Strategy-development for the Alpine Space

Second Draft Report

31 July 2012

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The present Second Draft Report is as a basis for discussions with alpine stakeholders.

The expert group is grateful for many inputs from the project Task Force, composed of representatives of the participating countries, of the Managing Authority and of the Joint Technical Secretariat. However, the report has been written under the sole responsibility of the group of experts.

The report is an interim result, which will be amended by the group of experts on the basis of forthcoming stakeholder dialogues in the Alpine Space.

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Glossary

Actions are interventions to meet the targets of the specific objectives. Actions can range between changing the knowledge base over implementing new procedures to projects with a clear defined start and end. In this report, the proposal of actions is not included. This is a task for a later stage of the process. Proposals for actions are presented in Annex 5.

Alps are used generically to refer to various understandings of the mountainous areas belonging to the alpine range within the Alpine Space, e.g. as they have been delineated by the Alpine Convention. These correspond to the "core" alpine area.

Alpine Space refers to the group of regions that participate in the Alpine Space Programme (ASP)

Cooperation means the interaction of actors from the same or different levels and sectors to contribute to the implementation of actions as part of the strategy implementation process

Driving forces are long lasting mega trends with a strong mostly global or continental impact to the general development conditions

Field of action summarizes current or upcoming issues from the same thematic field (e.g. public transport, water supply)

Specific objectives are the subordinate level of thematic objectives. They provide a more precise orientation, as they define what should be achieved and how actions would change the future situation compared to a future without implementation of these actions

Strategic objectives give a superordinate orientation to the future development of the Alpine Space

Strategy is composed of two main elements: an hierarchical system of objectives (highest level: strategic objectives, second level thematic objectives, lowest level specific objectives) and a set of instruments built by an instrumental framework and a set of actions

SWOT is an impact analysis technique combining internal analysis to identify strength and weaknesses and external analysis to extract opportunities and threats as impact reactions from driving forces

Territorial Types are a qualitatively identified subdivision of the Alpine Space based on functional patterns of interaction (e.g. functional urban areas) and some particularly significant patterns or trends. The objective is to distinguish between territories where different strength, weaknesses, opportunities and threat can be identified or foreseen.

Thematic objectives are the subordinate level of strategic objectives. They serve as guidance for the development of their subordinate level of specific objectives and actions

A guide for the hurried reader

The present draft strategy-development report is submitted to stakeholders as a basis for discussions. It is associated with ten key statements that are presented separately and whose function is to launch a dialogue. Producing an executive summary of this draft report would presuppose a hierarchy between the results and proposals made, which will result from the forthcoming stakeholder dialogues. This therefore appears premature.

In lieu of an executive summary, we present some indications on how this report can be approached.

To get an overview of how challenges and opportunities in the Alpine Space are perceived, and of how the policy objectives are formulated, one can focus on the following sections:

- The selection of facts, figures and maps of the Alps are mainly presented on pages 40-48;
- Table 7 on page 67 presents the conclusion of the observation of Alpine Strengths, Weaknesses, Opportunities and Threats. They are synthesized by 20 “fields of action”;
- The conclusion on pages 74-76 explains how three strategic objectives are selected on this basis;
- On pages 86-90, one then finds the description of nine proposed thematic objectives for the Alpine Space.

The discussion on why cooperation at the alpine level is needed, and how this could fit into the current European framework is developed in these sections:

- A general presentation of the geography of the Alps, on pages 19 to 22;
- The description of the current European context on pages 28 to 35, including the European Commission’s proposals for European territorial cooperation and debates on macro-regional strategies in the Alpine Space and elsewhere in Europe;
- The conclusions on pages 105-106 and 109-110.

Some parts of the report also focus more particularly on the role of the Alpine Space Programme in the wider context of alpine cooperation, and propose some options for the next programming period:

- A general description of the status of the Alpine Space Programme (ASP) on pages 22 to 25;
- The conclusions on pages 104-109.

Introduction

The present Second Draft Report presents the preliminary conclusions of the expert team on the elaboration of a long-term strategic orientation and identification of priorities for the Alpine Space. It is a draft document to be used a as basis for discussions with stakeholders. A revised version will be produced on the basis of the stakeholder dialogue to be organised in the second half of 2012 and beginning of 2013.

Objectives and context

While the overall aim of the project is "to elaborate a long-term strategic orientation and help to identify priorities for the Alpine Space", the mission statement of the project defined two parallel objectives:

> (1) pave the way towards a future Alpine Space Programme (ASP) in the period 2014-2020 by identifying key priorities and strategic orientations,
>
> (2) contribute to the debate on a possible macro-regional strategy for the Alps, exploring if there are topics and stakeholder support which call for a broader European perspective within a macro-regional strategy.

Options for the Alpine Space Programme in the next programming period (2014-2020) and arguments regarding the appropriateness and relevance of a macro-regional strategy for the Alps are usefully informed by long-term strategic orientations, but cannot be based on them. For the Alpine Space Programme, an overall strategic orientation for the Alps is only one component when preparing the next programming period. The initiatives of other actors, including authorities at different geographic levels, public and private bodies and non-governmental organisations may for example be a more critical parameter. The objective of the Programme is to ensure that its contribution to promote agreed development objectives for the Alpine Space makes a difference, i.e. that it does not duplicate efforts undertaken by other actors or that would have been carried out by them if the Alpine Space hadn't done so. Such considerations are complex and partly speculative, as they are based on hypotheses on the alpine-relevant actions that will be undertaken by a wide range of potential stakeholders during the forthcoming programming period. The present report provides a basis for assessing the potential added value of the Alpine Space Programme measures within different fields of action, but does carry out such as assessment. The stakeholder events to be organised as part of the strategy-development process during the fall and winter of 2012-2013 should make it possible to partly compensate for this limitation.

The strategic objectives, thematic objectives, actions and cooperation examples identified by the expert team for the Alpine Space Programme in the next programming period are therefore based on the involved experts' general knowledge of strategies of alpine-relevant actors. Their elaboration has furthermore been enriched by discussions with a task force composed of programme partners, by desk research and interviews with other experts.

The strategy development process

In its contribution to debates on the alpine macro-regional strategy, the expert team bases its considerations on experiences from the two currently implemented macro-regional strategies in the Baltic Sea Region and the Danube region, on relevant documents published by European bodies and on a series of available analyses of the macro-region (Dühr (2011), Dubois et al. (2009), Stocchiero (2010a, 2010b), Schymik (2011), Schymik and Krumrey (2009)). Findings from this review of primary sources and available analyses have made it possible to critically review the conclusions of the two current alpine macro-regional initiatives: the Contribution of the Alpine Convention to the process towards a macro-regional strategy for the Alps and the road map of the alpine regions for a macro-regional strategy for the alpine space.

Figure 1 illustrates the strategy development process implemented in view of producing the present report. As a first step, described in chapter 1, the expert team takes one step back and asks how conceiving measures at the level of the "Alpine Space" and the "Alps" would help constructing better and more efficient policies. The expert team thereby expresses some scepticism against the idea that transnational cooperation areas would be "naturally given" or justified by traditions from "time immemorial". A continuously updated critical reflection on the added value of alpine transnational cooperation is needed, both from the perspective of European integration and of regional and local sustainable development.

Understanding the role of the Alpine Space Programme is the second axis of reflection. How can calls for tenders and project co-financing help achieving strategic objectives? This analysis is primarily based on the 2010 "Alpine Space Programme Impact Assessment" carried out by Metis GmbH and more generally on the results of Strategy Revision Process of the Alpine Space Programme that was initiated by the Programme Committee in 2009.

The third element is the European policy context, of which two components are mainly considered in the present report. The first of these, the European Commission legislative proposals for Cohesion Policy 2014-2020, is still under discussion. While the final cohesion policy legislation, resulting from negotiations with Member States, discussions at the European Parliament and wider consultations remains unknown, these proposals by the Commission provide good guidance on foreseeable changes. The Europe 2020 strategy, which defines overarching priorities and targets and constitutes a general framework for all European initiatives, is a second component. It is primarily based on a dialogue between the European and national levels, e.g. through national reform programmes and targets and the monitoring of national performance with respect to these targets. The role of territories, and more particularly of transnational ones such as the Alpine Space, has not been elaborated in the Europe 2020 strategy. It is therefore largely up to transnational cooperation programmes such as the Alpine Space to demonstrate their added value in the achievement of the Europe 2020 priorities and targets.

The empirical analysis (chapter 2) is organised around a SWOT-analysis, identifying Strength, Weaknesses, Opportunities and Threats in the Alpine Space. Because territorial heterogeneity is one of its distinguishing features, different SWOTs are produced for five main categories of territories. These categories have been chosen on the basis of available studies. Secondly, the expert team identifies a number of external determinants of local and regional development processes in the Alpine Space, or "Driving Forces". These driving forces have been described in the literature as having

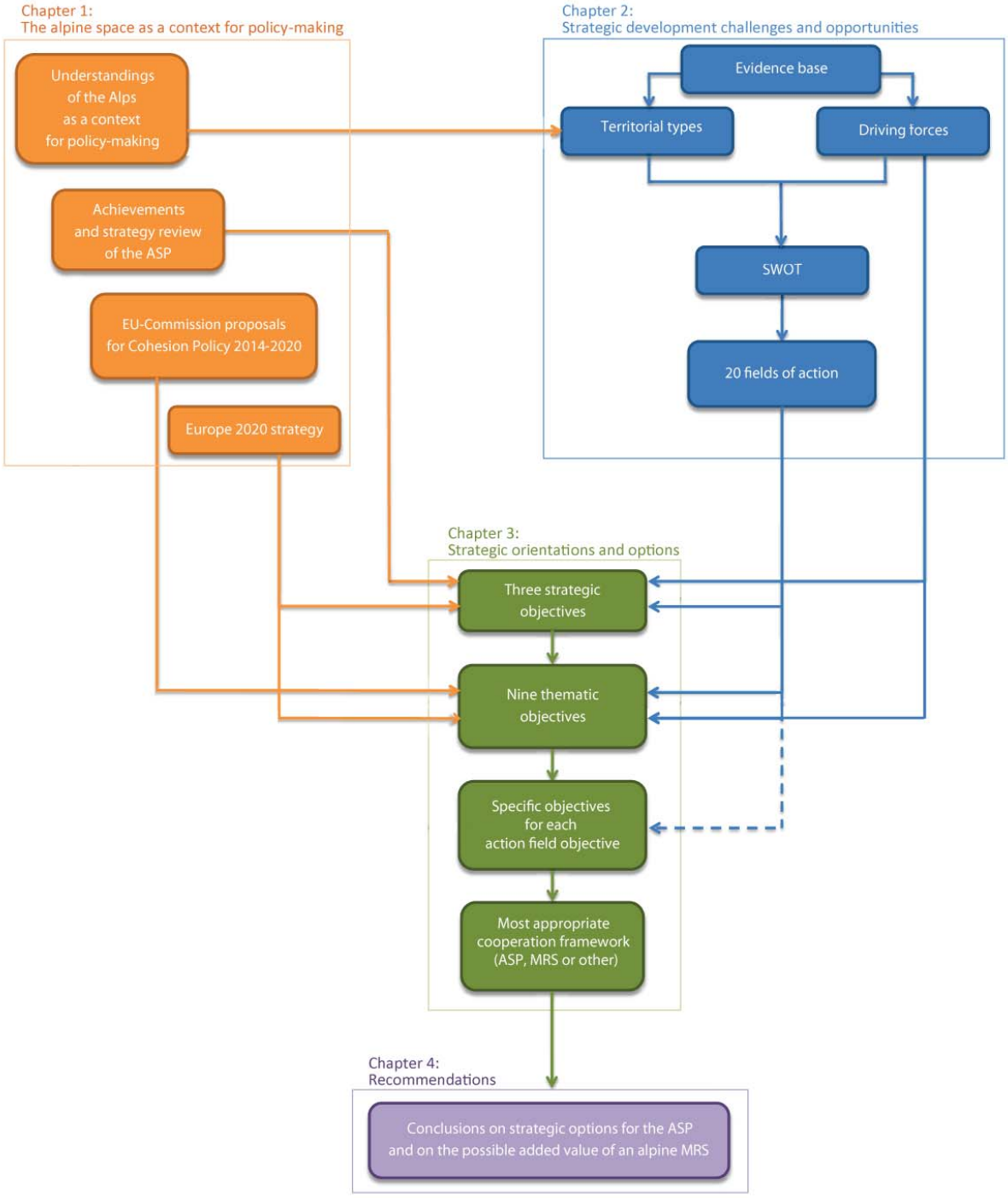


Figure 1. Overview of the strategy development process

This representation does not include the stakeholder dialogues, which are a component of the strategy-development process. Stakeholder dialogues will be based on a series of "key statements".

a particularly strong observed or foreseeable impact in alpine communities and regions. The cross-analysis of the six driving forces and of the five territorial types in a SWOT made it possible to identify the most relevant opportunities and threats and most importantly 20 “fields of action”, i.e. issues of particular relevance for transnational cooperation.

By combining the analysis “driving forces”, assessments of past achievements of the Alpine Space Programme and conclusions from its strategy revision process produced independently of this report, with proposals of the Europe 2020 strategy, the expert team could propose three strategic objectives for the Alpine Space (chapter 3):

1) **Foster resilience in the Alpine Space**
2) **Turn to a green economy**
3) **Build on cultural diversity and social solidarity**

These three strategic objectives synthesise the observed opportunities and threats of the Alpine Space and the European priorities to which any Community funded instrument needs to relate. As such, they correspond to thematic fields within which the actions of the Alpine Space Programme could complement those of other actors.

Nine “thematic objectives” are then proposed as a way of breaking down the strategic objectives to units that correspond to established sectoral fields of policy-making. Additionally, they make it possible to link the strategic objectives of the Alps with the eleven “Cohesion Policy thematic objectives” proposed by the European Commission. Considering that the current proposal of the Commission presupposes that Territorial Cooperation programme should focus on only four of these eleven cohesion policy objectives, the nine “Alpine Space thematic objectives” provide a basis for discussing which “Cohesion Policy thematic objectives” the Alpine Space should focus on.

A number of “specific objectives” have been proposed under each “Alpine Space thematic objective”. Their main function is to specify the meaning of the “thematic objective” and to trigger debates. For each “specific objective”, the expert team has sought to identify whether the most appropriate cooperation framework would be the Alpine Space Programme, a macro-regional strategy or another instrument.

On this basis, the expert team proposes recommendations for long term a long-term strategic orientation for the Alpine Space as well as for identifying priorities and strategic orientations for the future Alpine Space Programme in the period 2014-2020.

1. The Alpine Space as a context for policy-making and for the elaboration of strategies

From a physical geography point of view, the Alps are an orographic unit. In the EU-vocabulary, they are referred to as a so-called "massif". However, this does not imply that the Alpine Space of transnational cooperation is determined by topographic criteria. The Alpine Space is rather a result of regions identifying with the Alps and considering that a dialogue, cooperation or integration with neighbouring regions on the basis of a shared alpine identity is particularly relevant.

A general paradox is that the primary functional and political context for most of its inhabitants, economic actors, elected representatives, institutions and other organisations is neither the Alpine Space nor the Alps[1]. People living in the Alps primarily belong to a region, a valley, a local community and a country; companies located in the Alps develop in interaction with business partners and clients that may be located within their functional economic area, but also typically in the numerous metropolitan and urban regions around the Alps. They are also well-integrated in global economic circuits structured around World Cities. Similarly, the success of research and higher education institutions in the Alps is not primarily based on intra-alpine networks, but on the capacity to develop networks of cooperation and exchange with most relevant national and international partner organisations. Therefore, an alpine strategy needs to be approached as a component of wider strategies for e.g. social harmony, economic development, research and innovation and environmental protection.

The uncritical adoption of a wide-ranging alpine strategy may therefore lead to the implementation of measures that would have been more efficient at other geographic levels. On the long term, alpine cooperation may be jeopardized if there is not a distinct focus on issues for which the Alps is the optimal geographic context for the design and implementation measures, the exchange of good practice and/or policy discussions. This is a precondition for ensuring that alpine cooperation contributes to the wise and cost-efficient allocation of public funds. The present report therefore pays particular attention to the identification of themes and issues for which the Alps are the most appropriate level of policy design and implementation.

The formulation of strategic orientations for the Alpine Space first requires that one distinguishes between different forms of alpine cooperation, in terms of geographical scope, thematic focus and objectives that are pursued. The objective at this stage is not to provide an exhaustive list of alpine cooperation initiatives or even a representative sample, but merely to illustrate different understandings of the Alps and rationales for alpine cooperation. This provides a backdrop against which the Alpine Space Programme's understanding of the Alps may be identified (section 1.1).

Indeed, a clear rationale for alpine cooperation is a precondition for achieving the Alpine Space Programme's ambition of strengthening its strategic perspective and of focusing on long-term impacts. While the ASP is considered as one of the most successful transnational programmes in Europe, it remains a funding driven programme, where the development of projects is left to a

[1] In the present draft report, "Alpine Space" refers to the group of regions participating in the Alpine Space Programme. The term "Alps" is used generically to refer to various understandings of the mountainous areas belonging to the alpine range within the Alpine Space. These are also referred to as the "core" alpine area.

"market" that is hardly influenced by strategic considerations on programme level. Furthermore, the link between the ambitions of projects funded by the ASP and the strategic objectives of the programme is not always obvious as the focus tends to be on short term results rather than long term impacts (Schneidewind et al., 2010). However, as part of the on-going programme, a number of actions have been undertaken to improve this situation. These initiatives constitute a platform on which strategies for the ASP in the forthcoming programming period may be built (section 1.2).

As a component of European Territorial Cooperation, the ASP also needs to relate to the evolving policy context at the Community level. The European Commission's legislative proposals for the forthcoming programming period constitute the main basis for assessing the regulatory framework for the future ASP. However, at the time of writing, they remain under negotiation with Member States. As part of the elaboration and discussion of these proposals, the need for a result-oriented, effective and efficient Cohesion Policy has been emphasized. The Alpine Space Programme also needs to relate to the Europe 2020 strategy, to which it is meant to contribute (European Commission, 2011b), and to developments in European debates on the meaning and implications of the objective of combined social, economic and territorial cohesion. The European context in which a strategy for the Alpine Space may be developed is therefore multifaceted and multi-layered (section 1.3).

