricultural Policy (The CAP ... 2010), the RURBAN preparatory action (Urban-rural linkages ... 2014), and the Declaration on "Population and Culture" of the Alpine Convention (2006) – emphasize an integrated approach to spatial development of urban and rural areas. This approach is based on functional areas that should go beyond intra-city policy coordination and rural development issues. Links between urban and rural areas should be improved to achieve more balanced territorial development; that is, more efficient land use and planning, better provision of services (e.g., public transport and health), more developed territorial governance, stimulation of economic development and job creation, and better management of natural resources.

The main objective of this chapter is to highlight recommendations to improve rural-urban links within the Alps and with territories outside the Alps, based on rural-urban partnerships. Such partnerships may help strengthen territorial cohesion and contribute to more sustainable forms of spatial development. In addition and by definition, rural-urban links arise from contemporary urban and rural dynamics, settlement structure, and territorial functioning. It is therefore also essential to draw attention to more general recommendations that address both urban and rural development issues. The recommendations are guided by the WIKIAlps project's vision of sustainable spatial development, based on normative transnational and national spatial policy and planning documents, results of the WIKIAlps project analysis, and the expertise and experiences of the WIKIAlps partners.

2.2.1 Recommendations to policy-makers and civil servants

– Support polycentric development

Balancing growth and links (commuting, service, and shopping access) between centres of national, regional, and local importance, may increase territorial cohesion and resource efficiency. The Alpine urban system consists of large peri-Alpine metropolises, large to medium-sized inner-Alpine agglomerations, and smaller cities and towns. Although to a different degree, all of these centres are and should remain the hubs and links that provide their hinterland and remoter regions with goods and services. It is crucial to strengthen the urban system as a whole in light of the objectives of territorial cohesion and equality of living conditions. Here, small and medium-sized centres in particular play a crucial role due to their predominance in the Alpine urban system. Second, for the objectives of sustainable settlement development, polycentric development has also triggered planners' interest in countering the widespread phenomenon of urban sprawl. Contemporary urban and regional planning guidelines and practice should aim at concentrating urban development around centres alongside the urban system and along major transport axes. In this context, polycentric development is also based on



inter-municipal cooperation and overcoming administrative boundaries; for instance, through pooling local resources and joint development strategies.

– **Strengthen small and medium-sized urban centres**

In order to ensure local employment, retain human capital, and maintain a high level of services, it is essential to increase the competitiveness of Alpine towns and local centres. To reach these aims, the CAPACities project recommends the formation of small-scale alliances and links between Alpine towns in proximity to one another, based on shared functions and complementarities. The InnoCité project delivers recommendations at the local scale; for example, for structural activities, such as improving urban quality, the selection or availability of commercial activity and services, or for intangible activities such as promotion, marketing, and communication, which may help to position Alpine towns in the urban network and enhance their visibility. In addition, other projects such as ACCESS, COMUNIS and demo.change relate more indirectly to the competitiveness and attractiveness of smaller Alpine towns. They have developed recommendations on, for instance, how to jointly develop commercial zones, how to attract young people for professional education, and how to improve transport and communication networks.

– **Integrate transport and urban planning**

Although interactions between transport and land use are widely recognized, regional and local practice often lack integration of land-use planning and transport projects. This leads to severe impacts on the Alpine environment and to the overexploitation and inefficient use of natural resources; for example, regarding land development, traffic, air pollution, and fuel consumption. In order to decrease these impacts, it is important to integrate land-use planning and transport planning. For this, it is first of all essential to raise awareness and build knowledge among stakeholders that are concerned by and drive land-use development. In this regard, the Moreco project has delivered some valuable tools to raise the awareness of households, mobility actors, planners, and decision-makers; these are tools that should be used. Second, integration of transport and urban planning requires both integration between planning and transport sectors (horizontal integration) and integration between different administrative scales (vertical integration).

– **Diversify and sustain rural economic activity**

Rural-urban links also arise from the distribution of employment and exchanges of goods between rural and urban areas. First, a major dimension of functional rural-urban links is commuting. Because employment opportunities are predominantly concentrated in and around cities and towns,



people commute to these areas from their residential location. To reduce commuting and its follow-up costs, it is desirable to re-balance employment locations between urban and rural or mountainous areas and to promote employment in remoter locations. Recommendations in this regard relate to economic diversification, more hybrid forms of work and its locations (e.g., telework and telework centres), and supporting and developing rural small and medium-sized enterprises. Rural economic activity can also help strengthen rural-urban links and cohesion. Local agricultural and craft production should be supported and should try to build on close urban markets. Finally, it is important to sustain rural agricultural activity, providing not only food products but also the maintenance of environmental services to the population, among other things the attractiveness of a cultural Alpine landscape (as a basis for tourism, recreation, and quality of life).

– **Promote rural-urban partnerships**

Rural-urban partnerships relate to cooperation between cities and towns and their surroundings. They are generally described as bottom-up approaches, which are based on dialogue, participation, and local autonomy (Urban-rural partnership ... 2013). It is important to consider regional and local territorial contexts before deciding which actions to pursue in promoting partnership. The essential basis for a rural-urban partnership is the existence of links and problems that are mutually shared (sectoral – e.g., transport – or more integrated), and in which a partnership solution might bring about a win-win situation between territories. The creation of an ongoing process based on governance is decisive because various stakeholders should be included. Also for this reason, constructing rural-urban partnerships is time-consuming. Time determines the effectiveness of project action, and it also determines the partnership's progress along its lifecycle. To maintain a good dynamic and create a feeling of togetherness within the partnership, actions should focus on small steps and many concrete projects. In this way, a greater variety of stakeholders is included and a larger number of success stories emerge (Artmann et al. 2012).

– **Promote partnership between Alpine and peri-Alpine territories**

Rural-urban links also exist between pre-Alpine territories, specifically large metropolitan areas such as Milan, Munich, or Lyon, and Alpine territories; for example, their countryside in the perimeter of the Alpine Convention. The task for Alpine–peri-Alpine territorial partnerships, as a form of rural-urban partnership at a larger scale, is to better manage these more intangible links and flows, and to establish compensation mechanisms for mutual impacts. It is thus necessary to promote partnership with the same recommendations as for smaller, functional rural-urban areas. Awareness among stakeholders has to be raised regarding benefits from complementary assets and functions; for example, for



competitiveness, better environmental management, and enhanced quality of life. Territories and their stakeholders need to enter a dialogue and develop a shared vision that does not stop at the border of their functional areas, countries, or the Alpine Convention. However, because functional links might be weaker and more intangible, local stakeholders might lack motivation to join such partnerships. Here, it is even more important to have sufficient political backing at the regional level, creating a fruitful political and administrative context that is able to trigger such approaches.

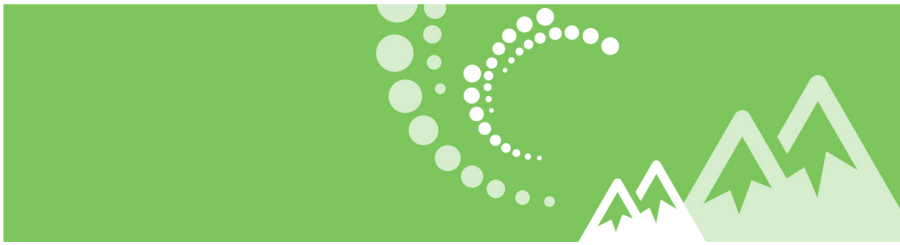
– **Promote governance approaches at the scale of the functional urban area**

The importance of the functional urban area approach to account for interdependencies between the city and its hinterland has already been highlighted. In order to improve resource efficiency and contribute to sustainable spatial development, spatial planning and policy should share this spatially integrated vision. Numerous examples of such urban region planning approaches already exist in the Alpine area (e.g., greater Geneva, the Grenoble urban region, the Milan metropolitan region, the Innsbruck planning region, and the Ljubljana urban region), with various levels of institutionalization and various forms of regional governance (see also the Rurbance project). At this time, they often concern sectoral issues and lack influence with regard to spatial planning (which generally remains a municipal competence). The aim here should not be to standardize approaches across the Alps and institutionalize spatial planning at the urban region scale at any cost. The aim should rather be to start softening administrative and rural-urban borders through the development of a common dialogue and a joint vision of a functional territory, based on equal contributions and agreements of all territories in the area.

2.2.2 Recommendations to the Alpine Space Managing Authority

– **Emphasise creation of the legal and organizational conditions for rural-urban partnerships**

Both territorial experiences and the emphasis of European guidelines on rural-urban partnerships in spatial development show that spatial development issues should be solved jointly in rural-urban territorial systems; that is, functional urban areas. In order to promote and alleviate partnership practices and ensure a lasting process, it is important to strengthen legal and organizational frameworks at the regional, national, and transnational levels. Bottom-up efforts need to be identified, accompanied, and backed by public policy and financial support, without compromising local flexibility due to different contexts. The Alpine Space Managing Authority should try to promote projects that concentrate on functional urban areas and local governance, such as Rurbance. Such projects on local practices could help in deriving recommendations and ideas for policy changes, coming from the bottom or local experiences.



– **Emphasise creation of the legal and organizational conditions for Alpine–peri-Alpine partnerships**

Polarization around peri-Alpine metropolises (MEGAs) has negative effects on Alpine towns, notably impacting migration, job markets, service provision, transport, and mobility, and hence local living conditions (Bole et al. 2011). In order to ensure local employment, retain human capital, and maintain a high level of services, it is essential to increase the competitiveness of Alpine towns and local centres and to strengthen their position in national and regional policies, also as a counterweight against the MEGAs. Changes to legal and organizational framework conditions can support the partnerships (Urban-rural partnership ... 2013), but need to be stimulated at the regional, national, and transnational levels with policy reforms, new instruments, and incentives. For instance, the EU Strategy for the Alpine Region, encompassing the Alpine Convention area and the peri-Alpine belt, might become one of several scenes where such partnerships can be promoted.

– **Diversify and sustain rural economic activity**

Our analysis of Alpine spatial development issues has not revealed particular Alpine Space Programme projects and related recommendations that address rural economic activities. This might be either due to the scope of WIKIAlps or due to a real lack of consideration of the links between spatial development and location of economic activity. For sustainable and balanced spatial development of the Alps, we recommend that future calls integrate a cross-sectoral vision of economic development, considering spatial and functional effects of economic activity and its development. This is important for maintaining a vital network of central places.

2.3 Accessibility to services

Preserving and improving spatially and socially equal accessibility to Services of General Interest (SGIs) is a core issue for the functionality of mountain areas and any regional development strategy at both the national and transnational levels. SGIs cover both market and non-market services that the public authorities class as being of general interest and subject to specific public service obligations. Various Interreg projects (e.g., PUSEMOR and ACCESS) have revealed that sparsely populated areas in all Alpine countries are facing difficulties in maintaining services due to their poor profitability and due to the need to respond to new or changing needs of the local population. The ongoing territorial concentration of SGIs leads to a vicious circle of further deterioration in the quality of provision, which in turn causes decreasing demand in existing services (Machold 2010). This process has many negative



consequences for the regions affected. In fact, the withdrawal of SGIs causes reduced functionality, reduced competitiveness, and more motorized mobility in communities in sparsely populated areas (Hiess et al. 2006). Furthermore it aggravates social inequalities; people without cars or that do not know how to use ICT face problems in accessing services. These areas are often characterized by significant population losses and population ageing.