1.1. Why is alpine cooperation needed? Different understandings of "the Alps"

Alpine cooperation has long-standing traditions, and was inspired by national policies establishing different forms of "special treatment" for the Alps. For example, Switzerland passed laws supporting mountain farmers in the 1920s, while the Slovene Alpine Conservation Park (the Triglav National Park of today) was founded in 1924. Organisations of users of the alpine area mainly coming from other regions, such as the Austrian, Swiss, Italian, German, French and Slovenian alpine Clubs were established even earlier, respectively in 1862, 1863 (Switzerland and Italy), 1869, 1874 and 1893. Even if they are not necessarily focusing only on the alpine range, these references to the Alps pay testimony to the special role of the Alps among mountaineers. This is also an early example of disputes on the legitimacy of different types of actors to work on the Alps and to emit opinions on the use of alpine areas.

The International Commission for the Protection of the Alps (CIPRA) was founded as a non-governmental organization in 1952, with natural scientists and conservationists as its main protagonists. It has progressively opened up to a wider range of actors. With the contribution to the creation of the "Alliance in the Alps", the "Alpine Town of the Year" and the "Network Enterprise Alps", it has established its position as a promoter of bottom-up dynamics encouraging the participation of alpine citizens in project designed to preserve the quality of alpine natural environments. CIPRA also contributed to the drafting and signature of the Alpine Convention, about which commentators have noted that it has "not managed to present a unified position while preserving the structural and cultural variety of the alpine region", leading to "slow implementation" (Bätzing et al., 2004). In the preface to the collection of articles on "Mountain

regions as referents for collective action", Debarbieux (2009) considers that the Alpine Convention was "subsequently enriched by numerous pan-alpine networks of actors concerned with having a say in the matter". Its role as a catalyst of pan-alpine initiatives should therefore not be underestimated.

Cooperation initiatives based on different understandings of the Alps

The history of alpine cooperation demonstrates the importance of legitimacy, participation and appropriation for the success of alpine policies. In many respects, the ways in which processes leading to the adoption of measures and actions can be more important than measures or actions themselves.

Table 1 includes a selection of pan-alpine initiatives for which a succinct description of the way in which the notion of "Alps" is understood is presented. As previously mentioned, the purpose of this list is not to provide an exhaustive list of alpine cooperation initiatives or even a representative sample. The objective is merely to demonstrate that a variety of reasons for considering the Alps, or a subdivision of the Alps, as an appropriate context for cooperation co-exist.

The Alps can for example be approached as a cultural or biogeographical region, but also as an area with specific preconditions for economic and social development or for sports, leisure and tourism. Interestingly, in the case of the Alps-Adriatic Working Community (Alpe-Adria), the Eastern Alps and their surrounding regions are identified as a relevant area of transnational cooperation because their mountains act as barriers. The presence of mountains has contributed to the emergence of a large number of cultural, linguistic and political borders. The Alpe-Adria area is therefore at the cross-roads of multiple influences. This in turn creates a series of unique potentials and challenges in the context of European integration.

The "Cooperation ideas" and "Principle of Cooperation" listed in Table 1 are correspondingly diverse. The Alparc initiative vividly demonstrates that the notion of "Alps" have different functions within a given theme. Alparc sponsors exchanges ideas on the practices, know-how and experience of the personnel of protected areas. Alpine cooperation is then based on the idea that conservation of alpine wildlife and natural resources poses different sets of questions and calls for specific types of answers in the Alps. However, Alparc initiatives have also demonstrated that there is a need for pan-alpine ecological corridors between protected areas, leading to the creation of a genuine ecological continuum; it has even established an Ecological Network Platform for this purpose. The underlying idea is then that the Alps are a form of "ecological functional region". Finally, pan-alpine initiatives may be justified simply because the Alps are different from surrounding territories. This is the case when the Alps are described as a "Green Heart" of Europe, similar to the "Green Belt" along the former Iron Curtain.

Table 1 also includes the France-Switzerland INTERREG IV programme, as an example of cross-border cooperation in the Alpine Space. Cross-border programmes have an impact on alpine cooperation by creating a culture of international cooperation among involved local and regional stakeholder which could be capitalised upon in transnational project. While some of the issues they deal with are linked to the mountainous character of the cooperation area, they generally do not relate to the Alps or to

the Alpine Space. The programme documents focus on other types of functional spaces and geographic cultural and social identities (e.g. INTERREG France-Suisse, 2007, ALCOTRA, 2007).

It may be necessary to combine these different understandings of the Alpine Space if the objective is to adopt a holistic perspective to alpine territorial development. However, the formulation of a strategy could gain in clarity and efficiency if their differences and interrelations are more clearly formulated. Discussing the ways in which stakeholders understand and approach alpine issues is a precondition for designing consultation and decision-making processes in which relevant stakeholders can be allowed to participate on their own terms in view of developing a sense of ownership to the resulting policy outcomes. The capacity of the Alpine Space Programme to efficiently function as a promoter of alpine policy development and as a sponsor of pilot actions depends on its ability to incorporate this diversity of understandings of Alps and ideas on why alpine cooperation is needed.

It is also important to keep in mind that most alpine stakeholders and networks are not involved in any form of transnational cooperation and tend to focus on local, regional or national issues. There are only few examples of alpine transnational organsations federating local and regional actors that have emerged in a bottom-up way. Alliance in the Alps may be be considered as an example of such a bottom-up network involving local authorities that would like to exchange and cooperate on the basis of the Alpine Convention's principle for sustainable development. The Alpine Pearls and Best of the Alps are networks of tourism destinations considering the branding of the Alps as a component of their own development strategy, but without elaborating a general strategy for alpine tourism. Overall, the limited number of bottom-up alpine initiatives shows that the first objective of an alpine strategy remains to promote a shared awareness of the alpine dimension of some opportunities and challenges.

Table 1. The diversity of understandings of the Alps and ideas of alpine cooperation: examples drawn from a selection of cooperation initiatives

(shaded rows correspond to initiatives sorting under the preceding one)

Name	Type	Understanding of the Alps	Cooperation idea	Principle of Cooperation	Current added value for the Alps and broader area
CIPRA, International Commission for the Protection of the Alps http://www.cipra.org/	NGO	Focus on the Alps as a living environment to which the alpine population identifies	Connecting the activities of different stakeholders	Information platform and discussion forum, serving as a marketplace of knowledge about the Alps, cooperation with other Alpine Space initiatives	Discussion forum, reports, wide range of concrete actions initiated.
Alliance in the Alps www.alpenallianz.org	Network of nearly 300 municipalities from seven countries		Applying the principles of the Alpine Convention on the local level, where its individual members are given the possibility to develop their environment and take part in initiatives and projects.	offers a sharing of experience and information beyond the boundaries of language and culture	Common concrete activities with a wide array of initiatives and programmes in the Alpine Space (on local, regional and transnational level)
Alpine Town of the Year www.alpenstaedte.org	award, association		focused on the responsibility of alpine towns for sustainable development in the Alps with particular commitment to the implementation of ecological, economic and social goals of Alpine Convention	The alpine towns that have been awarded the title are connected in a network, which grows each year and operates under an association with the same name. Since 2005 it co-operated with the Permanent Secretariat of the Alpine Convention.	Increased visibility for Alpine towns and cities. Enhanced dialogue between Alpine towns and cities. Promotion of urban sustainable development in the Alps.

Name	Type	Understanding of the Alps	Cooperation idea	Principle of Cooperation	Current added value for the Alps and broader area
Alpine Convention http://www.alpconv.org/pages/default.aspx	International treaty, regular meeting of a political decision-making body supported by a permanent secretariat and working groups/platforms.	"One of the largest continuous unspoilt natural areas in Europe, which, with their outstanding unique and diverse natural habitat, culture and history, constitute an economic, cultural, recreational and living environment in the heart of Europe"	Sustain and prudent use of resources, applying the principles of prevention (the "polluter pays" principle), pursuit the preservation and protection of the Alps, through commitments and obligations the adoption of shared sets of regulations.	Conservation of natural and cultural diversity and the use natural resources in an economic way, without negative consequences for future generations, based on eight protocols an two declarations (Spatial planning and sustainable development, Conservation of nature and countryside, Mountain farming, Mountain forests, Tourism, Energy, Soil conservation, Transport, Population and Culture, and Climate Change)	Provides a basis for argumentations and discussions. Has made obvious the need for a pro-active approach to multilevel and cross-sectoral governance of alpine issues.
Alparc www.alparc.org	Alpine Network of Protected Areas	Alps defined as a biogeographical region, but also references to linguistic heritage, craftsmanship and collective imagination.	Facilitating exchange between the alpine parks, nature reserves, biosphere reserves, tranquillity zones and many other kinds of protected areas.	Exchange ideas on the practices, know-how and experience of the personnel of protected areas An ecological network, i.e. ecological corridors between protected areas, leading to the creation of a genuine ecological continuum in the Alps. Raise awareness among and inform the general public and local residents about the importance of the natural and cultural heritage of the Alps	- Ten Alparc working groups dealing with different themes have been established. - Conferences, training, workshops, study trips. - Ecological Network Platform established - Range of shared communication resources and campaigns

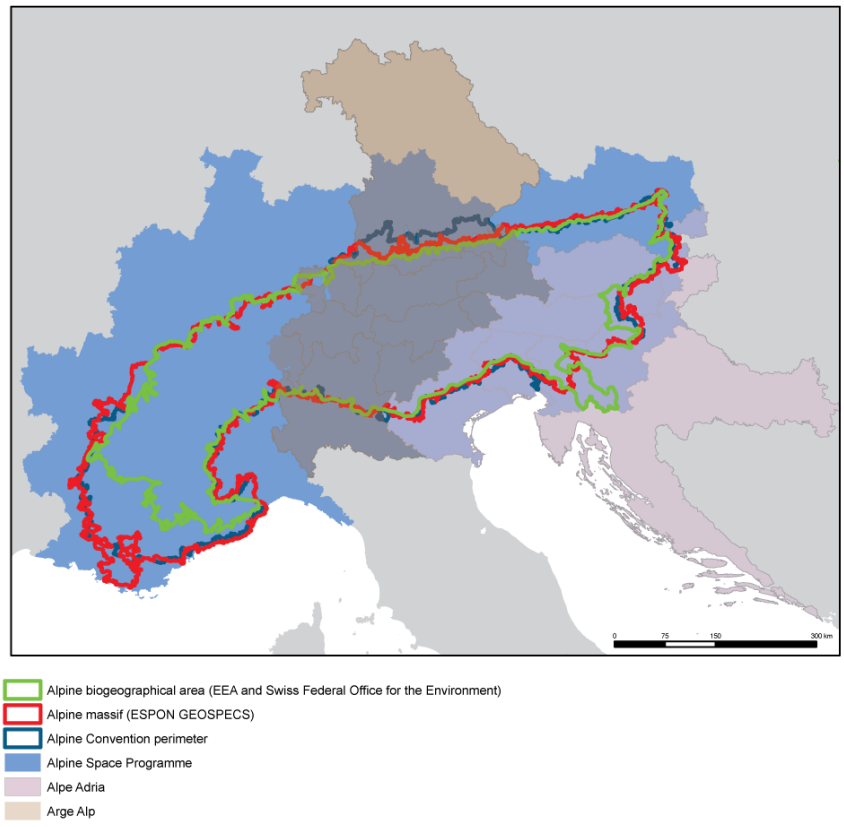
Name	Type	Understanding of the Alps	Cooperation idea	Principle of Cooperation	Current added value for the Alps and broader area
Alpine Space Programme 2007-2013 (www.alpine-space.eu)	Transnational European Territorial Cooperation Programme	Defined - by topographic criteria (mountainous areas or "alpine core") and surrounding foothills and lowlands - as a meeting point of cultures and languages	Promotes sustainable regional development Three priorities: Competitiveness, Accessibility and Connectivity, and Environment and Risk Prevention.	Partners from the seven alpine countries work together, covering whole area of the Alps and many adjacent territories	Primarily acts as a policy promoter, contributing to strategic policy development, and funding explorative and piloting actions as well as projects related to policy implementation
ARGE ALP - Arbeitsgemeinschaft Alpenländer (http://www.argealp.org/)	An association of 9 *Länder*, provinces, regions and cantons of Austria, Germany, Italy and Swiss	Alps identified on the basis of a series of specific conditions for social and economic development, e.g. limited available space, fragmentation, climatic conditions, local contrasts in altitude and specific hazards.	Raise awareness of shared responsibility for the alpine habitat, promote contacts between the peoples and citizens, contribute to cooperation in Europe at raise awareness of alpine issues at the European level.	Grouping of regions promoting both the direct participation of »alpine citizens« in alpine issues and the awareness of »non-alpine citizens« within these regions of alpine challenges (especially those caused by influences outside of the Alps)	Discussions, conferences, awareness-raising events, projects, studies.
Club Arc Alpin (CAA) (www.club-arc-alpin.eu/index.php)	Association	Alpine area as a specific context for leisure and sports activities, both in terms of range of possible activities and with regards to the vulnerability of the natural environment	Alpinism / mountaineering	Connecting national alpine clubs	National alpine clubs are influential actors in national policy debates. The Club Arc Alpin has started the process of Federating their positions at the transnational level.

Name	Type	Understanding of the Alps	Cooperation idea	Principle of Cooperation	Current added value for the Alps and broader area
Alpe-Adria	Working Community gathering eight regions, with a focus on "future-oriented peace work"	The Eastern Alps as a border region	Initially (1978): relations and cooperating with neighbouring regions notwithstanding the ideological divide and political isolation Now: capitalising on the diversity of historical and cultural identities and socio-economic situations	Promote interregional cooperation within five sectoral fields, in addition to the transversal themes "information" and "relations with the EU". Increase awareness of cross-border issues in the so-called "Alps Adriatic" at the national level in the concerned countries. Facilitate the Europeanization of regional policies, the capacity of regions to follow and influence European policy developments.	Interface between the Alps and neighbouring regions in the Adriatic area European of policies in the concerned regions. Cross-border interregional cooperation in the concerned area.
Euroregion Alpes Méditerranée	Cooperation between five French and Italian regions, all of which have an alpine component	Part of a the "coherent geographic basis" that justifies the cooperation (together with the contact with the Mediterranean Sea)	Strengthening links between citizens, socio-economic actors, administrations and elected representatives within five thematic fields.	Five working groups develop strategies and common projects within their respective thematic fields. The regions share an EU representation office in Brussels.	A number of joint projects and actions have been implemented. Improved representation of the concerned regions in Brussels
France-Switzerland INTERREG IV programme	Cross-border cooperation	No specific understanding of the Alps. The focus is on local and regional cross-border issues	Exploiting the economic and geographic diversity of the cross-border area to improve innovativeness and promote balanced development	Improving knowledge of cross-border area among regional and local stakeholders. Overcoming differences in administrative and institutional structures to formulate shared objectives.	Considered jointly , cross-border programmes of the alpine area create a culture of international cooperation among involved local and regional stakeholder

Geographies of the Alps

There is not necessarily a "map of the Alps" that corresponds to each of the understandings of the Alps described in the previous section. They can be "fuzzy", network-based or refer to ways of life or types of landscape which cannot necessarily be delineated cartographically. Taking these considerations into account, comparisons of existing delineations of the alpine area may nonetheless be useful for strategy-development purposes. They function as a starting point for discussions, may clarify the understandings of the institutional actors that produce them and are needed as soon as one seeks to use quantitative evidence to support policy-development through.

Map 1 overlays the Alpine Space Programme area, the Alpine Convention perimeter, the delineation of the core alpine part of the mountain delineation of the ESPON GEOSPECS project and of the alpine biogeographical areas identified by the EEA and the Swiss Federal Office for the Environment[2]. This shows a relatively good fit of these different delineations, with some minor exceptions in Bavaria and more significant ones in the south-Western Alps, where the alpine biogeographical region excludes areas considered as alpine according to the Alpine Convention and ESPON delineations.



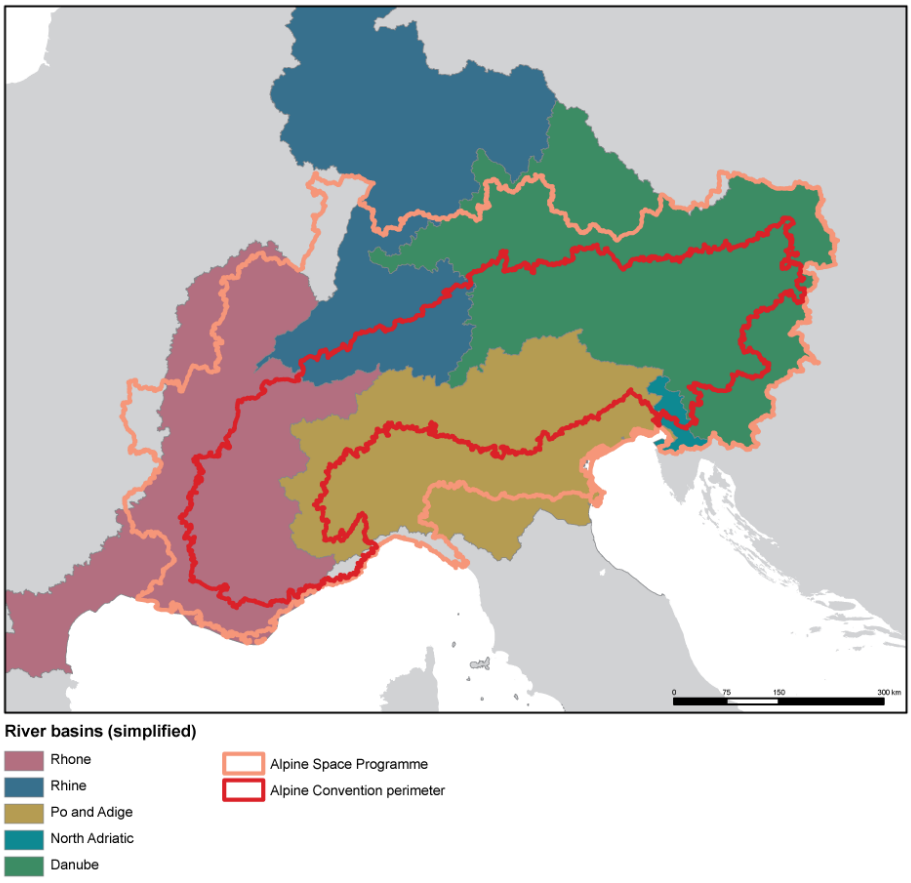
Map 1. Different delineations of the Alps and contexts for alpine cooperation

This map shows the different geographical scope of delineations of the Alps and of interregional groups and programmes established to address alpine opportunities and challenges.

[2] The EEA data describe a series mountainous areas in Europe as belonging to the "Alpine biogeograhical region". The Swiss Alpine biogeographical region is the area comprising the following units: Voralpen, Südalpen, Nordalpen, Östliche Zentralalpen and Westliche Zentralalpen. Liechtenstein is considered as belonging to the Alpine biogeographical region.

Overlaying these delineations of the “alpine core” with the Arge Alp, Alpe Adria and Alpine Space Programme delineations within which regions seek to involve both alpine populations and those of Neighbouring areas when addressing alpine relevant issues illustrates the variable geometry of the notion of “alpine neighbourhood”, e.g. including all or parts of Bavaria. The subdivision of the Alps in Eastern, Central and Western parts provides an example of different cultural and political units, with more or less established traditions of exchange and cooperation.

The overlay of river basins and delineations of the Alps (Map 2) can feed into discussions on the relevance of pan-alpine strategies dealing with water management and the Alps’ role as “Europe’s water tower”. While the observation of the Alps importance in this respect cannot be denied, further discussions may be required on relevance of pan-alpine measures, as compared to strategies focusing on individual alpine river basins.

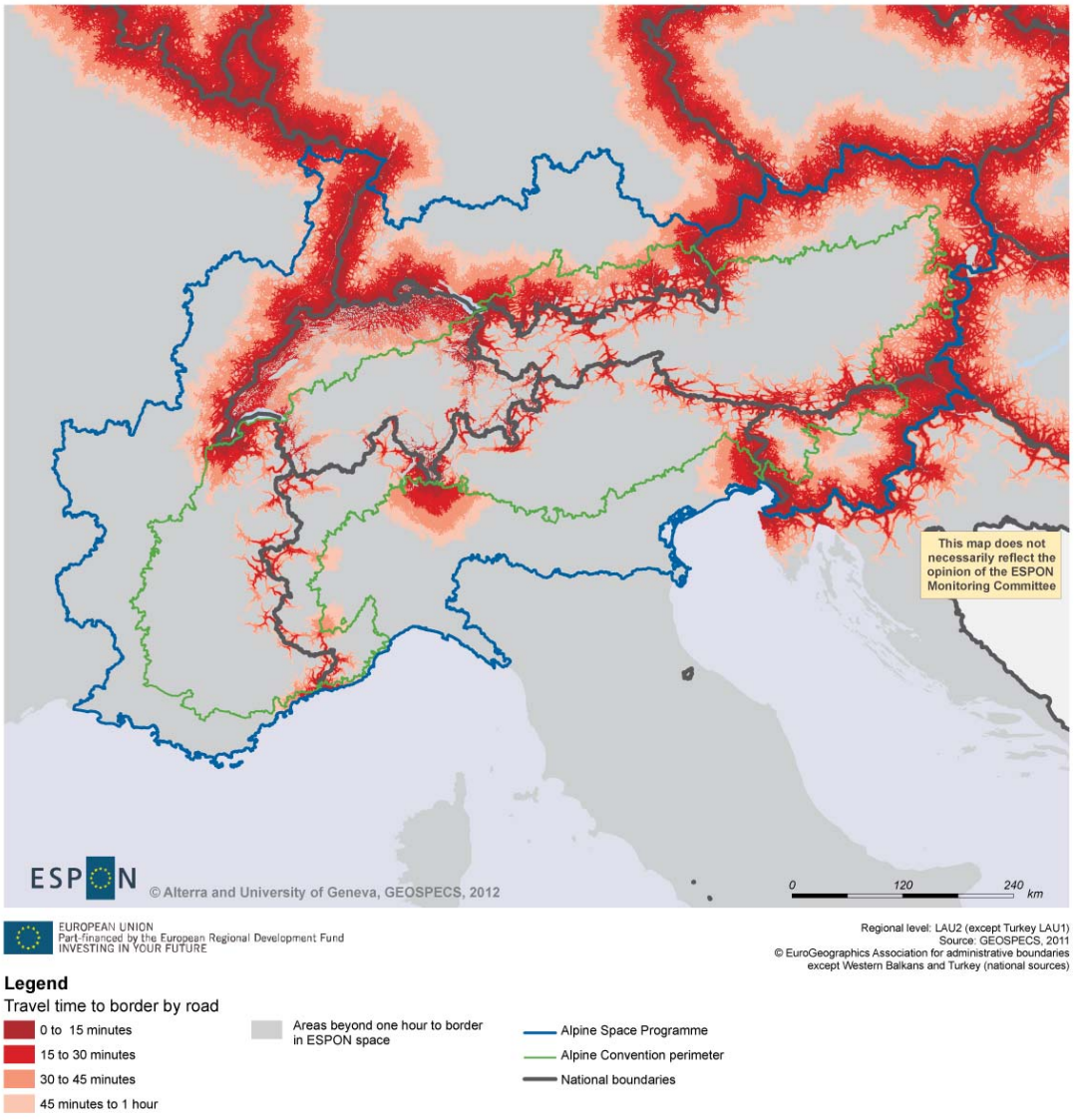


Source: EEA Wise River Basin Districts

Map 2. Simplified representation of river basins in the Alps

Water management is often mentioned as a potential issue for alpine cooperation, as the Alps play an important role in the regulation of water supply for large parts of Europe. However, one may ask whether these issues are more meaningfully addressed at the level of water basins including not only the Alps, but also downstream regions. Water basins can be considered as “functional areas” for water related issues.

Finally, the Alps function as a barrier to flows, to functional integration and to cooperation. This barrier is not impassable, as illustrated by the major transit corridors running through it. The construction of tunnels (e.g. Brenner, Gotthard and Lötschberg) has made it possible to further increase the flows of persons and goods along these corridors and their strategic importance for Europe. However, within the Alps, interaction and exchange tends to be limited between neighbouring local communities and regions that are not connected by adequate transport infrastructure. This is particularly visible along national border in the Alps: areas within daily mobility to the border within the alpine core area are very narrow and concentrated to the valleys. In many parts of the Alps these areas of access to the border by road are non-existent, which implies that



Map 3. The Alps as a barrier: limited extent of areas within daily mobility distance to a border

The map shows a distinct pattern of cross-border accessibility within the Alps (delineated here using the perimeter of the Alpine Convention), on the one side, and the rest the Alpine Space area and adjoining regions, on the other. This suggests that cross-border cooperation to a lesser extent functions as a vector of transnational integration in the Alpine Space than in other parts of Europe.

municipalities on both sides are not connected by any transport infrastructure (Map 3). This creates specific preconditions for cross-border cooperation in the Alps compared to other parts of the Alpine Space and of Europe, which in turn limits the experience of cooperating across national boundaries. This may constitute a challenge for the development of alpine transnational cooperation.

Conclusions

These considerations on the specificity of alpine accessibility patterns and on the variable geometry of cooperation in the Alps are not new. However, they remain important both when considering strategic perspectives for the Alpine Space Programme and as inputs to current debates on an alpine macro-regions. The successful design of alpine strategies needs to take into account the patterns of interactions and flows between alpine territories and the spatial configuration of alpine functional regions. Furthermore, topographical constrains have created barriers between local communities and regions, creating strong cultural contrasts and limiting the development of an "alpine identity". For these different reasons, the Alps are therefore a "multiple geometry area", where each type of issues should be dealt within different types of geographic contexts.

However, it is not sufficient for a strategy to take into account the spatial configuration of settlements, economic activities, flows and ecosystems. A strategy necessarily also relates to alpine stakeholders' diverse understandings of the Alps and wide range of ideas of how and why transnational cooperation in the Alps would be of added value. Furthermore, the ideas of what alpine cooperation implies and entails may vary significantly from stakeholder to stakeholder. To function as a promoter of alpine policy development and as a sponsor of pilot actions, the Alpine Space Programme needs to relate to this diversity of approaches.

1.2. Strengthening the strategic perspective and long-term impacts of the Alpine Space Programme

The European Union recognised the existence of an "alpine region" when it started compiling evidence on territorial patterns and trends in Europe and promoting ideas of cooperation for European territorial development in the early 1990s. The Europe 2000 report (European Commission, 1991) and its follow-up Europe 2000+ (European Commission, 1994) refer to the "Alpine Arc", focusing particularly on pressures on the environment and on the impact of transport and tourism. This recognition was translated into concrete policies in 2000, with the EU Community Initiative Interreg IIIB Alpine Space Programme for 2000–2006. This programme mainly focused on promoting sustainable development, improving accessibility in the Alps and protecting its natural and cultural heritage. The follow-up programme for the 2007-2013 programming period has pursued the same objectives, with particular emphasis on growth, job creation competitiveness and attractiveness of the cooperation area and sustainable development. It was introduced as the EU transnational cooperation programme for the Alps which fosters territorial development and cohesion. It addresses this aim with three priorities: Competitiveness and Attractiveness, Accessibility and Connectivity, and Environment and Risk Prevention.

The ASP is an initiative of the European Community and of the Member States, to which regions, local authorities and other alpine actors are invited to participate with both project ideas and co-financing. The ASP has also produced different studies, e.g. the Alpine Space Prospective Study (2005), and organised workshops as a contribution to debates on alpine issues. On the basis of these different types of inputs, the programme seeks to strengthen the link between the European and the regional and local levels. However, this is a complex and challenging task. As an initiative "in between" established levels of policy debate and decision-making, it appears difficult to define a clear identity for the programme. The absence of a "Vision for the Alpine Space" or a programme mission other than implementing the strategic priorities for the Alpine Space identified at the European and national levels is in this respect identified as a weakness.

The current Alpine Space Programme (ASP) engaged in a revision process in 2009, as a response to three types of questions that had been raised by the Programme Committee members. These questions were:

- What are the impacts of the programme?
- How are projects generated and assessed?
- How could the programme's communication be improved?

As part of the effort to address these questions, an Impact Assessment Study of the ASP was carried out in 2009-2010 (Schneidewind et al., 2010). This study and the ensuing discussions demonstrated that, as a funding-driven programme, the ASP has limited influence on the development of projects. This implies that the selection of projects is based on what is offered by a "market" of project initiators and partners, and that it tends to be disconnected from strategic considerations at the programme level. However the ASP provides good opportunities for networking and exchanges of experience. Three main benefits of the programme are highlighted: exchanges of knowledge, strengthening of networks and development of new contacts. At the present stage the assessment of projects is mainly based on output and result orientation but the success of the programme will in the long run depend on the impact of the project activities. In general, long-term impacts are not tackled by project yet. The main question is the missing link between programme and project objectives. One of the challenges for the ASP is therefore to "reduce the gap between project and programme level" (Schneidewind et al., 2010) and to establish the strategic oriented programme structure. The strategy-development process of which the present report is a component can be seen as a contribution to this process.

This strengthening of the strategic perspective appears all the more important as the Commission Green Paper on Territorial Cohesion "suggests that transnational cooperation should play a key role in the pursuit of improved Territorial Cohesion (European Commission, 2008). However, this would presuppose that one identifies the specific implication of Territorial Cohesion as a policy objective for the Alpine Space. More generally, the development of visions for the Alpine Space, or at least sets of objectives shared by a wide range of alpine stakeholders, would facilitate the strategy development. The previously mentioned prospective study commissioned by the Interreg IIIB Alpine Space programme (Bausch et al., 2005) identified the need for such a visioning process involving all relevant stakeholders, but it has not yet been carried out. A vision would help strengthening the programme identity and could improve awareness of what the ASP stands for among current and potential project partners. The revision process therefore considered that it could contribute to improve the

coherence between strategic objectives at the programme level and the activities of individual projects.

The Alpine Space Programme strategy revision process also concluded that it would be necessary to enhance programme quality. A first strategy in this respect was to shift from output orientation to impact orientation. Impact orientation is much more difficult to access and would require a different approach in the project generation and project presentation as well as in the assessment. Considering that the success of the programme will in the long run depend on the impact of the project activities, a new approach to project appraisal seems required. These findings are in contradiction with the prevailing European discourse on the need for a more "result-oriented" cohesion policy, insofar as long term impacts are not necessarily measurable and certainly not within the time-frame of a programming period. However, carefully selected result and output indicators could provide indications on the extent to which individual project may be presumed to contribute to the achievement of a long term impact (see section 1.3).

In view of reducing the gap between the programme and project levels, the revision process sought to systematise the thinking on how individual projects contribute to the achievement of strategic objectives at programme level. The main outcome of these efforts was the so-called "policy cycle" (Figure 2), which allows for a better understanding of the potential impacts to be expected from individual transnational projects. It is based on a typology of projects co-funded by the Alpine Space Programme that differentiates projects according to their objectives and nature of their activities, and thus on their position in the policy cycle. Three project types were identified:

- Type 1: Projects related to strategic policy development
- Type 2: Projects related to explorative and piloting actions
- Type 3: Projects related to policy implementation

The cycle of these three types illustrates how one type may contribute to the design of projects of the next type. Projects may also in their lifetime move from one type to the next. However, covering the three phases of the policy cycle within three years projects is not realistic. Depending on the type of project and its position in the policy cycle, different types of tasks and activities can be carried out. The criteria to be applied when assessing the accomplishments of each project need to be adapted to this diversity. By establishing a balance between the different types and actively promoting interactions between projects belonging to each of them, the programme improves its capacity to achieve its strategic ambitions. The focus of programme management is shifted from absorption to results and impacts.

The Alpine Space Programme Impact Assessment Study (Schneidewind et al., 2010) classified projects according to this typology and showed that impacts within each group would tend to follow the same pattern: Impacts from the "type 1"-project (strategic policy development) are rather broad and intangible. Projects of the second type (explorative and piloting actions) are frequently rooted in a strategy. They focus on developing new tools or methodologies (e.g. problem-specific models or

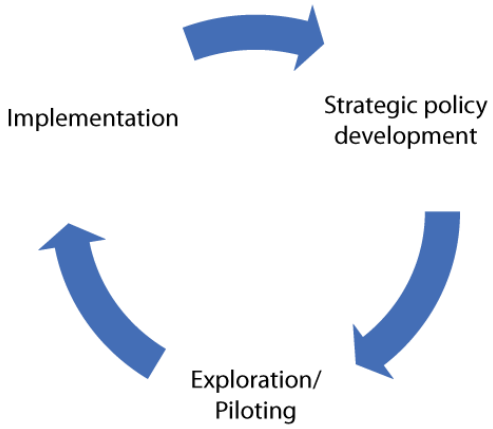


Figure 2. The policy cycle

scenarios) and testing them. The impact of these projects is mostly intangible. However, depending on the focus of the strategy and the thematic fields, limited tangible impacts where observed in some region. Unsurprisingly, the third type of projects, which focus on policy implementation with a concentrate on fully developed instruments, have the most tangible impacts. Policy implementation for example implies the development of legal or planning instruments such as regulations and laws with a transnational character.

The challenge is both to make the limited tangible impacts visible, and to ensure that stakeholders understand the potential added value of the intangible impacts for the long term development perspectives of the Alpine Space. Securing European and regional visibility of the programme was therefore one of the priorities identified by the revision process. It is important to demonstrate that the ASP is not merely a funding stream, but carries a number of specific objectives. One of the difficulties of establishing such an identity is the position of the programme between the European and the regional levels. The revision processes concluded that a better understanding of the programme's position in the governance levels of European regional and territorial policy must be established among the alpine stakeholders. This would be even more important if an alpine macro-regional strategy were to be adopted. The respective strategic objectives pursued through the Alpine Space European Territorial Cooperation programme and by the macro-region would need to be carefully identified and differentiated.

The programme has taken actions to strengthen its profile as a forum for discussion and exchange. By organising thematic workshops on specific programme topics such as climate change, demographic change and innovation between May 2010 and September 2011, the programme enhanced its visibility and stimulated the creation of transnational and interdisciplinary networks. This is one of the most visible achievements of the ASP in current period, which involved both an external audience and project partners. However, it still needs to be acknowledged that only a limited proportion of the alpine population is aware of the Alpine Space Programme, and that the economic actors, institutions and organisations involved in ASP activities are not a representative sample of alpine local and regional communities taken as a whole. While it is not an objective for the programme to be all-encompassing, reflections could be initiated to identify alpine relevant actors with which further interactions would need to be developed.

Conclusions

The review of achievements and strategy of ASP shows that the impact is mostly intangible and difficult to identify. While it needs to be underlined that these intangible impacts can be important for the long term development perspectives of the Alpine Space, strengthening the programme's capacity to generate more tangible impacts appears as the main priority. Overcoming the identified gap between programme and project level should for this reason be part of the strategy for the next programming period. This is the critical step that would allow the programme to develop a clear identity and to effectively seek to achieve specific targets and outputs.

This general objective has implications both in terms of overall programme design, and for its implementation:

- In terms of programme design, only strategic objectives that are explicitly connected to alpine realities, trends, opportunities and challenges, may later meaningfully be connected with individual projects. It is possible to assess whether project applications provide "stringent logical analyses" and "clearly elaborate logical links" to such strategic alpine specific objectives. However, this remains a pipedream as long as strategic objectives are carbon copies of general European or global objectives;

- Considering project implementation, more proactive approaches to the generation of project ideas are needed. There is no a priori reason to expect that strategic priorities for the Alpine Space Programme would be followed up by local and regional stakeholders and other alpine relevant actors. Targeted awareness-raising efforts would be needed to stimulate the formulation of proposals that contribute to the achievement of the programme's strategic objectives. This presupposes that these objectives are sufficiently narrow and well-defined, and that an actor-mapping exercise is carried out once they are adopted. This mapping exercise would be the first step of a process of pro-active project generation.