The main challenge for the communities and regions concerned is therefore to find innovative ways to deliver and/or access SGIs, both through the physical transport of people and goods as well as through the non-physical, electronic transfer of services supported by modern ICT. Demand-oriented and flexible SGIs should be promoted with innovative cooperation structures in order to best capitalize on the potentials of sparsely populated areas. These challenges are advantageously put into relation with the concept of governance. The concept of governance redefines public administration in the broad sense of the term, to meet new challenges in society. This is increasingly seen as a concept that encompasses a series of mechanisms and processes designed to empower the population and to ensure that society owns the process. This concept is very beneficial when searching for well-adapted, customer-oriented SGIs (Hiess et al. 2006).

2.3.1 Recommendations to policy-makers and civil servants

– Aggregate services

Too small a demand for locally provided services is one of the most common reasons for efficiency problems in rural SGI delivery. Putting multiple services in the same physical location, or co-locating them, is one approach that seeks to build demand. The main advantages of co-location are that it can result in cost savings in energy, security, administrative expenses, and so on (economies of scale), and at the same time can improve access time (with extended opening hours). Another advantage is that users that incur travel costs can combine trips to save money and time. If post office services are consolidated with a shop, people can take care of their mail and buy food at the same time. Meagre resources call for the bundling of resources. Small municipalities in particular will only be able to provide basic services if coordination and cooperation are not shared with other municipalities. It will be necessary to leave behind a purely sectoral form of organization for the provision of SGIs. WIKIAlps could help in bringing together different actors in SGI delivery and also facilitate the exchange between political entities (e.g., municipalities).

– Provide alternative delivery mechanisms

Bringing services to users and the Internet are two possible ways to deliver a service in a manner that can either increase efficiency or attract more users. Where the demand for SGIs is widely dispersed,



it might be more efficient to reorganize how the service is provided and bring the service to the user (Dax 2006). The Internet offers new opportunities to provide services in rural areas and for providers in rural areas to offer services outside their territory. On the other hand, a number of providers of business services now choose to live in rural areas and are able to manage their routine work with urban clients from a home office using web services and videoconferences. For rural areas, ICT provides new ways of dealing with the disadvantages of remoteness. Access to high-speed broadband capacity is crucial for rural areas to take advantage of these opportunities. Many countries are investing in improving broadband capacity, but there is little agreement on how fast connectivity has to be in order to be an effective tool for SGI delivery. Moreover, it is important that countries and communities realize that in addition to connectivity there have to be parallel investments in technology and human skills in the rural communities for broadband investments to really pay off. In conclusion, the rollout of ICT in rural areas should be speeded up.

– **Offer different types of providers**

A particular type of service must not be restricted to a particular type of provider. In some cases, the best solution in SGI provision might be a for-profit village shop, and in other villages there are community-owned shops that provide equivalent access to services. Finding a new provider may be a way to stimulate demand and increase profitability. In practice, replacing a current service provider often means that a for-profit company or a government unit hands service provision over to a non-profit entity or to a volunteer organization. The same approach mentioned above is applicable to mobility services when people need to move to places where the SGIs are located (usually the regional centre).

– **Improve marketing and demand**

Too often service providers in rural areas seek to exploit a local monopoly situation and pay little attention to actively marketing their business or improving the quality of service, a situation that in turn contributes to a negative image of the service. With increased mobility, users are better able to identify alternative service providers outside their immediate territory that offer better value. This results in a declining volume of use and affects the profitability or viability of the local service. In this context, one has to keep in mind that the closure of one shop (e.g., a butcher's shop) can have a domino effect, resulting in another shop (e.g., a local grocery) also facing major problems due to subcritical cluster size.

One option for building demand is investing in marketing and improving the quality of the service to assure that customers know the service is of high quality. In addition, with a changing lifestyle oriented toward healthier products, there is growing interest in supporting local business, including all



forms of local service providers if they offer competitive products. This change in attitude has to be fostered actively by service providers and local authorities.

– **Improve accessibility and strengthen communication networks**

From the perspective of daily needs, communication networks – mainly including roads, bus lines, rail links, telephone, and broadband – are valuable because by linking different elements to a service chain they allow other types of goods and services to be produced and distributed. Public transport plays a major role in increasing the accessibility of and linking various SGIs. Therefore politicians should keep an eye on strengthening communication networks, although they should act with caution because these networks can also have the effect of drawing away customers. A new road for example, might make purchasing goods outside the immediate area more attractive. From the perspective of how to improve communication networks, new approaches to restructuring conventional public transport have been successfully developed in Europe during recent decades and are ready to be implemented wherever needed. They can be accompanied by flexible unconventional solutions, also involving drivers as self-providers of public services, such as car-pooling and car-sharing. One key success factor in these cases is the coordinated provision of mobility services directed by a planning body, together with the help of communication and marketing actions. A second important issue is to put user needs at the very centre of planning public transport. Modern ICT technologies make it easier for the public authorities and for companies to listen to everyone’s mobility problems, so that connections can be planned according to real needs.

– **Reinforce SGI-related policies**

The importance of SGI, especially for rural mountain areas, is often insufficiently reflected in policies. Legal frameworks can even act as handicaps for providing SGIs and their functioning.

2.3.2 Recommendations to the Alpine Space Managing Authority

– **Strengthen rural-urban links and improve governance, co-design, and codelivery**

Strengthening rural-urban links and improving governance, co-design, and codelivery are areas where the Managing Authority should place more emphasis with regard to accessibility and mobility in relation to spatial development. Establishing rural-urban links and fostering governance creates synergies, is more cost-effective, and is sustainable. This involves a strictly multisectoral approach and a participatory methodology.



2.4 Climate change, natural hazards, and environmental protection

The Alps are more strongly affected by climate change than any other region in Europe, and recent warming has been roughly three times the global average (Climate Change in ... 2007). In the Alpine area, the availability of space suitable for permanent settlement and economic activities is limited, and the land demand for other types of uses is increasing. The effects of climate change exacerbate the problem, extending the number and relevance of hazard zones as well as the need for land for protection measures in connected areas. As a consequence, land is becoming increasingly scarce as a resource for settlements in almost all the Alpine regions. Long-term climate changes, affecting glacier mass, for example, and the growing risk of extreme weather events and natural hazards have already had severe consequences on natural ecosystems, infrastructure, residents, and economic sectors, and they could compromise the development and growth potentials of the entire Alpine region.

Climate change adaptation is therefore becoming relevant for Alpine spatial planning and development. A European Commission white paper explicitly stresses the necessity of a long-term and strategic approach to spatial planning in order to reduce vulnerability to the impact of climate change (Climate Adaptation Policies ... 2012). Spatial planning can thus be considered a “consistent, effective and influential means to prevent and respond to the consequences of climate change on the alpine territory” (Transnational Strategy ... 2011). According to the green paper “Adapting to Climate Change in Europe – Options for EU Action” from the European Commission, “spatial planning is a cross-sectorial issue, which makes it a suitable tool to define cost-effective adaptation measures.” This means that policies and strategies for adapting to climate change should become a prioritized field of action of spatial planning.

Adapting to climate change is a process that, as a complement to mitigation processes, reduces the consequences of global warming (Climate Change 2007). However, adaptation requires technical knowhow, funding, and large businesses; it necessitates coordination between individual actions and public policies, and it could be completely ineffective without political will and social awareness. Furthermore, the adaptation strategy must be implemented in several economic sectors and climate change adaptation strategies should be included in decision-making processes.

Adaptation to climate change is strictly connected with environmental protection and natural hazard management, and this creates a general situation of high complexity with a high level of uncertainty. An unsuitable or inadequate adaptation strategy can worsen the situation, and for this reason spatial planning must become the convergence point of various contributions coming from specialized approaches. There is room for innovation in soft adaptation strategies, which are often better able to manage uncertainty than hard adaptation strategies. Spatial planning could be implemented in Alpine territory by adopting focused adaptation strategies that promote a diffuse



responsibility and awareness in a social and economic context, adapt firm decisions in limiting the use of areas threatened by natural hazards, sustain concrete actions in business sectors to reduce irresponsible exploitation of natural resources such as water and soil, and spread awareness about well-oriented governance for preserving balance in local development. This requires the establishment of an active social and cultural context, together with governance capacity and transparency of decision-making processes.

In the Alps, adaptation to climate change, respect for the environment, and management of natural hazards call for difficult decisions that may affect many interests. Thus, these choices should be based on robust and reliable climate scenarios. Although a large variety of evidence for climate change is available, it is not yet possible to make a precise forecast from the information available and it is not even possible yet to draw a trustworthy picture of the effect that climate changes will have on natural hazards in the Alps. Nevertheless, decisions regarding adaptation to the increasing risk of natural disasters and climate change have to be made now because “there are costs and risks to action, but greater long-terms costs to inaction” (Meeting the risk ... 2011).

2.4.1 Recommendations to policy-makers and civil servants

Climate change

– Integrate climate change adaptation into planning practices

In order to address the impacts of climate change, an adaptation strategy has to be developed and embedded in spatial planning at the regional, national, and local levels. Despite several examples and attempts, at the Alpine Space Programme level it is still impossible to find a solid methodology that can be applied to different territorial situations. Even the economy is a sensitive criterion that should be taken into account because the availability of financial resources is a critical factor in supporting activity countering the negative effects of climate change.

– Foster cooperation among administration at the same level

Cooperation is a strategic element, especially for collecting and interpreting local climate change data. Territorial monitoring and analysing the information and data directly collected in the field have become important tasks for many administrations. These fresh data are a valuable element for improving the quality of the scenarios for how climate change will evolve. Cooperation in the Alpine area should be fostered because is useful to set up standards and shared methodologies that make information transferable from one context to another.



– **Build and use a common knowledge base through interdisciplinary and transnational collaboration**

Taking the example of the PermaNET project, assembling all experiences and measurements into a single knowledge base has created a sophisticated decision base and has led to the development of a consistent map of permafrost distribution in the Alps. This example could be extended to many other similar situations. Creating common knowledge bases is essential for giving local civil servants a more solid base for their daily work in managing Alpine territories.

– **Start acting**

Institutions and public bodies bear great responsibility in decisions concerning adaptation to climate changes. Over the last ten years, the appeals for more effective political action against the negative effects of climate change have been so clear and sometimes so easy to apply that the first recommendation is to start acting.

– **Create a legal framework for climate change and set up funds**

Because a large selection of recommendations and research findings is available, it is now time to prepare a suitable legal framework for climate change policies and to budget funds for implementing them. This is not easy to do, especially when almost all public administrations are facing a drastic reduction in financial resources and when the priority is to support investment for economic development. However, even the expenses of climate change compensation could be a source of opportunities for new jobs, considering needs in terms of land protection, new technologies for energy production, consumption, and so on.