- Evaluation and project selection procedures can also be reviewed in order to improve the steering of the projects toward the programme strategy.

Furthermore the programme should generally enhance the focus on communication with alpine actors and beneficiaries. The present programme's workshops and other discussion events gave the opportunity to present and discuss on experiences and results of existing or past projects in relevant topics and to point out main challenges to be faced by future projects. Potential partners and invited political stakeholders were offered the chance to exchange on mutual expectations and to generate strategic projects. This experience may be capitalised upon in the next programme.

The forthcoming stakeholder dialogues to be organised as part of the strategy-development process will seek to generate projects, but will also contribute to establish the ASP as a promoter of strategic dialogues and improve the understanding of the programme's position between European and regional governance levels.

1.3. The European context

The European policy context in which transnational alpine cooperation may be developed is multifaceted and multi-layered. On the one hand, there are the financial instruments implemented under Cohesion policy, with their sets of programming tools and administrative procedures. The Alpine Space Programme, funded under the territorial cooperative objective, is one of these tools. On the other, the notion of Territorial Cohesion has enjoyed a certain prominence in European policy debates since its adoption as a core objective of the European Union in the Lisbon Treaty. These discussions, whose origins can be traced back to adoption of the European Spatial Development Perspective (ESDP) in the 1990s, remain at a relatively abstract level. While they are an important source of inspiration for individual territorial policy initiatives and contribute to the progressive emergence of shared European perspectives in this respect, they have not had a direct impact on Cohesion Policy as such.

The purpose of the present section is to identify the elements of the current policy context which usefully inform a strategic-development process for the Alpine Space. The focus is the prevailing types of discourse on harmonious territorial development, and their implications on for alpine territories.

The European policy-making context for strategy-development in the Alpine Space is composed of a number of disparate elements belonging to different Institutional frameworks and framed in different programming levels. It is not possible to fully reflect this complexity of frameworks and levels, but some key aspects of relevance for the Alpine Space can be highlighted:

- ***Cohesion Policy***: Legislative proposals for cohesion policy during the period 2014-2020 were adopted by the European Commission on 6 October 2011. These will according to the current calendar be discussed by the Council and European Parliament until the end of 2012 in view of a final adoption in the first half of 2013. These proposals contain a number of changes in administrative procedures and financial instruments, of which the analysis is beyond the scope of the present study. However, their underlying territorial rationale, e.g. in terms of integration through territorial programming, is of relevance.
- ***European Commission initiatives for the promotion of territorial cohesion***: Since the adoption of the Treaty of Lisbon, territorial cohesion is identified as a shared competence of the Union and the Member States. However, this has not led to any major overhaul in the methods applied by the European Commission with regards to Territorial Policy. Significantly, the Green Paper on Territorial Cohesion, published by the European Commission in 2008 and opening for debates on the meaning and implications of Territorial Cohesion as a policy objective, has not been followed by a white paper identifying the European Commission position in these matters. The European Commission primarily sees itself as the facilitator of a dialogue between European stakeholders in matters pertaining to Territorial Cohesion. Ensuring that the specific challenges and opportunities of the Alpine Space is reflected in these debates is an important long-term objective

- ***Member State initiatives for the promotion of territorial cohesion***. The adoption of the Territorial Agenda by the Member States at the informal meeting of the ministers responsible for urban and spatial development in Leipzig in May 2007 and its update in 2011 constitute milestones of EU Member States involvement in Territorial Cohesion debates. Its action programme, adopted in 2007, presents five guiding principles for the implementation of the Territorial Agenda: solidarity between regions and territories; multi-level governance; integration of policies; cooperation on territorial matters; subsidiarity. These principles are highly relevant for the design of strategies for the Alpine Space.

- ***Europe 2020 strategy***: Europe 2020 is the growth strategy of the European Union. It is based on the three priorities "smart, sustainable and inclusive growth". European headline targets have been defined to monitor the progress made in achieving these goals, which have also been translated into national targets. However, the involvement of the regional level and of transnational territories such as the Alpine Space in the achievement of the Europe 2020 goals has not been clearly defined. There have been extensive discussions on the importance of approaching the ambitions of the EU 2020 strategy from a territorial perspective. The Committee of the Regions has for example argued in favour of "Territorial Pacts" that would make it possible to take into account each region's socio-economic situation and degree of autonomy when designing strategies to implement the national reform programmes of the EU2020 strategy. The principles of "Europe 2020" rather function as a framework for legislative proposals for cohesion policy and for the assessment of future programme documents.

Proposals for European Territorial Cooperation

The legislative proposals for European Territorial Cooperation (ETC) require that there should be an enhanced thematic concentration within each programme (European Commission, 2011b, Art. 5, p. 18). This implies that a maximum of four priorities need to be agreed upon. These priorities are to be chosen from the list of 11 thematic objectives set out in the Commission Provisions (see Text Box 1) and drafted on the basis of the Europe 2020 strategy. Within these 11 thematic objectives, the focus is on economic production and entrepreneurship (3 objectives), ecological and environmental issues (3 objectives), transport (1 objective), learning, employment and social inclusion (3 objectives).

For each of them, the proposals for a Common Strategic Framework suggest a series of key actions by fund, list some general implementation principles and describe how complementarity and coordination between various actors and instruments could be achieved (European Commission, 2011a). Overall, the Commission therefore seeks to ensure that the rationale for public intervention at programme level is well-embedded in overarching policy objectives and that it does not duplicate actions undertaken at other levels. The level of detail of these specifications implies that individual European Territorial Cooperation programmes would choose their strategic focus from a limited set of pre-determined options.

Text Box 1: List of thematic objectives set out in the Commission Provisions for the Cohesion Policy 2014-2020 (Source: European Commission, 2011b)

(1) strengthening research, technological development and innovation;

(2) enhancing access to and use and quality of information and communication technologies;

(3) enhancing the competitiveness of small and medium-sized enterprises, the agricultural sector (for the EAFRD) and fisheries and aquaculture sector (for the EMFF);

(4) supporting the shift towards a low-carbon economy in all sectors;

(5) promoting climate change adaptation, risk prevention and management;

(6) protecting the environment and promoting resource efficiency;

(7) promoting sustainable transport and removing bottlenecks in key network infrastructures;

(8) promoting employment and supporting labour mobility;

(9) promoting social inclusion and combating poverty;

(10) investing in education, skills and lifelong learning;

(11) enhancing institutional capacity and an efficient public administration.

The Common Strategic Framework further suggests which priorities should be chosen by an ETC programmes such as the Alpine Space that share "*a major geographical feature*" such as a mountain range. It is indeed specified that such programmes should "*support the joint management and promotion of their natural resources, protect biodiversity and ecosystem services, develop integrated cross border natural risk management, address pollution of these areas and implement joint climate change adaptation and risk prevention and management measures, in particular in relation to flood protection and coastal defence*". If one applies this suggestion literally, this would imply that the thematic objectives (5) and (6) are compulsory for the Alpine Space Programme. The flipside of the concentration of ERDF funding and of the coordination with other funds (e.g. ESF and EAFRD) in the Common Strategic Framework is therefore that the scope for basing a strategic perspective on the unique characteristics of the Alpine Space is rather limited.

Monitoring and evaluation

The legislative proposals for European Territorial Cooperation include a list of common indicators to be used for the Monitoring and Evaluation of programmes, and for which cumulative targets are supposed to be fixed for 2022 (European Commission, 2011c). This list contains a large number of indicators subdivided in 11 fields[3] and focus on effects and impacts of public policies, e.g in terms of number of enterprises receiving grants, additional waste recycling capacity or number of households benefiting from improved housing conditions. In the European Parliament Draft Report of on the proposed regulation of 24 May 2012 this list is criticised for "*not reflect[ing] the specificity of*

[3] Productive investment , ICT Infrastructure, Transport, Environment, Research, Innovation, Energy and Climate change, Social infrastructure, Urban development, Labour Market and Training, Institutional and Administrative Capacity.

cooperation objectives". It is argued that it should be "*focused on matters with cross-border or transnational character and not on general character suitable for the national programmes*" (European Parliament, Committee on Regional Development, 2012).

These debates illustrate the difficulty of constructing a more "evidence based" and result-oriented cohesion Policy. The Fifth Cohesion Report already argued in favour of "clear and measurable targets and outcome indicators" that would be "clearly interpretable, statistically validated, truly responsive and directly linked to policy intervention, and promptly collected and publicised". However, the measurement of achievement requires an in-depth a priori agreement on objectives that may be difficult to reconcile with a dynamic approach to programme operation, whereby activities that are undertaken are largely determined by the project ideas that are submitted. Adopting an approach based on precise quantified objectives therefore implies a significant change in the operation of the Alpine Space Programme. It implies that a more pro-active approach to project generation and a more detailed follow-up of individual project achievement are needed.

As emphasized by Barca and McCann (2011) in their methodological note submitted to the High Level Group Reflecting on Future Cohesion Policy, indicators need to be selected on the basis of regionally or nationally agreed principles on the objectives to be captured ("which outcome for which people?") and how one may best track the progress towards them. According to these authors, there also needs to be a commitment to annually report about changes in these indicators and to evaluate impacts. An agreement on outcome indicators for the Alpine Space Programme therefore would need to be made on the basis of a wide consultation, involving decision-makers, stakeholders and producers of socio-economic and environmental data.

The evolving understanding of macro-regional strategy

One of the objectives of the present report is to contribute to the debate on a possible macro-regional strategy for the Alps, and exploring if there are topics and stakeholder support which call for a broader European perspective within a macro-regional strategy. This presupposes an understanding of what a macro-regional strategy entails and how it is currently understood by alpine stakeholders.

In a discussion Paper presented by Commissioner Samecki in 2009, a number of guiding principles are outlined for what a macro-regional strategy would be in the European context. It is first emphasized that such a strategy would only be supported if one can identify "very specific and visible opportunities or problems that cannot be satisfactorily addressed by regions or countries acting alone" (Samecki, 2009). In addition, Commissioner Samecki introduced two tests to identify actions and projects to be included in macro-regional strategies. The first of these tests concerns market failure and administrative structures. The strategy should only deal with an issue when it cannot be adequately addressed by existing market mechanisms and institutions. The second test is "indispensability". This implies that interventions should only be included in a macro-regional strategy if they would be rendered meaningless in their absence.

The Baltic Sea Region initially focused on the environmental challenge of eutrophication. The only purpose mentioned by the European Council when it invited the Commission to present an EU

strategy for the Baltic Sea in 2007 (European Council, 2007) was to address urgent environmental issues, even if it also opened for the pursuit of other objectives. The Communication of the Commission of June 2009 in which the European Union Strategy for the Baltic Sea Region is presented confirms that the environmental challenge, and in particular the "impact of excess nutrients […] leading to eutrophication and algal blooms" is the foremost among the four identified key challenges. However, it later appears that this thematic focus has been weakened (European Commission, 2009). In its follow-up communication of 23 March 2012, the Commission considers that it is necessary to "give the Strategy more focus and direction" (European Commission, 2012). For this purpose, it proposes three overall objectives: "saving the sea", "connecting the region" and "increasing prosperity". No explicit hierarchy is established between these objectives. Instead, the macro-regional strategy insists on the link between these goals and the Europe 2020 objectives (European Commission, 2012). While strengthening its links with overall European Union policy objectives, such an approach implies that specific and concrete challenges and opportunities of the Baltic Sea to a lesser extent would guide the understanding and implementation of the strategy.

The Danube Region from the outset has not had a distinct thematic focus. The European Council invitation to present a strategy for the Danube region in 2009 contained no indication on the purpose of such a strategy (European Council, 2009). The communication on the strategy published by the European Commission one year later, and adopted by the Council in April 2011, included four pillars: "connecting", protecting the environment", "building prosperity" and "strengthening [through enhanced institutional capacity and cooperation]" (European Commission, 2010). When adopting the strategy in April 2011, the Council "stresses that the EU Strategy for the Danube Region has a strategic framework guided by the Europe 2020 Strategy and the European Sustainable Development Strategy" but makes no reference to specific and concrete challenges or opportunities of the Danube Region (European Council, 2011). This suggests a change of focus towards broader macro-regional strategies, built on the conviction of involved regions and member states that transnational cooperation will make them better equipped to face economic, social and environmental challenges.

Such a trend implies that the initial logic of macro-regional strategies is diluted. Rather than "singling out a limited part of the EU" and treating it in special ways against the background an acute need for policy action (Bengtsson, 2009), macro-regions would seek to improve the perspectives of achieving the pan-European objectives of the "Europe 2020" strategy. This makes it more important to justify why strategies and actions at the macro-regional, transnational level are needed. Indeed, when macro-regions of constructed on the basis of a "very specific and visible opportunity or problem", they are delineated on the basis of the, necessarily transnational, functional geography of that opportunity or problem. On the other hand, macro-regions that pursue a wide and holistic strategy inspired by the Europe 2020 objectives need to demonstrate the added value of transnational strategies and actions. In other words, they need to explain what makes the challenges that are being addressed "too broad for the national level but too specific for the EU-27" (European Commission, 2012).

The notion of "functional macro-region" is nonetheless invoked both for macro-regions organised around a specific opportunity or problem and those with a wider strategic perspective. As emphasized by Stocchiero (2010), the "adoption of a functional approach gives rise to possible variable geometries in the definition of the macro-regional scales". Macro-regional strategies will

therefore tend to have fuzzy boundaries in view of adapting the actions to the spatial extent of the different issues it addresses. Such a flexible approach however presupposes a detailed understanding of how the geography of stakeholder interactions and territorial processes within each thematic field, if the functional approach is to be anything but a pipe dream.

The concept of the "three noes" is also important to ensure that macro-regional strategies remain a response to challenges and opportunities requiring transnational policy measures. By emphasizing that there would be "no new funds, no new legislation, no new institutions", the Commission and the protagonists of the first macro-regional strategies helped reducing fears of an imbalance between areas of Europe that are covered by a macro-regional strategy and those that are not. The Committee of the regions have voiced the opinion that there should also be "three yesses", including "the agreed use of existing Union funding for developing and implementing macro-regional strategies" and using the staff of EU bodies to create "a platform, network or territorial cluster of regional and local authorities and Member States which also brings in stakeholders" (Committee of the Regions, 2011). According to the European Parliament working document on the evolution of EU macro-regional strategies (European Parliament, Committee on Regional Development, 2011), the Council conclusions on the European Union Strategy for the Danube Region of April 2011 also "proposed a 'three yeses rule': more complementary funding, more institutional coordination and more new projects" (European Council, 2011). More generally, even if the "three noes" principle is applied strictly, the existence of a macro-regional strategy can be considered as an asset to attract funding from existing sources. The notion of "alignment of funding" is promoted by the Commission in its March 2012 communication on the European Union Strategy for the Baltic Sea Region. This principle implies the strategy should be "*comprehensively linked to all available resources, including, the European Regional Development Fund, the European Social Fund, the European Agricultural Fund for Rural Development, the European Fisheries Fund, the Connecting Europe Facility, the LIFE-programme, and research and innovation, as well as educational, culture and health, programmes*" (European Commission, 2012). It is therefore not surprising that fears of more limited funding if a macro-regional strategy is not adopted are voiced in other Europe parts of Europe. One of the seven rationales for initiating a Mediterranean macro-region described by the Medgovernance project is for example "insuring equal opportunity between the different EU territories" (Touret and Wallaert, 2010). Its authors consider that "one can expect the European Commission to mobilise funds and programmes under its direct authority in order to support macro-regional projects in the Baltic and in the Danube areas".

Such a stance is likely to lead to the adoption of macro-regions covering all of the European territory, irrespective of whether it is the most adapted instrument to address identified territorial challenges and opportunities or not. As has been pointed out by the Association of European Border Regions, such an exhaustive coverage of the European territory would make it necessary for "the European Commission […] to explain thoroughly the differences between macro-regional strategies and INTERREG B programmes" (AEBR, 2011). There is a risk that participation in a macro-region would progressively be perceived as mandatory to draw more benefits from European funding opportunities. Additionally, as a significant number of staff members in EU-institutions work on the design and coordination of macro-regional strategies, they help ensuring that these bodies pay attention to opportunities and challenges in one's own part of Europe.

Alpine Space regions and stakeholders in these regions therefore on the one hand need to consider whether they can run the risk of being excluded from a process that would increase their visibility in Brussels and potentially facilitate access to some sources of funding. On the other hand, one sees that the European "macro-regional fever" observed by e.g. the president of the PACA-region Michel Vauzelle will lead to an institutional dead-end in which the initial justification and purpose of this experimental instrument goes lost. Considering, as emphasized by the DG REGIO senior adviser David Sweet, that macro-regional strategies have a significant cost for the involved stakeholders (Sweet, 2010), it will be important to assess whether the game is worth the candle.

Considering the experimental nature of macro-region strategies, and the evolving understanding of its meaning and implications, it is difficult to select a working definition of macro-regional strategies for alpine stakeholders. However, one can consider there are some minimum requirements for such strategy:

1. With regards to content

- Joint challenges need to be identified;
- A thematic focus and priorities need to be agreed upon;
- Outputs and targets, which should ideally be measurable, need to be defined.

2. With regards to the three noes (no new instruments, legislation or institutions)

- Joint funding instruments, including structural funds, coordinated use of regional and national funding sources must be identified;
- A solid consensus and long term commitment among relevant stakeholders from authorities at different geographic levels, private and public sectors and among non-governmental organisations is needed to compensate for the absence of a legislative framework;
- A sufficient organisational capacity must be put in place, with the division of responsibilities and allocation of resources for the implementation, monitoring and updating of the strategy, to compensate for the absence of dedicated institutions.