– **Put climate change adaptation at the top of the priority list**

Climate change adaptation must be at the top of the list of political concerns and, like policies for public health and military security, this should be one of the costs fixed in every public budget. In Europe each year, the cost to repair damage caused by climate change amounts to several billion euros and even more resources are required to decrease this risk to a reasonable level.

– **Put statements into practice**

Policy-makers should express clearer commitments. The majority of white books and white papers do not have an implementation section in terms of program and project management, and too often they risk remaining only statements on paper.



Natural hazards

The results of the AdaptAlp project (Meeting the risk ... 2011) are the most advanced and are implementable in the near future.

– Develop an integrated risk-management framework

The complex territorial situation in the Alps demands integrated risk management of natural hazards that is part of a holistic understanding of natural risks that includes risk analysis, risk evaluation, and reduction. Integrated risk management should incorporate all the measures that contribute to reducing the damage caused by natural hazards. These measures include emergency management during disasters, maintaining protective structures, and maintaining protective forests.

Integrated risk management is a task that must be carried out at transnational, national, regional, and local administrative levels, and it requires the interconnected and coordinated effort of many actors and institutions at each administrative level. All responsibilities and actions must be coordinated and must complement one another.

– Make use of existing data and favour the creation of long-lasting data sets

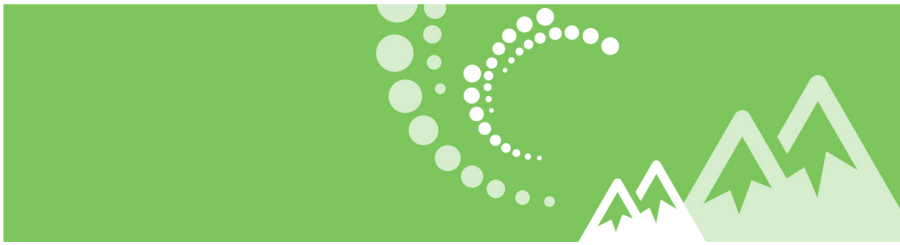
It is important to make optimum use of knowledge, experience, and information so that the potential synergy of all the institutions involved can leverage the cost-effectiveness of risk-appropriate measures. The use of long-lasting data sets has to be favoured to better understand the evolution of small areas where the processes are highly uncertain.

– Foster risk communication and risk dialogue

Risk communication and risk dialogue are the preconditions for efficiently coordinating all actors' activities. Without this, the advantages of integrated risk management cannot be obtained. Risk communication and risk dialogue must be promoted and appropriate training must be provided. Risk communication must address the young (risk education), and risk communication should be an essential component of disaster risk management in the municipalities. Regular events need to be held that ensure the involvement of authorities, experts, stakeholders, and citizens affected.

– Consider the influence of climate change on natural hazards

The most effective strategy for dealing with the influence of climate change on natural hazard processes is measured consideration of natural hazard processes in land-use planning, strengthening personal responsibility for protecting property, and risk-appropriate priority-based investment in risk-reduction measures such as early warning, prevention, emergency planning, and so on. In line with the current state of knowledge, it is recommended that the effects of climate change on natural hazards be



considered only if they are reliable and significant. It is recommended to avoid generalizing individual effects of climatic changes to all natural hazards across all locations in the Alps.

– **Cooperate beyond borders and across sectors, and apply multi-level strategies**

Preventing disasters caused by natural hazards is an area where political action should demonstrate its capacity to cooperate and work beyond borders. Policy-makers and local administrators can immediately apply multi-level strategies to start a territorial rebuilding process, including the effects of natural hazards in new spatial development scenarios.

– **Develop a common Alpine strategy for resilience to natural hazards**

Having examined several Alpine Space Programme projects, we noticed that many recommendations for natural disaster prevention are transferable from one type of natural hazard to another, or they can merge into a common Alpine strategy for resilience to natural hazards. All of these examples lie in the hand of politicians and public administrators, who should motivate their institutions to act towards changing the long-term trend in Alpine land use.

Environmental protection

– **Be proactive**

The role of civil servants in environmental protection is, first of all, an ethical commitment, which starts with the awareness they are at the centre of a system that can influence the future. Being proactive could be the synthesis of an attitude that demands constant engagement to foster the efficiency of public policies.

– **Make governance a component of the environmental protection process**

The responsibility in implementing environmental protection policies includes the will to be an essential part of the governance process, not refusing to face the dynamic evolution of Alpine territory. An example comes from spatial development strategies and projects, where one can find many practical recommendations for the sustainable development of settlements, services provided by them, and mobility. White books describe transferable governance strategies that should serve as a guideline for regions and territories seeking to implement some specific tools. Other projects present more detailed recommendations that should help in better taking into account services of general interest within legal frameworks; for example, in spatial planning.



- **Use new technologies**

Even new technologies, especially advanced GIS based tools, can help spatial planners to steer land use in such a way as to preserve natural habitats and also allow sustainable development and production.

- **Combine long-term thinking and project action**

Politics should work on a short-term agenda: long-term objectives are essential to address trends, but project action, perhaps as part of long-term strategic thinking, is a critical component of environmental governance. Defining and respecting intermediate goals could be a good approach to correcting or changing long-term strategies that turn out to be adapted to effectively attain the expected results.

2.4.2 Recommendations to the Managing Authority

- **Converge towards common action**

The Alpine Space Programme could contribute to this approach. Starting with the beginning of the programme period, it could be useful to include a capitalization project for each priority axis, aiming to immediately highlight the most important actions to implement for climate change adaptation, natural risk management, and environmental protection, and addressing these findings to policy-makers.