Dubois et al. (2009) also identify 6 fields of tension for macro-regional strategies that usefully inform current debates on an alpine macro-regional strategy:

- Thematic tension: competition of topics due to the different agendas of the main alpine stakeholders;
- Institutional tension: The wide range of stakeholders with different interests;
- Coordinating tension: there is the role of the Commission and the interests of alpine stakeholders, the question of leadership in a mix of bottom up and top down approaches;
- Instrumental tension: we have a diversity of instruments and policy tools that need to be coordinated horizontally and vertically in order to realise synergies;
- Tension in terms of power (legal, financial, communicative) and question of ownership;
- Tensions related to whether a MRS is the right approach to improve transnational cooperation and cohesion (general European debate).

A first step in direction of a macro-regional strategy could be to make an assessment of the relevance of these difference tensions for the Alpine Space and, when needed, to formulate proposals on how they could be overcome. As a second step, proposals on how to organise a process leading to an agreement on priorities and targets among relevant stakeholders could be made. The conclusions from such a wide dialogue and consensus-building effort would in turn lead to the formulation of a macro-regional strategy to be submitted to the European Council. However, it needs to be acknowledged that the currently foreseen time frame, which implies that proposals for macro-regional strategies would need to be finalised by mid-2013, does not allow for such a process.

Macro-regions will only benefit alpine regions on the long term if they have solid foundations. This not only implies that they are well-embedded within the macro-region, but also that their justification and purpose at the European level is preserved. Alpine stakeholders therefore not only need to define and promote an understanding of macro-regional strategies that could help addressing some of the key issues they are confronted to and which require a transnational policy response. They also need to consider the effects of alpine macro-regional strategies at the European level. As shown above, too general macro-regional strategies run the risk of losing their justification as they are reproduced across Europe. A restrictive focus on a limited number of key issues, with a clear understanding of the expected outcomes, therefore appears as a more promising option than a wider and more holistic approach to an alpine macro-region.

Current approaches of alpine macro-regional strategy

There are currently two main initiatives seeking to contribute to the process of macro-regional strategy:

- The Alpine Convention working-group on macro-regional strategies [4] considers the MRS as an instrument to "act together towards common goals" and to "share knowledge and policies" (Alpine Convention, 2012, p. 9). However, none of the common goals concern concrete opportunities and challenges, and no measurable targets are identified. The contribution mentions a number of alpine specific issues on the basis of which one could seek to identify concrete targets for a macro-regional strategy. One of the objectives is to establish market mechanisms through which ecosystem services would be valued and external costs would be internalised, on the basis of an agreement between alpine areas and surrounding urban areas. However, relevance of the Alps as a territorial context to pursue such an ambition is not discussed.

- The final version of the alpine regions' roadmap for a macro-regional strategy for the Alpine Space[5] was presented in on May 9th, 2012 and adopted on June 29th, 2012[6]. This

[4] The Alpine Convention working-group on macro-regional was established on the basis of a decision of the XIth Alpine Conference in 2011. Our comments are based on their draft contribution of May 14th, 2012

[5] The alpine regions' initiative to promote a macro-regional strategy for the Alpine Space was first launched by the Free State of Bavaria in cooperation with some other alpine regions. The drafting exercise was carried out with the support of the Association of Elected representatives of Mountain areas (AEM). The involved regions were Provence-Alpes-Cote d'Azur, Rhône-Alpes and Franche-Comte (France), the states of Bavaria and Baden

roadmap initially proposes four concepts of the Alps, as an area for transport planning, and energy production region, a link between Northern and Southern Europe and a "water tower". However, the description of objectives and measures for an alpine macro-region covers most sectoral fields, from the protection of biodiversity to the promotion of research and innovation and from the use of information and communication technology to agriculture and forestry. While the advantages of inter-regional cooperation within each of these fields are described in some detail, a hierarchy between them is not proposed.

While significant advances are made in terms of compiling and describing alpine specific issues and themes, a purpose and direction for an alpine macro-regional strategy therefore remain to be identified. Key debates concern the governance of a possible macro-region, as they would also determine the modalities of the dialogue and consensus-building process leading to an agreement a strategic focus. The macro-regional strategy should not represent a new cooperation or governance paradigm in Alpine Space but instead represent continuity with, and a strengthening of, existing alpine initiatives.

Conclusion

The legislative proposals of the European Commission for Cohesion Policy and European territorial cooperation impose a thematic focus on "the promotion of climate change adaptation, risk prevention and management" and on "the protection of the environment and promoting resource efficiency" which would correspond to priority 3 of the current programme. However, the need to select only two additional thematic objectives would imply that the thematic scope is narrowed, as the other proposed objectives are formulated in a more restrictive way than priorities 1 and 2 of the current programme ("Competitiveness and Attractiveness" and "Accessibility and Connectivity", respectively).

If an alpine macro-regional strategy is approved by the concerned Member States and submitted to the European Council in mid-2013, it is likely to be broad and holistic as there would not be time to reach an agreement on thematic priorities. Such a broad strategy may generate confusion on the respective roles of the Alpine Space Programme and of the Macro-region when it comes to develop strategies and policies for the Alpine Space. The European Commission's arguments in favour of the "alignment of funding" for the Baltic Sea Region (BSR) would logically also apply to the Alpine Space. This would imply that the strategic perspective of the Alpine Space Programme would primarily be determined by the macro-regional strategy.

Württemberg (Germany), Lombardy, Valle d'Aosta, Piedmont, Veneto and Friuli / Venezia, the autonomous provinces of Bolzano and Trentino Alto Adige (Italy), the provinces of Tyrol, Salzburg and Vorarlberg, the cantons of Grisons, St. Gall, Ticino, Uri, Schwyz and Valais (Switzerland) as well as representatives of Slovenia.

[6] http://www.argealp.org/content/download/1087/7084/version/3/file/Alpenregionen+St+Gallen+Beschluss+29+6+12_de.pdf

1.4. Conclusions: alpine strategy development as an interactive and creative process

We have established that strategies for the Alpine Space cannot be developed independently from alpine stakeholders' diverse understandings of the Alps and wide range of ideas of how and why transnational cooperation in the Alps would be of added value. This integration of actor's perspectives will be part of the stakeholder dialogues.

One of the Alpine Space Programme's roles is to bridge these local, regional and national perspectives on the Alps and strategic priorities elaborated at the European level. The need to incorporate the Europe 2020 perspective and to focus on a limited set of predefined thematic objectives is particularly explicit in the legislative proposals for the 2014-2020 programming period. This implies an effort of translation and adaptation of EU objectives, so as to generate an alpine-specific strategic perspective on the basis of which the identity of the Alpine Space Programme may be built. To position itself more explicitly as a bridge between European strategies and transnational issues at the level of the alpine space, the Alpine Space Programme needs to enhance its focus on the necessary adaptation of European priorities.

The absence of a vision for the Alpine Space is a weakness for the development of such alpine-specific strategic perspectives. However, considering the diversity of positions on the primary objectives for the Alpine Space and controversies surrounding the legitimacy of actors situated outside of the Alps to formulate an alpine strategy, an excessive focus on the need for a vision may bring alpine cooperation into a stalemate. Continued efforts to promote the dialogue between alpine actors, to raise awareness on alpine issues and to propose solutions at the alpine level may progressively help overcoming these differences of perspective. Convincing regional and local stakeholders of the added value of alpine transnational action would be a key to further alpine integration. To this end, chapter 2 identifies a series of strategic fields of action based on an extensive analysis of development patterns and trends, challenges, opportunities and threats in Alps.

2. Upcoming strategic fields for transnational cooperation

As all other parts of Europe, the Alpine Space is subject to permanent changes. The driving forces leading to changes can have different dimensions and backgrounds. Some have a global or at least large scale dimension, other are more related to levels as EU, nations, regions or local authorities. The Alpine Space Programme area is compared to the global economy but also politics a small regional unit. While it contributes to the overall global system of economy, society and ecology, not least as an example of transnational and inter-regional dialogue and policy integration, it does not significantly influence the direction and dynamics of large scale driving forces. These can therefore be approached as external determinants of local and regional development processes in the Alpine Space. Based on an extensive literature review[7], the expert team has identified the following driving forces as the most important:

- climate change
- securing energy availability
- global market dynamics
- knowledge and information societies as basis for innovation
- demographic change
- transport of goods and persons

These long-term driving forces affect the Alpine Space as a whole. However, the nature and extent of the impact for each alpine territory depends mainly on two aspects: on the one side the strength and weaknesses of the territory itself, on the other its position in relation to other alpine regions and its ability to draw on their growth and development for their own benefit.

The extent of territorial heterogeneity is one of the main features that distinguish the Alpine Space from other parts of Europe: mountain areas and surrounding piedmonts, accessible and remote valleys, metropolitan regions and towns, lowlands and high plateaux create different preconditions for economic and social development. There is therefore a large diversity of situations. However, for the purpose of the present analysis, the objective was to use a more synthetic and operational territorial typology, which covers most of the Alpine Space and fulfils the requirements for a good typology: the patterns and trends in territories belonging to the same category shall be as similar as possible, while territories belonging to different categories shall be as different as possible.

[7] See Section 2.2. below.

Based on existing studies and maps such as the 3rd Report on the State of the Alps (CIPRA, 2007), the 5th Framework Programme REGALP project (Pfefferkorn et al., 2005), the Alpine Space Programme MARS project (BAK Basel Economics et al., 2005), the Alpine Space Prospective study (Bausch et al., 2005) and other geographical analyses (Tappeiner et al., 2008, Vanier, 2006)) the following five territorial types were chosen as a basis for the strategy development:

1. Alpine metropolises
2. Alpine cities
3. stable or growing rural areas
4. declining and shrinking rural areas
5. tourism areas

These territorial types are further described in section 2.1 by some criteria, characteristics and examples.

In the centre of this chapter a SWOT analysis is carried out for each of these five territorial types. First a list of general strength and weaknesses (SW) of each type was set up following fields of regional policy making along the sustainability triangle.

In the next step an impact analysis based on of the identified and general strength and weaknesses (SW) identified opportunities and threats (OT) of each territorial type. This was done by imagining different ways in which the six driving force listed above could influence each strength and each weakness and by this have an impact to the territories' future positive or negative development.

As the last step of the SWOT analysis a synthesis of all opportunities and threats was built. The expert group first ranked all OT elements on a simple scale with four levels: very important (1), important (2), slightly important (3) and without general importance (-). All OT elements with at least level 1 or 2 were merged in a matrix keeping the regional types in columns and the OTs in rows with a reference to the driving force behind. Using these blocks of similar or interlinked OT elements, the expert team could highlight field of action and related issues with a high potential for multiregional (at least 2-3 of the territorial types affected) and thematic (1-2 territorial types affect) development approaches.

The methodology of the SWOT analysis and result interpretation is illustrated in Figure 3.

Four main limitations of the approach need to be mentioned:

- The variety of regional types in the Alpine Space cannot be covered entirely by only five types. There exist a series of atypical areas (e.g. high intensity fruit and flower production areas), whose strengths, weaknesses, opportunities and threats would require separate analyses. But because of their exceptional character a general valid strategy cannot fully incorporate the whole range of situations. The expert team nonetheless considered that the strategic key issues which identified in the concluding section of this chapter are general enough to cover also these areas.

- The reduction of driving forces to long-term global or at least continental trends leads to a selective view from outside to the Alpine Space. The expert team is aware of the fact that there exist also driving forces on a smaller scale level as well as for the short term, which may have a strong impact to regional development policy. A current example is the European financial crises and all related policy decisions. But while we know that there will be challenges related to demography, climate change, global market forces, knowledge and innovation and transport that will lead to structural changes in the Alpine Space, this is not the case for the financial crisis. Strategy development in relation to these types of driving forces would be based on highly speculative assumptions and was therefore not attempted. However, possible effects of the financial crisis may be part of the so-called "wild cards" when considering visions and future scenarios in stakeholder dialogues (see below).

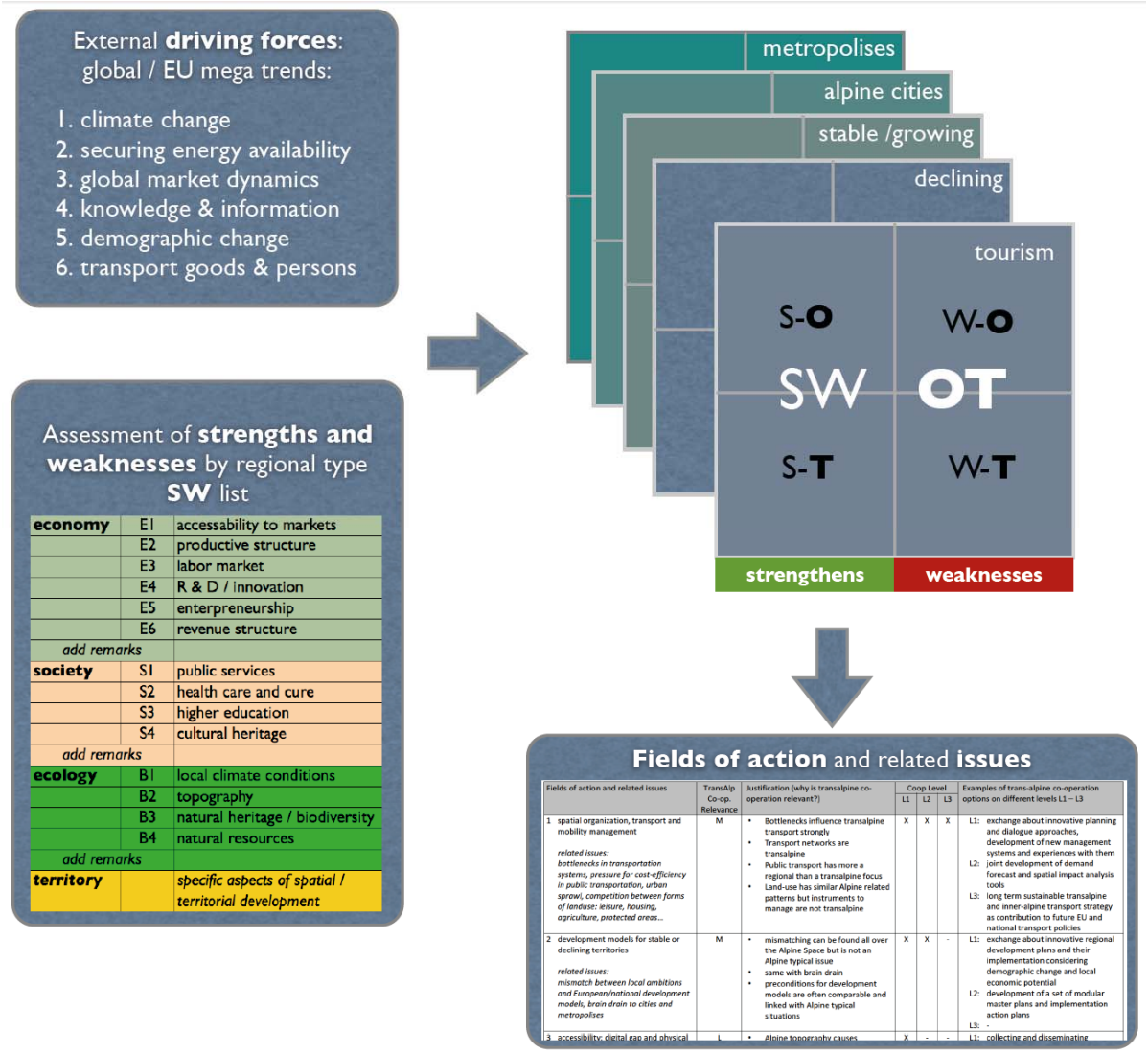


Figure 3. General concept of the SWOT analysis for Alpine Space strategy development

- No general scientific basis for the identification SW and the OT elements derived from them exists. The discussion among the experts is based on their knowledge of existing research, past stakeholder dialogues, thematic publications from regional to European level and additional desk research. This neither guarantees completeness nor objectivity. The planned stakeholder dialogue will install a platform for further discussion and addenda.

- All considerations base on the assumption of continuity. Unforeseeable events like global crises because of war, terrorism, mega natural hazards or untreatable economic crises are not part of the analytical work. These types of events, also called “wild cards” will could be envisaged as part of the stakeholder consultation processes.

2.1. Territorial types

As mentioned above, the expert team has subdivided the Alpine Space in five types of territories. These types of territories are defined for the entire Alpine Space, i.e. considering both the mountainous core of the Alps as well as surrounding lowlands and other connected neighbouring territories (e.g. Jura). The territorial types are based on functional patterns of interaction (e.g. functional urban areas) and some particularly significant patterns or trends (e.g. demographic decline, tourism hotspots) and can be illustrated with few distinctive indicators. A set of maps produced by the ESPON GEOSPECS project proved helpful to illustrate the relevance of these territorial types. However, the objective is not to construct a typology based on quantitative criteria, but to distinguish between territories where different patterns and trends can be identified or foreseen. The territorial types have not been delineated cartographically. The SWOT method following later on is carried out along these five territorial types, which are further described in Table 2.

These widely different territories have contrasted pre-conditions for economic and social development. Not only are they confronted to diverse challenges. Their respective authorities and stakeholders also pursue different policy agendas and objectives. It is challenge to formulate a strategy for such a heterogeneous set of territories at the level of the Alpine Space. However, this diversity is also a strength. As a network of sub-regions sharing an alpine identity, but without necessarily being confronted to mountain-specific development challenges, the Alpine Space can seek to integrate different types of measures and instruments. A mountain policy focusing on the specific preconditions of territories with topographical constrains can for example be approached in interaction with cross-border and transnational cooperation, or policies seeking to promote balanced urban-rural relations, and policies for balanced development in metropolitan regions. The geographical extent of the Alpine Space, stretching beyond the mountainous core part of the Alps, helps making it possible to link these various policy approaches. This helps demonstrating that place-based approaches are not only about considering assets and handicaps in individual regions and local communities, but presuppose an understanding of horizontal and vertical interactions between geographic levels and territories.