2.5 Governance and participatory planning

Contemporary spatial development challenges in the Alps, connected to climate change, demographic change, transportation, natural hazards, and other issues, refer to all spatial levels, from local to transnational, to formal actors and those not part of political establishment and governmental jurisdictions. Therefore, spatial planning may not only reflect the views of the government, but should connect all stakeholders into a partnership, providing a solid structure for sustainable spatial development through inclusion of actors, governance, and participatory planning.

In this regard, governance is related to overlapping processes and relationships between governing bodies that can also include external actors. The aim of governance is not to change the concept of government, but to create new, additional forms of “integration out of fragmentation” and new forms of “coherence out of inconsistency” (Davoudi et al. 2008). This is particularly promising for the Alps, where the preservation of the unique and sensitive Alpine natural environment must go hand in hand with human social and economic activities, and thus appropriate and diversified measures



should be in harmony with the local population, political representatives, and businesses and associations (Protocol ... 1994). Putting them at the fore, local stakeholders are given a chance to determine their own social, cultural, and economic development, convinced that many problems in Alpine territory can best be resolved by the local and regional authorities directly concerned (Protocol ... 1994, Article 7).

In relation to governance, participatory planning includes stakeholders in a planning process and seeks to transcend the partial interests of individual regional actors that could play an important role. A mutual search for the most appropriate solutions creates better acceptance of the decisions made, prevents unproductive competition, and lowers the differences between stakeholders' perspectives. By taking part in the planning process, stakeholders are more likely to identify with proposed solutions, their motivation for engagement is higher, and activities are more easily implemented.

The participation process strengthens regional identity, initiates a process of social learning, enhances local knowledge, and promotes comparative advantages based on local knowledge. The participatory process requires sensitive attention to not increasing socioeconomic differences between groups in the population, but instead reducing and eliminating such differences (Nared and Razpotnik Visković 2014).

Although participation also has its disadvantages, especially because of the efforts required regarding time, financial resources, and potentially resulting exclusion or underrepresentation of individual groups due to inadequate knowledge and skills, it is still the best instrument for providing democratic and sustainable spatial development. The role of participatory planning is exceptionally important because local cultures, geographical conditions, urban economic composition, local management styles, and local governance conditions are site-specific and have a significant influence on planning decisions. Planning is thereby accorded higher quality, legitimacy, affiliation, and support from the population, which is a precondition for successfully implementing planning activities (Nared and Razpotnik Visković 2014).

2.5.1 Recommendations to policy-makers and civil servants

– Focus on functional areas

The historical background, traditions, and cultures in the Alpine area are also reflected in various forms of cooperation that exist between and within Alpine regions. Once production chains and provision of services were localized and limited to local supply and demand, but this has changed considerably in direction of the complex, large-scale, cross-sectoral character of contemporary setting of spatial, social, and economic relations. Therefore functional areas have broadened, and spatial processes such as climate change, natural hazards, and so on are often managed at the macro-regional



(Alpine) or even global levels. In this regard, administrative regions do not fit the requirements of contemporary planning and planning should thus refer to broader functional areas, which differ by area, sector, and problem. Connections at the level of functional regions have several advantages: the entire system in the entire area of influence can be planned and thus a greater level of integration of the area can be achieved in addition to better interconnection between the measures taken, which can be reflected in better results at the level of all administrative units included. The focus on the entire area of influence also makes it possible to include all of the driving forces, which can provide more comprehensive solutions (Nared and Razpotnik Visković 2012).

– **Overcome borders**

Transition towards functional regions, also supported by European territorial cooperation, requires various forms of cross-border cooperation. To overcome borders, one could join one of the Alpine transnational networks that represent new models of coordination and governance, a new politics of horizontal relations. These interlink various actors that are concerned with the protection and sustainable development of the Alps (CIPRA), protected areas (Alparc), municipalities (Alliance in the Alps), small businesses (NENA), cities (Alpine Town of the Year), researchers (ISCAR), tourism resorts (Alpine Pearls), and many other areas. A further step in cross-border cooperation is transnational and cross-border projects. The financial support of partners from the seven Alpine countries makes it possible to overcome national borders and promote sustainable spatial development together at the transnational level. Another form of European territorial cooperation is cross-border cooperation, which is even more focused on problems arising from contact between two different administrative systems and on issues shared by regions on both sides of the border. Successful projects provide not only solutions for their regions, but also to similar problems in other regions.

– **Upgrade government with governance**

Management of areas and sectors is normally clearly defined in various acts, building the framework at various government levels, but some undefined areas can still be found where the jurisdictions and competences are blurred, being either a matter shared by various sectors or at different territorial levels, or where different institutions deal with residents' expectations. In such cases, when competences and interests interweave (and this is particularly true in an international community like the Alpine area), common solutions should be sought by joining all crucial stakeholders into a process in which matters are discussed and decided upon mutually. Governance does not replace the jurisdictions of the countries or institutions engaged, but particularly binds them in areas where joint effort provides additional benefits to all parties. Inclusion in the decision-making process is



especially important for local residents due to their implicit knowledge, which could effectively fit solutions taken to the local environment (Nared and Razpotnik Visković 2014).

– **Find your own form of cooperation**

The examples of cooperation described above lead to the conclusion that there is no uniform concept of cooperation. Both informal cooperation in the sense of voluntary, participatory decision-making, and the establishment of a more formalized joint institution in charge of developing policies for all the units included can be successful. Cooperation in some form is essential, regardless of which form it takes, provided that a clear definition of jurisdictions is given. In the case of joint bodies, their range of activities, sources of funding, and how they include individual stakeholders must be specified. In the case of informal governance structures, it makes sense to define clear processes to reach consensus, and a joint facilitator to manage the process. Even if the decision-making process is informal, an umbrella institution should supervise the process and be responsible for implementing the agreed-upon activities. Solutions should also be sought in a consensus between all the actors involved because only in this way will the joint body be able to achieve satisfactory results (Nared and Razpotnik Visković 2012).