Table 2. Description of territorial types used for the SWOT analysis

Territorial types				
	Type	***key indicators***	***examples***	***description***
1	**Metropolises**	• at least 750.000 inhabitants in the functional urban area • among the leading European regions in terms of connections to high speed transport networks (train / motorways / international airports) and ICT endowment, • extensive suburban area with multiple secondary nodes and major commuting flows • R&D centres of global significance	Lyon, Milano, Munich, Vienna, Zurich (fully metropols) Geneva, Bern, Ljubljana, Torino, etc. (partly metropolises)	A number of major European metropolises are located in the rim of lowlands set around the mountainous core of the Alps. These agglomerations are among the main nodes of the European urban system (so-called "MEGAs"), have extensive surrounding functional areas with a number of secondary nodes and also exert their influence on large surrounding rural areas. The statute of metropolis is obvious for a short number of cities but can be partial and open to discussion for a number of others, which have some of the metropolitan features but not all of them. The metropolises are highly connected areas, both with the rest of Europe and the world, especially with other European metropolises and with the alpine cities. They benefit from a wide range of infrastructure and transport services (international airports, motorways, high speed railways). Internally, the large commuting flows they generate presuppose efficient public transports though the wide development of suburban areas induces an important use of personal vehicles and brings in congestion and associated impacts (pollution, loss of time, etc.). The economic basis of the metropolises is wide and diverse and makes them multifunctional areas with a large range of high level services. Their influence area is therefore extensive. They are world-leading players in a number of fields, contributing to structure global economic exchanges and concentrating wealth and competence at the European level. R&D level is high and supports a high input of innovation in the economy.

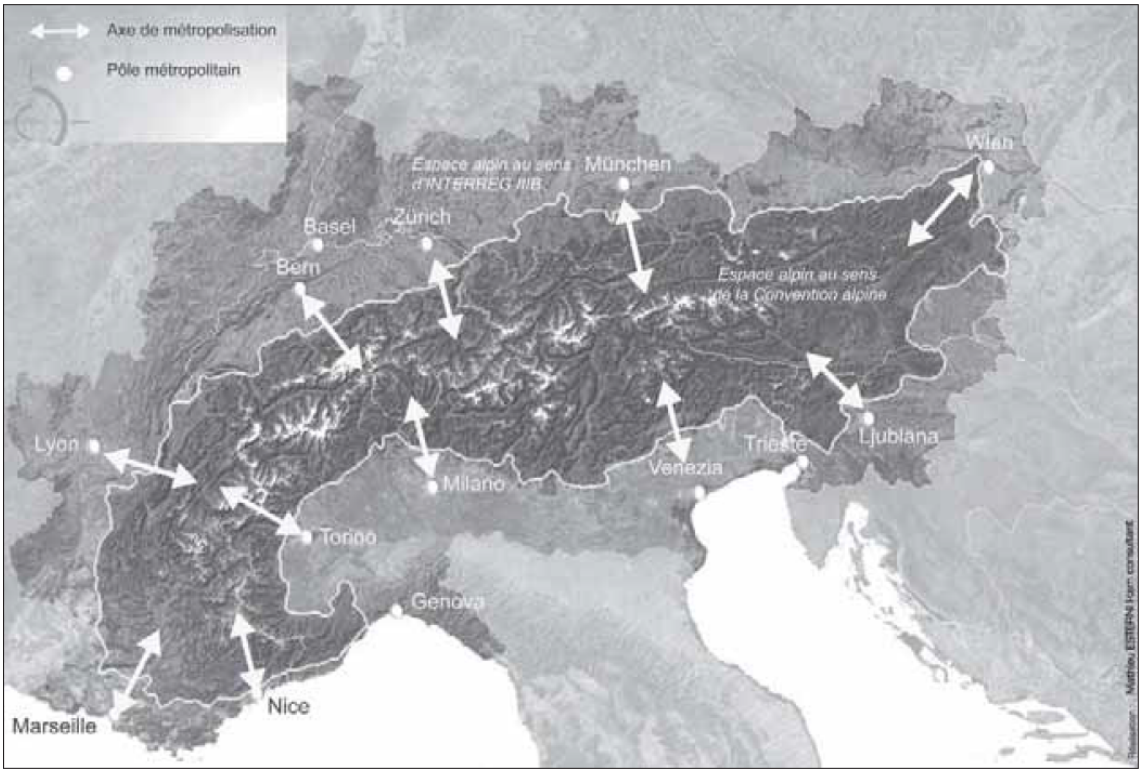
Territorial types				
Type		***key indicators***	***examples***	***description***
2	**Alpine cities**	• at least 50.000 inhabitants in the functional urban area • connection to high speed transport networks (railways /motorways) • suburban area with relevant commuting share (30-45 minutes) • R&D centres	Bolzano, Innsbruck, Salzburg, St. Gallen, Konstanz, Annecy, Grenoble	An important number of dynamic cities are located either in the rim of lowlands set around the mountainous core of the Alps or within the alpine valleys. These cities are not necessary structuring elements in European and national urban systems but concentrate a good level of services and are drivers of economic growth within their region. They are generally considered economically and socially attractive cities at a regional or a wider level and combine good connections to the metropolises as well as vicinity with core alpine areas. They often have valued urban features contributing to that attractiveness (setting, patrimonial features). Most alpine cities are well connected to the nearest metropolis. They benefit from both road and railway connections and have regional airports. They are also well connected to their nearer area of influence through public services but urban sprawl and well as a widening influence other peri-urban rural areas increase the global level of mobility and the share of individual motorised transports. The economic basis is often strong and relies on a wide range of activities and services. The level of R&D is more limited than in the metropolises but can be above average in Europe for a similar category of cities. These cities are linked to the global economy through their relations to the metropolises but also sometimes directly within some specific sectors.
3	**Stable or growing rural areas**	• stable or growing population • significant share of workers employed in cities and metropolis • average ageing population • GDP/capita 80%-100% of average • good to very good connectivity to a metropolis or city	parts of Allgäu, Valle d´Aosta, Chablais, vallée de l'Ain, Außerfern, ...	There are large stable or growing rural areas in the Alps, which are well connected to alpine cities and benefit from their dynamics in terms of activity and services. They can be lowlands, pre-Alps or alpine core areas, depending on the proximity to the cities and on the quality of transports to them. They are well connected to the nearest city (or cities) but often rely heavily on individual motorised transports. A pattern of small cities structures these rural areas at a more narrow scale. These rural areas are diverse but share a number of common features. They benefit from the combined effect of local export-oriented economic activities as well as from the activities of the nearest cities and metropolises. Their attractiveness relies on the fact that they offer job and service opportunities combined with qualitative life conditions.

Territorial types				
	Type	***key indicators***	***examples***	***description***
4	**Declining rural areas**	• declining population • no significant share of workers employed in cities and metropolis • over average ageing population • GDP/capita below 80% of average • weak connectivity to next city or metropolis	parts of all Bavarian alpine discricts, Hautes-Alpes, Hautes-Provence, ...	Declining rural areas are generally situated beyond the main influence areas of the metropolises and alpine cities and/or have a limited endowment in smaller cities. They can be located in lowlands, pre-Alps or alpine core areas, but do not have the transport infrastructure and needed to compensate for the distance to urban centres and potential markets. They therefore mostly do not benefit from the employment opportunities of towns and cities. Additionally, they have not been able to generate a sound foundation for economic activities. Their total economically active population tends to be lower than in stable rural areas, creating less diversified economies that are more vulnerable to external shocks and fail to offer attractive employment opportunities for local youth and for the spouses of locally employed people.. Limited access to capital is an additional challenge for these areas, especially as banking and investment activities are increasingly concentrated in large groups with their geographic base in cities and metropolitan areas. Demographic decline creates a vicious circle, as the cost of public and private service provision increases.
5	**Tourism areas**	• tourism is one of the main economic sector (overnight stays / (inhabitants x 100) > 1) • high ground/property prices • immigration of elder and outmigration of younger people • partially highly seasonal activity	St. Moritz, Crans-Montana, Avoriaz, south part of Oberallgäu, Val Gardena, Ischgl...	Tourism activities have had a particularly strong impact on local and regional economies in the Alps. They are mainly located in the mountainous core of the Alps (with the exception of some lake areas for instance) and value "white tourism" in winter and "green tourism" in summer. Those two seasonal forms of tourism do not systematically apply to the same places in the same intensity, summer tourism being more widely scattered in the mountain areas than winter tourism that relies on heavy and spatially focused infrastructures. Different levels of altitude and exposure of winter resorts will result in different sensibilities to climate change. Tourism areas are well connected to the lowlands through infrastructures and public services in order to bring in tourist populations and support activities for tourism. Tourism areas are characterised by important variations of populations and activities through the year on a seasonal basis. Infrastructures have then to be dimensioned according to the frequentation peak but can be disused the rest of the year, with significant consequences in terms of costs, both in investment and maintenance. The level of activity and services has also important seasonal variations and the core activity and level of services for the all-year population can then be limited. The economy of these areas relies heavily on revenue transfers from outside on a seasonal basis. The inflow of seasonal workers matches the inflow of tourists. The focus of population in time and space has some drawbacks in terms of environment, as impacts can be important and require a high level of equipment to cope with them.

Map 4. Urban endowment in the alpine core area and in the Alpine Space

The map shows the continuous urban influence of metropolis and cities on the peri-alpine rim and the limited size and influence of cities in the mountainous core of the Alps because of extreme topography of the high mountains and therefore very limited settlement options. The influence of metropolises and their localisation all around the Alps can be underlined. Their role not only within the Alpine Space Programme area but also to the border areas of the alpine convention perimeter is obvious.

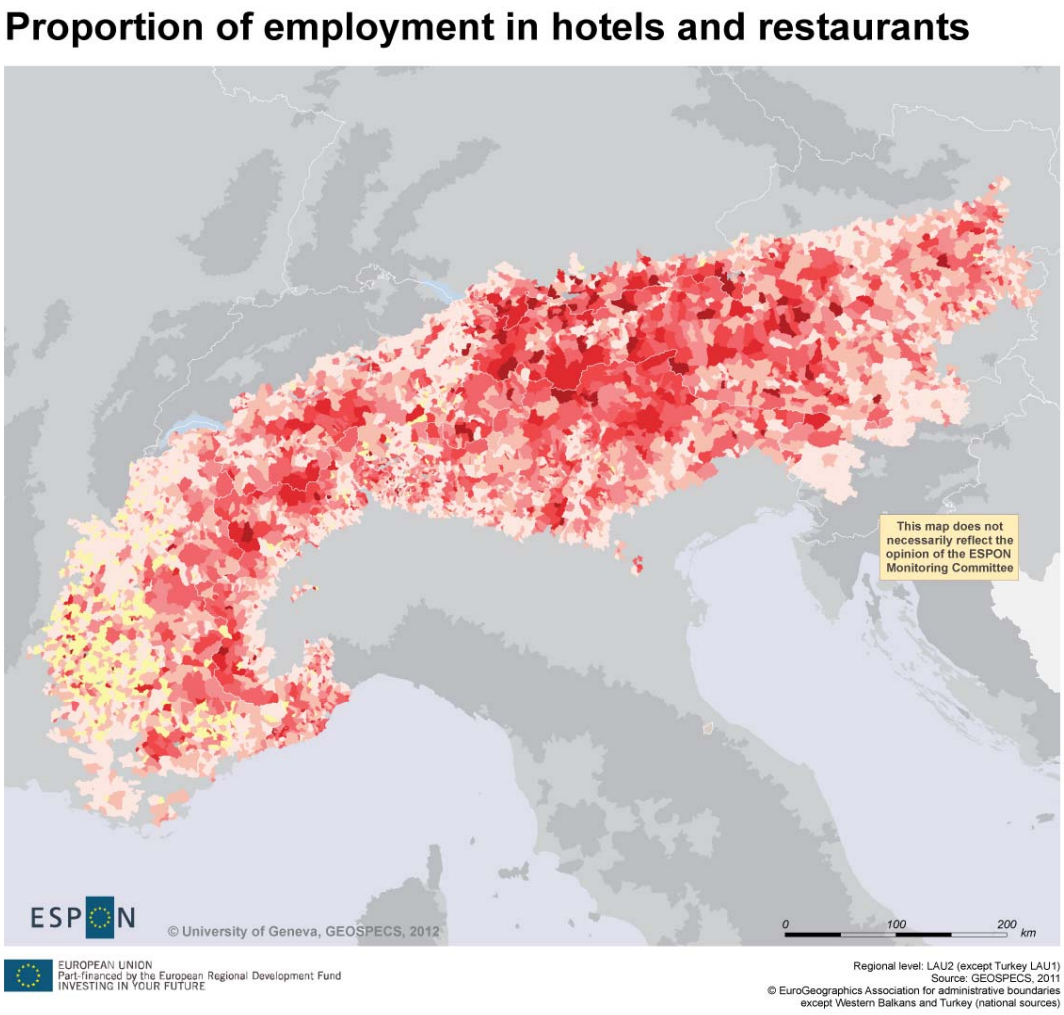
Source: University of Geneva (2012)



Map 5. Alpine core and peri-alpine areas : metropolisation corridor issues

Two understandings of the Alps appear on the map with an alpine core (Alpine Convention perimeter) and a wider space encompassing peri-alpine areas (Alpine Space Programme area). Metropoles are located in the peri-alpine area and are connected to the alpine core.

Source : Vanier (2006)



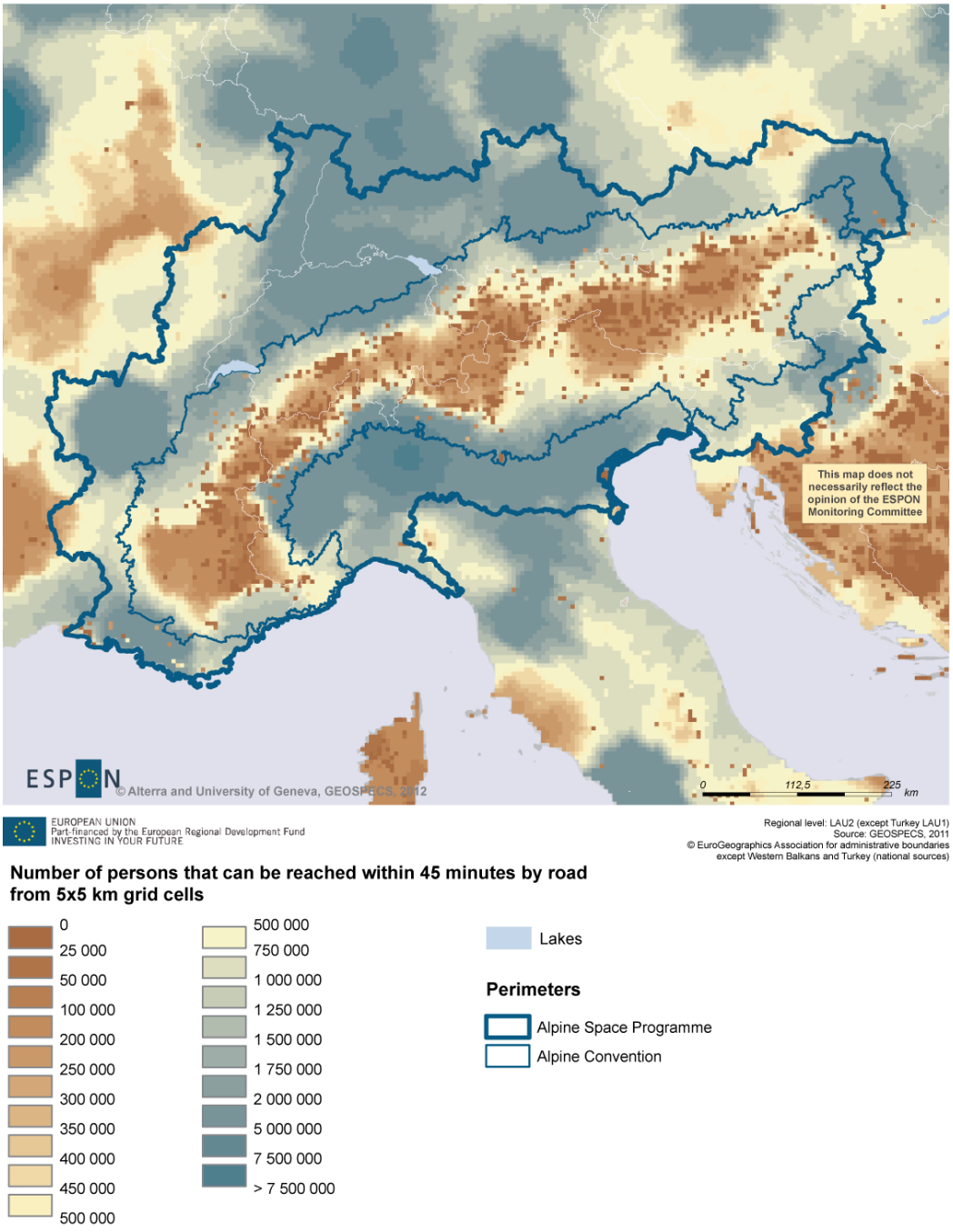
Map 6. Proportion of employment in hotels and restaurants

Tourism areas are considered as an additional regional type because of the economic importance of this sector in many regions in the core Alps. However, this does not imply that the Alps as a whole can be considered as a tourist destination. Tourism is the predominant sector of activity only in a limited number of areas with specific tourism relevant outstanding attractions.

The delineation of the Alps used in this map is specific to the ESPON GEOSPECS project.

Source: University of Geneva (2012)

Population accessible within 45 minutes by road



Map 7. Population accessible within 45 minutes

This map represents the number of persons that can be reached within 45 minutes by road. These values are considerably higher in peri-alpine areas than in the core of the Alps, but more than 1 million persons are nonetheless within commuting distance from considerable parts of the Alp . The map also shows the strong local differences in accessibility within municipalities, as grid cells with values of less than 50,000 and more than 450,000 are often contiguous.

Source: University of Geneva (2012)

2.2. Driving forces

The driving forces selected for the impact analysis can be characterized by the following aspects:

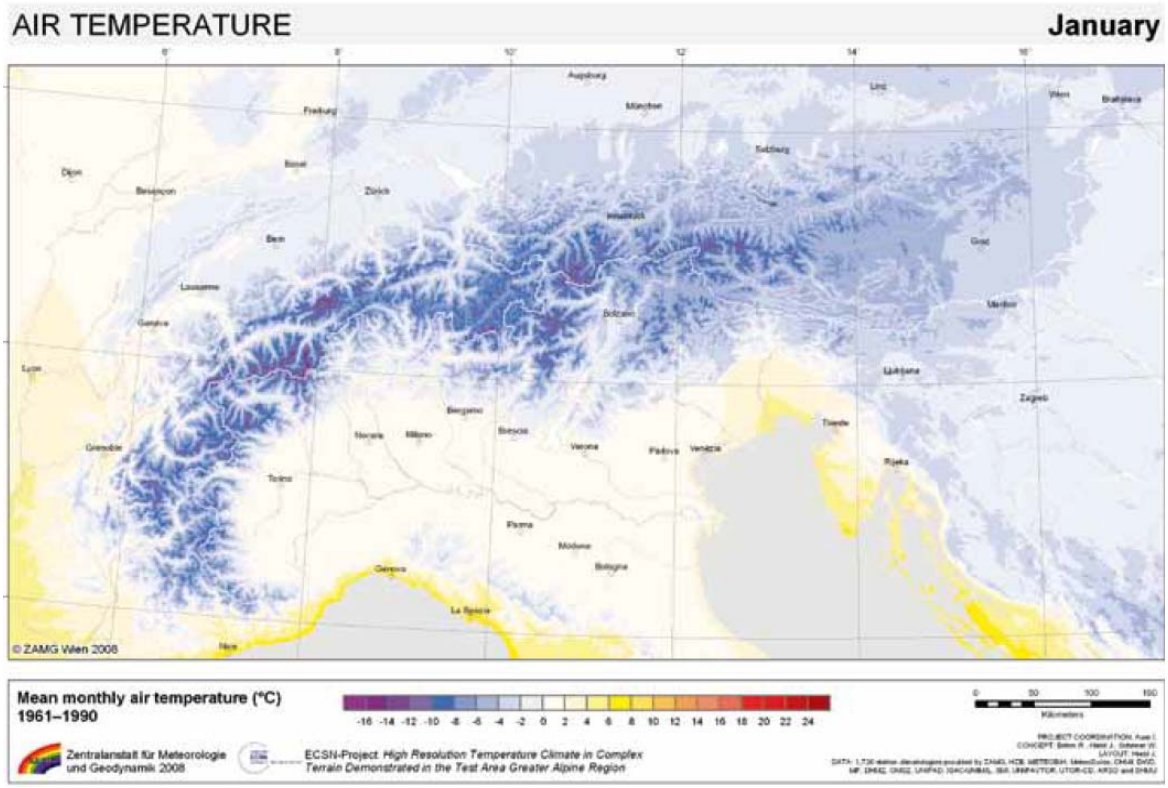
- long-term effects to regional development: they have at least an on-going or upcoming impact for the next 20 to 30 years
- large-scale relevance: the impacts occur at multiple regions and places within the Alpine Space
- unswayable nature: the dynamic and power of a force cannot be influenced itself, only the provision or reaction to it
- EU policy relevance: they are also part of the discussion and strategy approaches of EU policy

Each driving force is described below.

Climate change

climate change	Global climate change is a matter of fact (IPCC 2007). The climate change is stronger and faster in mountain areas than the lowlands, especially in the winter season. Mostly climate change is seen only negative (natural hazards, health of elderly people in metropolitans, change of regional natural resources as economic basis). But even only in a small range higher temperature and changes of precipitation may cause positive impacts. The dynamic of climate change is slow but impacts are strong and long lasting. Greenhouse gases of today influence the climate of at least the next 100 years. Therefore climate protection by mitigation strategies to reduce greenhouse gas emissions are a global effort adaptation mostly needs local and regional approaches (see Alpine Space Programme projects as e.g. AdaptAlp, ClimAlpTour. ClimChAlp, Clisp, Manfred). Climate change is therefore driver with two separate dimensions: - direct and indirect impacts of changing climate conditions - pressures to contribute to fulfil national, European and global climate protection objectives. The second dimension implies that actors from all sectors all are affected, even if they are directly impact by changing climate conditions as such. Because of the public debate and media attention devoted to higher exposure to natural hazards due to climate change, consumers get stimulated to change behaviour also in Alpine relevant fields as food selection, choice of energy suppliers or travelling.

Alpine evidence	▪ Alpine glaciers lost 30 % to 40 % of their volume between the mid-nineteenth century and 1975 (loss of 0,5% per year). This loss is steadily increasing since 25% of their volume disappeared between 1975 and 2000 (loss of 1% per year) and 10 to 15% of it between 2000 and 2005 (loss of 2 -3 % per year). ▪ In the Bavarian Alps, the average snow period duration at low altitude shrank from 20% to 30% in 45 years (1951 – 1996). This trend is less important at medium altitude and can even be reversed at the highest points of the Alps. ▪ The temperature of Alpine permafrost rose quickly during the 20th century with a average of a 0,5°C – 0,8°C increase. The annual rate of melting of the ice contained within permafrost more than double between 1970 and 1980 source : Région Rhône-Alpes, Observatoire National sur les Effets du Réchauffement climatique, pôle grenoblois d'études et de recherche sur les risques naturels - Alpine Space Programme (2008) ClimChAlp- *impacts of climate change on natural systems*



Map 8. Air temperature – January

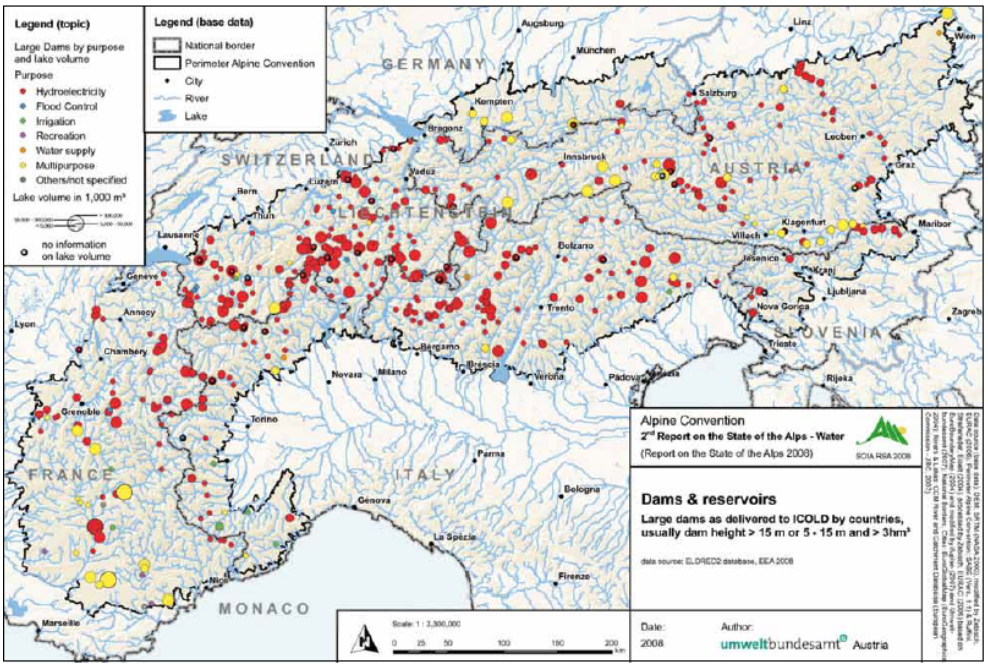
This map shows that the spatial structure of the Alps can be read through temperature levels. These levels could well change through climate change and have impacts on the spatial organisation.

Source : Permanent Secretariat of the Alpine Convention (2010)

Securing energy availability

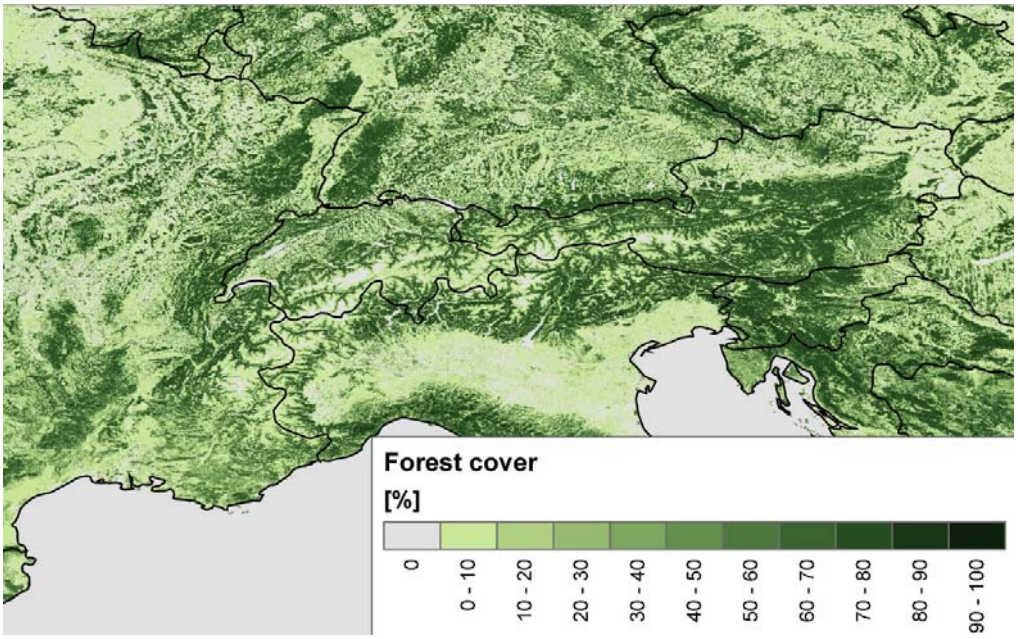
securing energy availability	Dynamics of the world economy are still closely linked to the availability of fossil fuel to at a moderate price. In the Word Energy Outlook 2008 (WEO) the International Energy Agency (IEA) forecasts a stagnation of oil production until 2030 and a growing demand. Other scenarios state that already in 2010 the maximum of global oil production (see peak oil study of the German Bundeswehr, Bundeswehr transformation centre (2010)) was reached. The nuclear disaster in Japan led to debates on the future of nuclear power in some European countries, and especially in Germany. Step by step reduced availability of traditional non-renewable energy resources (especially oil, gas, nuclear power) makes it necessary to consider whether energy efficiency and the share of renewable energy sources increase faster than the availability of old sources decreases. The absolute prices of energy will most likely increase. Therefore the central question is if the relative price of needed energy will be kept stable because of improvement of efficiency. Those industries, economic sectors and especially transport with high energy consumption will get under pressure. On the other side regions with a high potential of renewable energy can expect increased incomes if efficient solutions are found for the production, storage and transport of the resulting energy to the markets or for the relocation of energy-demanding activities to these areas.

Alpine evidence	▪ Hydropower is a major energy resource available in the alpine region. It is already used intensively in over one hundred large hydroelectric plants with a total capacity of more than 28 Gigawatt [GW] producing over 46 Terawatt-hours electricity each year [TWh/yr] . Adding to this, hundreds of smaller hydroelectric plants also have an impact on the alpine ecosystem. (source : Helmut Haberl, University of Klagenfurt - Institute of Social Ecology - IFF Vienna www.cipra.org) ▪ As an example, in 2002, wood stoves in Switzerland burnt about 2,6 million m^3 of wood thus replacing about 500 000 tons of fuel (the equivalent of 7 000 four-wheeled wagons) and saving 1,5 million tons of CO^2. (source A. Keel, Ch. Rutschmann, Energie-bois Suisse - La forêt bûche pour nous De l'énergie intelligente, pour vous!)



Map 9. Dams and reservoirs in the Alps

The map shows the high density of dams and reservoir being used for hydroelectricity production. This makes the Alps a prominent place of renewable energy production in Europe.
Source: Permanent Secretariat of the Alpine Convention (2009)



Map 10. Forest cover in the alpine region

Forest resources are an important asset throughout the Alps that can be found at low and medium-high altitude. These resources are a high potential that can be valued as wood energy.
Source: © Institute of Social Ecology, K.-H. ERB (personal communication, 2007), based on MODIS tree cover data (see FRIEDL, M.A. et al., (2002))

Global market dynamics

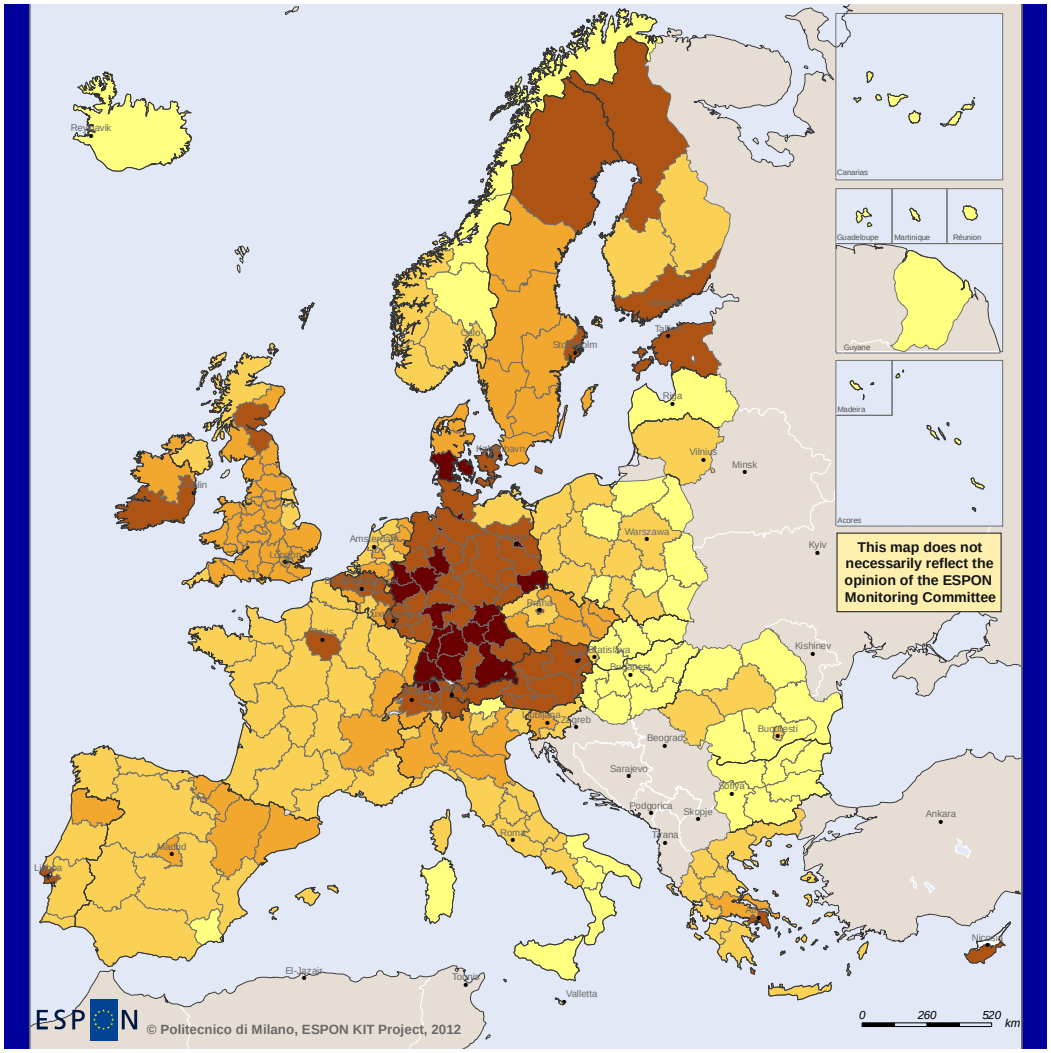
global market dynamics	National and European economic strategies (see also EU 2020 strategy) are still based on a general philosophy whereby economic growth measured in market prices is the leading objective. As inside EU the growth potential is low because of saturated markets and stable to declining populations . Economic policies therefore tend to support the improvement of competitiveness on the global market. As a result of this, European countries are increasingly exposed to global market dynamics, and especially to external shocks induced by competition and variation in demand in the BRIC countries. A global economy always tends to uniform and standardize products consumers can rely on everywhere. This opens in general opportunities to products which are unique and which cannot get copied as they are only authentic in the region of their origin as an opposite approach. Authenticity is based upon the existence of material and immaterial cultural heritage. The Alpine Space therefore has in general a very good starting position to benefit on the one side from the general global market dynamics but also by making use of its regional traditional competences.

Alpine evidence	The Alpine Space is one of the most competitive areas in Europe, especially regions located in the central part of the Alpine Arc, while the eastern and western fringes display rather low per capita GDP. Regions with the highest and regions with the lowest per capita income differ by a factor of five (see Map 1, Annex 1).