– **Include stakeholders from the very beginning**

The starting point of participatory planning must be honest inclusion of all stakeholders in the planning process, in which the stakeholders are not only included in the process from the first steps of the planning process, but should potentially be the initiators and the driving force of the process. In this regard, the planning procedures and roles of stakeholders included should be clearly defined in advance:

- Define the issues and the scale of challenges at stake.
- Invite a network of stakeholders in the selected topic and the issue to be tackled.
- Encourage stakeholders to actively participate. Discuss their proposals, adapt them, and include them in plans wherever possible.
- Try to highlight the main alternative suggestions and opinions and, where possible, achieve broad agreement on the joint vision and solutions.
- Implement the plans agreed upon.

Start with working groups on specific topics with all political, administrative, and planning authorities. Ensure that there are sufficient resources to follow up the advice and recommendations (Nared and Razpotnik Visković 2012).



– **Provision of an effective and transparent communication platform**

On the basis of the joint recognition of the extent and character of common challenges, a joint platform for communication and cooperation should be established for planning and implementing activities. To establish a joint platform, the roles and issues of potential conflict of the participating authorities should be identified and resolved as far as possible. A cooperation platform can be established in various ways: through a common communication and information platform, which provides detailed information to all political, administrative, and planning bodies, through working groups that work together on common issues, through volunteer associations, or through joint institutions that provide planning activities for all entities included. A joint cooperation platform should be seen as a generic term. Joint bodies for sustainable spatial development may be established as an important step towards more comprehensive integration at a future date (Nared and Razpotnik Visković 2012).

– **Include decisions in planning documents**

Including stakeholders has manifold benefits such as strengthened connectedness to the region, enhanced local culture and tradition, and new solutions provided by connecting different aspects, but if the decisions of the participatory process are not taken seriously the process might become counterproductive and could cause additional mistrust. To this end, participatory planning should not use the participatory process to inform inhabitants about decisions made and thus expect their goodwill, but should truly put them in a position to decide or at least guide the decisions at the highest possible level. Thus, planning would not simply obtain acceptance from the inhabitants, but would at the same time provide necessary legitimacy to the decisions made and to the entire planning process.

2.5.2 Recommendations to the Alpine Space Managing Authority

– **Stimulate a cross-sectoral approach, participatory processes, and governance**

Complex processes require different management approaches than have been needed in the past, and very often problems cannot be resolved by one actor alone. To successfully face this complex reality, actors must work together and strive to find mutual and satisfying solutions for all the parties concerned. Working together on a common issue provides better results because various viewpoints are included, and searching for consensus will prevent individual interests from dominating others. A new program period must therefore strengthen the aspirations towards a cross-sectoral, inclusive participatory approach and governance. All of these are crucial for reaching a higher level of consensus and more sustainable development of the Alps. New calls should identify cross-sectoral cooperation,



participation/inclusion of stakeholders, and governance as a mandatory element of the new projects, ensuring a broader impact of expected project results.

– **Facilitate and develop participatory methodology**

Many projects in the Alpine Space Programme for 2007–2013 have used participatory processes as one of their main methodological approaches. Each of them has developed their own manner of cooperation and thus a great variety of participatory methods appeared without a sufficient methodological foundation. One of the most obvious weaknesses of the participatory processes is their unrepresentativeness. Many project partners think that implementing participatory processes is a guarantee for solid and reliable results, but the reality might prove the opposite; namely, a low level of participation and underrepresentation of groups that do not have sufficient knowledge or interest in participating could lead to inconsistent and unreliable results. Therefore one of the options would be to establish a special group, helping projects and partners implement appropriate methods and developing new methods adapted to the special features of the Alpine area. For example, due to major distances and language constraints, stakeholders from across the Alps are not likely to commonly discuss a certain problem at a single location. In this regard, new information and communication technologies, especially social networks, offer a new opportunity that cannot be neglected in the future programming period. IC tools might also help increase the number of stakeholders involved, and automatize and improve participation in planning processes. To ensure reliability, methodological foundations must be further analysed. One of the inputs could be a shared manual on participatory processes, preventing duplication of the methodological endeavours of each individual project.

– **The Alpine area should become a model for governance of a European macro-region**

The Alpine area is a typical area where joint actions are needed even though the entire area is divided into several countries and regions, and many municipalities. In addition, there is a strong urban-rural interaction among Alpine areas and pre-Alpine mega centres. Because the problems and issues are shared, the responsible authorities must strive to find a proper way of cooperation, providing them with solutions that are effective (in terms of results) and efficient (in terms of resources invested). Close cooperation in the past, existing institutions (like the Alpine Convention) or networks (CIPRA, ISCAR, etc.), and the existing financial scheme (the Alpine Space Programme) are a huge contribution towards more sustainable development of the Alps and particularly towards a common management system able to address common challenges at the entire Alpine level. By fostering the idea of cooperation and joint decision-making, the Alpine area could become a model for governance of a European macro-region.



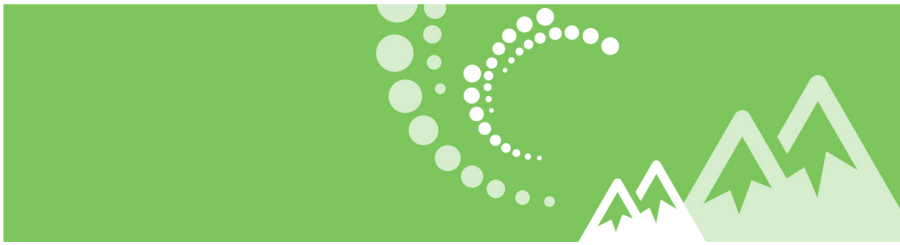
2.6 Sharing information via WIKIAlps

Today improving transnational co-operation represents a major task for reaching sustainable (or, “future-proof”) spatial development, especially in times of globalization. This applies particularly to the Alpine area, where seven countries need to overcome national borders to give value to these mountains’ massive socioeconomic and socioecological potential in order to handle the problems that emerge in an increasingly interconnected and globalized world.

Successful transnational cooperation, aiming at sustainable spatial development, must include a broad range of stakeholders – from interested members of general public to broadly recognized experts – and should ideally occur on multiple scales, from local via provincial and regional to national levels. In this context, sharing information between different interest groups emerges as a key issue. However, despite the large sums invested in generating transformation knowledge – for instance, €140 million during the 2014–2020 Alpine Space Programme – comparatively few results reach the general public. Many outcomes are caught up in today’s web of science (and hardly trigger regional development in the Alps), whereas other findings of the Alpine Space Programme’s projects fade away on outdated websites that are increasingly losing their functionality.

The participation of local people in Alpine spatial development can be noticeably increased and improved by the use of web-based technologies because stakeholders are often faced with limitations that impede their collaboration with other stakeholder groups. For example: they might not be able to physically participate in a workshop – or they lack time to personally attend a group discussion on a particular day or at a particular time. Some may even have reservations about face-to-face interaction with others because they do not see themselves at eye level with “experts”, and this is where WIKIAlps comes in.

WIKIAlps uses web 2.0 technologies for boosting the democratization of knowledge in the mountainous heart of Europe by 1) reorganizing the outcomes of research in the Alpine area, making this generally accessible and ensuring long-term availability, and 2) enabling interested stakeholders to reflect, criticize, or comment on the results. Registration as a WIKIAlps user is open to anybody and offers the opportunity to not only utilize the knowledge produced by others, but to actively create new personal insights on issues of sustainable spatial development. In this way the bottom-up generation of new valuable information is supported, much beyond the control of research findings. This will help strengthen the exchange of experiences, views, and visions between interest groups, from interested members of the general public to recognized experts. This process is crucial for improving transnational



cooperation and for triggering “future-proof” development within the Alpine area. In doing so, four major tasks can be fulfilled:

- Unrecognized synergies are detected between existing project outcomes;
- Remaining gaps in knowledge are revealed regarding sustainable spatial development in the Alpine area;
- Emerging contradictions between research findings are recognized and lead to fruitful discussion;
- Practice-proof findings in particular become more widely known and may be promoted for further use in Alpine development planning and policymaking.

2.6.1 Recommendations to policy-makers and civil servants

– Present your reorganized research findings on WIKIAlps

Make your findings accessible to a broader audience by presenting them on www.wikialps.eu and improve the visibility of your outcomes. Follow the approach developed in the WIKIAlps project because this will help you transform your complex findings into understandable and well-structured elements. This point includes the necessity of safeguarding the accessibility of your findings on the internet because potential stakeholders might become interested in these products not immediately after the publication of results, but months or even years later. WIKIAlps can thus help prevent the disappearance of results funded by the Alpine Space Programme.

– Explain how your findings were produced

Many studies – particularly from the Alpine Space Programme – provide interesting outcomes with the potential to trigger transnational sustainable development. Sharing your information on www.wikialps.eu enables other stakeholders to individually evaluate the applicability of these findings in practice. For this – and for discussing or even improving them – it is necessary to clearly describe and explain how the results were arrived at, and which methods or techniques were applied to answer the questions or solve the problems. This is particularly important during globalization because the framework conditions may change rapidly and therefore require reinterpretation of the results.

– Disseminate your outcomes actively to your target group

As a potential driver of sustainable Alpine regional development, it is not enough to simply present results in a comprehensible way on WIKIAlps, which enables others to access, discuss, or improve the information on an ongoing basis: it is crucial to actively promote the results available on



www.wikialps.eu and to convince potential interest groups to interpret, criticize, and, if necessary, adapt the outcomes. The general use of the WIKIAlps approach for presenting Alpine Space Programme projects will facilitate stakeholders' participation, improve the Alpine Space Programme's visibility, and thus elevate the impact of EU-funded research results.

2.6.2 Recommendations to the Alpine Space Managing Authority

– Make WIKIAlps one of the possible platforms for all future projects

In order to guarantee the long-term availability and accessibility of research results produced within Alpine Space Programme projects, the presentation of outcomes on www.WIKIAlps.eu after finishing a project in the Alpine Space Programme should become an obligatory step in future. The WIKIAlps technology not only enables all interested parties to easily find information, but also allows outcomes to be kept updated on an ongoing basis because all stakeholders are allowed to actively discuss and contribute to the research findings on WIKIAlps.

– Invite former project partners to contribute to WIKIAlps

Apart from the obligation to disseminate future project outcomes, former project partners should also be actively invited and motivated to make their findings visible and discussable on the WIKIAlps platform because many of their results are no longer accessible on the internet.

– Promote the use of WIKIAlps among potential users

The Alpine Space Programme and its Managing Authority are recommended to take responsibility for the future maintenance of WIKIAlps in order to promote the democratization of knowledge about the Alpine area, to allow updating on an ongoing basis and discussion of these results, and thus to further make EU-funded research outcomes drive sustainable and transnational spatial development.



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