Knowledge and information societies

Knowledge and information societies	In former times knowledge but also the access to information was a privilege of the old leading economies. Today knowledge as a result of R&D and information moves fast around the globe. Especially if knowledge is not linked to traditions and local / regional resources (human / natural resources) only the speed of innovation determines the degree of competitiveness. Because of a fast increasing academic basis in nearly all countries of the world and by spreading the R&D results in a global acting scientific and economic community competition about the “best heads” will increase. The inter-linkage between leading research institutions and the economy capitalizing research result is a core issue. As in the field of the production of mass products the European countries because of their labour and other location related costs often are not any more competitive future economic focus is more in the field of R&D and less in production. Nevertheless in economic sectors based on a leading position in knowledge related to the products itself but also the technical process also production still plays a strong role in the Alpine Space. Furthermore knowledge in the field of services gets more and more important. This can get strengthened by making use of local and regional knowledge as a part of the immaterial cultural heritage

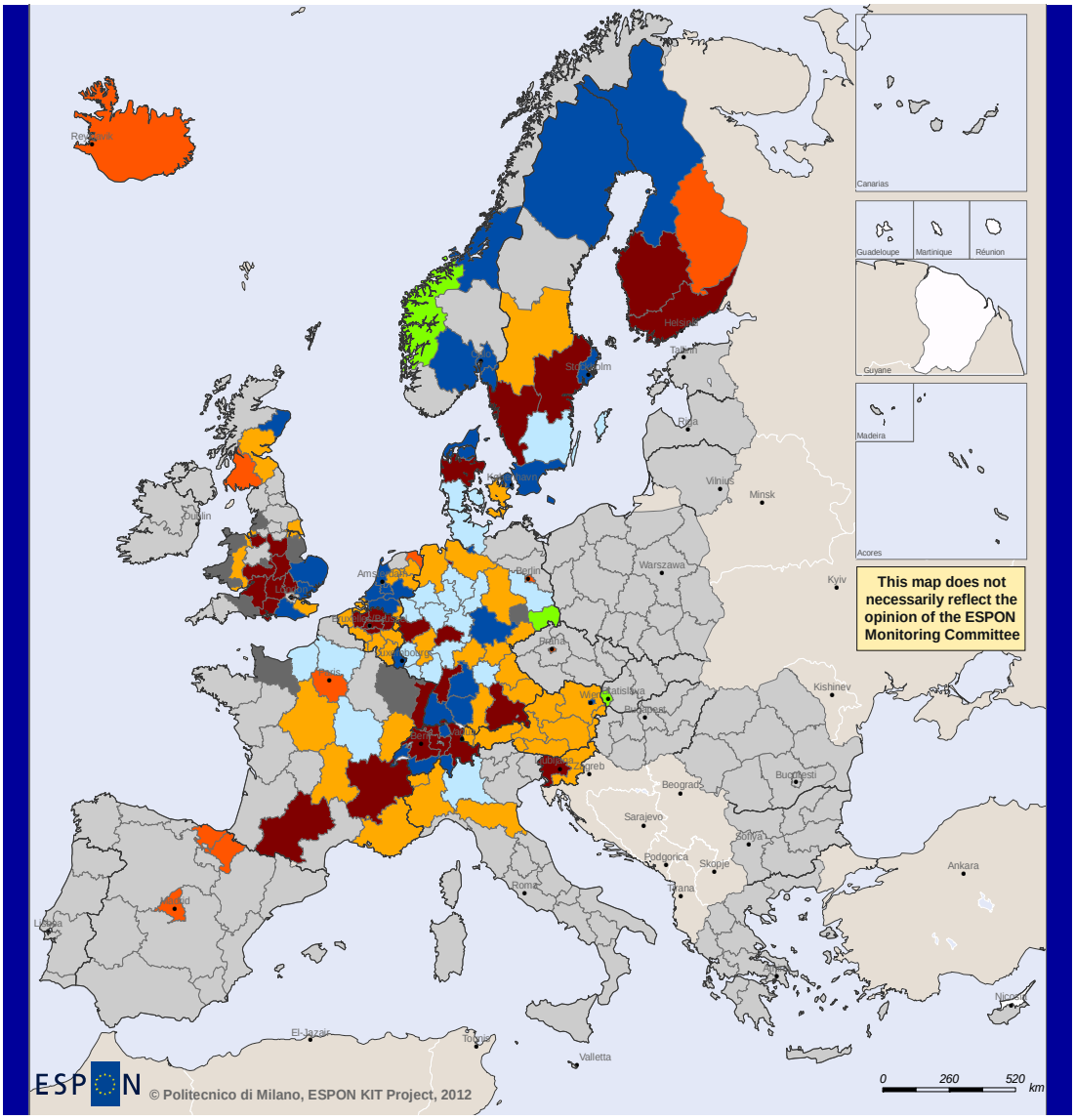
Alpine evidence	The share of R&D in the regional GDP (NUTS 2 level) is generally high in the Alpine Space compared to other parts of Europe (see Map 4, Annex 1)



Map 11. Innovation areas in Europe

The Alpine Space appears as one of the most innovative place in Europe with large areas of Switzerland, Germany and Austria having the lead. Other areas such as French and Italian Alps rank well though on a lower scale.

Source: BEST et al. (2012)



EUROPEAN UNION
Part-financed by the European Regional Development Fund
INVESTING IN YOUR FUTURE

Regional level: NUTS2
Source: Own elaboration, 2011
Origin of data: EUROSTAT and REGPAT, 2007
© EuroGeographics Association for administrative boundaries

Legend

- No data
- None (137 regions)
- TAR only (8 regions)
- Scientific regions only (11 regions)
- Networking regions only (43 regions)
- TAR and scientific regions (3 regions)
- TAR and networking regions (20 regions)
- Scientific and networking regions (29 regions)
- TAR, scientific and networking regions (31 regions)

Map 12. Knowledge economy in Europe

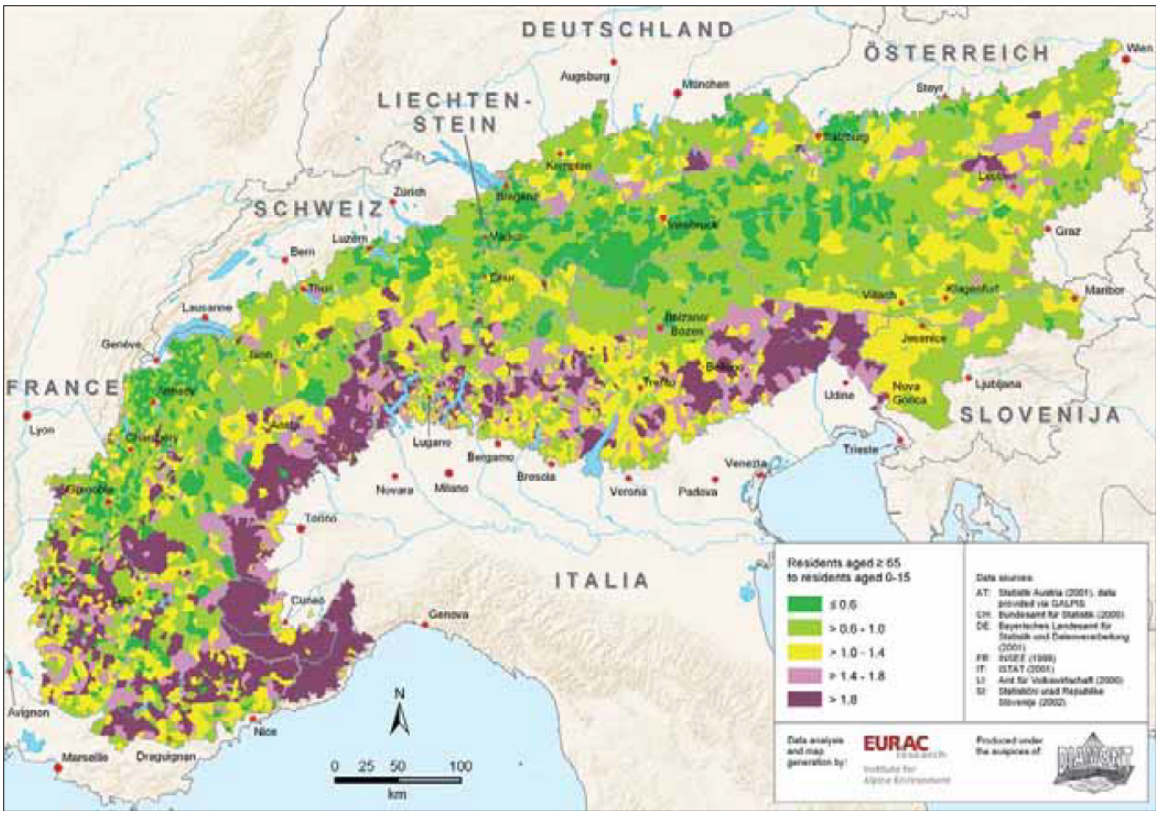
Large parts of the Alpine Space appear as strongholds of the European knowledge economy.

Source : BEST et al. (2012)

Demographic change

Demographic change	Demographic change is an already on-going European process leading to an unbalanced development of the European population. In most of the European countries the fertility rate is too low for a balance of the number of births and deaths. The restricted regulations for immigration to EU member states leads in some countries to a negative net total of immigrants in relation to emigrants. But also within Europe strong regional disparities occur (EUROSTAT 2008). While metropolises and cities tend to grow many rural areas stagnate or decrease. Younger people take their opportunities for higher education or qualified jobs in the larger agglomerations while elder people stay in the rural areas or look for attractive retirement locations often in tourism areas. Older consumers with changing needs confront all enterprises offering products and services not only to the locals and the regional population but also within the common market to adapt their portfolio. The demand for services in the field of healthcare and cure will increase. Young retired persons compose a growing potential for their engagement to a changing civil society. The dynamic of demographic change is often underestimated but offers besides the challenges also multifarious opportunities.

Alpine evidence	▪ In most alpine countries the share of inhabitants over the age of 64 is above the respective national average (exception: Austria, France and Slovenia). On average the highest shares are registered in the Italian Alps, the Italian-speaking regions in Switzerland (Ticino) ▪ Very small-structured municipalities (<500 inhabitants) and municipalities with over 25,000 inhabitants on average record a higher old-age index. Elderly people are one part of the population which is more dependent on good accessibility to serve their needs. The share of this group will increase to 30 % of the average population by 2050. (Permanent Secretariat of the Alpine Convention, 2007)



Map 13. Old to young age dependency ratio

Contrasts appear in the Alps considering the old to young ration with a prevalence of old people in western and southern Alps whereas northern and eastern Alps are younger.

Source : Tappeiner et al. (2008)

Transports of goods and services

Transport of goods and services	Transport is not obviously a driving force by itself as behind there is the main driving force of increase of demand for transportation of goods and persons driven by the relatively low price of fossil energy. On the one side, there is generally an excessive believe in the mechanical effects of increased accessibility on local investment levels and economic dynamism, while there is extensive literature on the need for accompanying measures to obtain positive effects from transport infrastructure investments. On the other side, while TEN projects have had a major influence to economic development (EC 2009) along the European major transport axes or in the surrounding of airports, the ESPON TRACC project concludes that "the combined results of empirical and modelling studies suggest that the present European transport policy may widen rather than narrow differences in accessibility between central and peripheral regions" (S&W et al., 2011).The planning and construction of new transport infrastructure is a long lasting process, often taking several decades from the very first planning to the finalization. In prosperous and fast growing regions the real demand for transport capacity at the moment of finalization already is higher than estimations at the beginning of the planning process were. Changes in settlement behaviour of the population or spare available capacities for housing in metropolises and cities lead to an increase of commuting. Transport therefore is a driving force similar to climate change with a double dynamics behind: already the discussion about the need and much more first planning ideas of transport infrastructure causes reactions related to regional development. But also the concrete existing impacts of transport or expected changes of the impact by the change of the amount of transport forces decision makers to act.

Alpine evidence	▪ On a general basis, the alpine road network is heavily used for freight transport. Based on traffic census data, an increase of 30% of heavy vehicles occurred in the decade between 1995 and 2005 on the most congested motorways. The share of freight traffic on main alpine motorways ranges between 15% and 35% on the Brenner and Tauern passes and reaches 60% on the Fréjus pass (Permanent Secretariat of the Alpine Convention, 2007) ▪ The Alpine Space Programme Monitraf project has shown that external costs of transports are considerably higher in sensitive alpine areas than in lowland in a proportion of 2 to 5 (due to climate, topography, etc.). Current budget allocations, e.g. for road maintenance, do not take fully account of these additional costs. (Source : Region Rhône-Alpes et al. (2008)) ▪ The alpine passes are important transport corridors for a large part of Europe, stretching from southern Italy to the North and Baltic Seas (see Map 3, Annex 1)

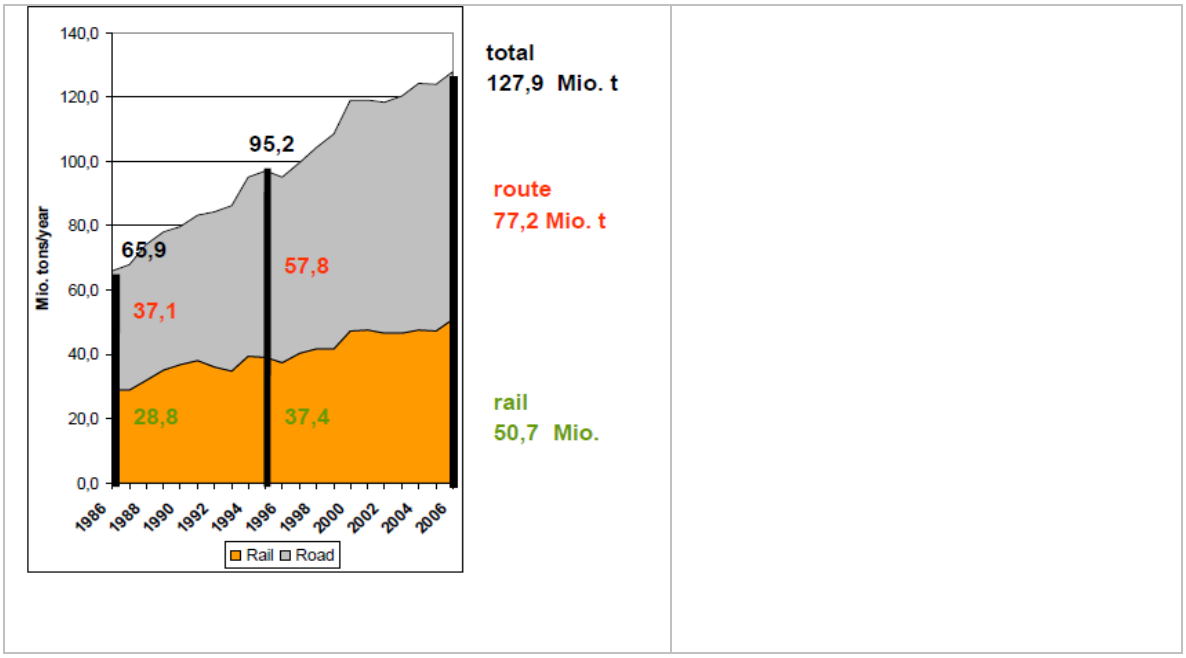


Figure 4. Compared evolution of road and rail traffic (1986-2006) on main transport axes

(Mont-Cenis, Fréjus, Mont-Blanc, Simplon, Saint-Gothard, San Bernardino, Brenner and Tauern)

Global traffic is increasing steadily and the share of rail transport is falling even if it remains stable in absolute value.

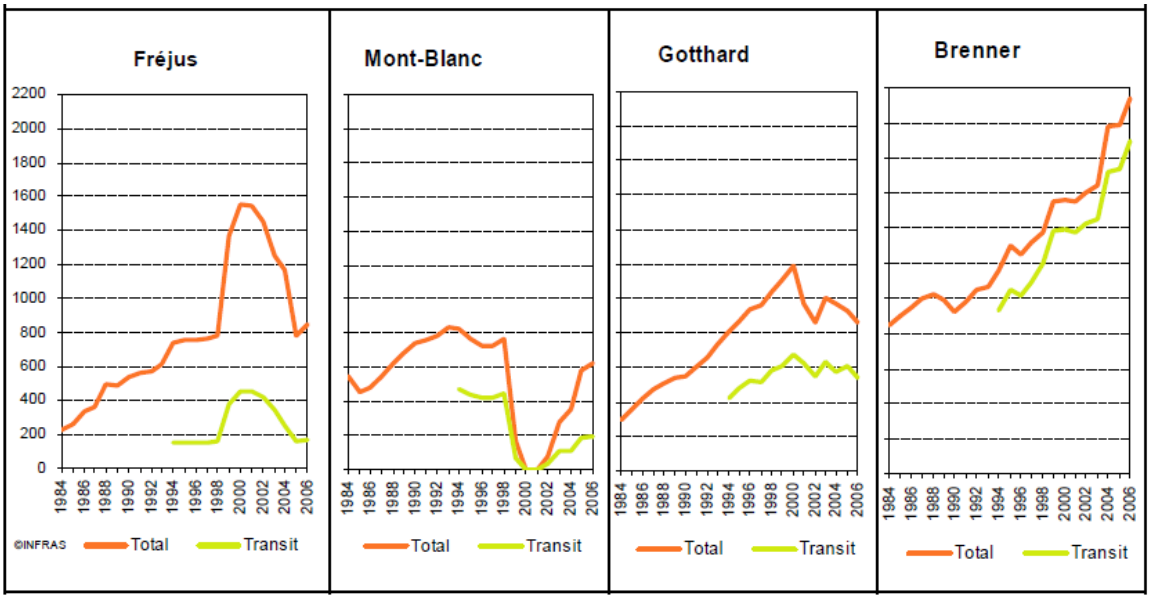


Figure 5. Lorry traffic increase (thousands of vehicles per year)

Traffic increase in the main alpine passes over more than 20 years is clearly shown in these charts with often a high share of transit traffic.

Source : Monitraf project, Region Rhône-Alpes et al. (2008)

2.3. Strengths and Weaknesses, Opportunities and Threats

A methodological constraint of a regional SWOT analysis is that there is no normative framework on the basis of which strengths (S) and weaknesses (W) can be identified, other than the development objectives and strategic orientation of the region itself. For example, low or medium quality mass accommodation capacities are not a strength or weakness in themselves. If a region wants to address the high price premium guest segment it is a weakness but if it wants to win young price sensitive customers it can be a strength.

Admittedly, the starting question of regional development strategies usually is often "what is special with this region compared to other areas?". Considering surrounding areas and more particularly those probably having better performances as the "norm" or "model" a kind of normative framework is therefore generated. For an area such as the Alpine Space, there are obvious risks with such an approach, as local differences in preconditions and in objectives for economic and social development make it unadvisable to operate such "transfers" between territories.

The used approach collected strength and weaknesses along the sustainability triangle: economy, society and ecology. Furthermore the cross-sectorial field of spatial planning and territorial development was evaluated. The following table shows the used evaluation grid:

evaluation grid: categories to identify strength and weaknesses		
economy	society	ecology
accessibility to markets	public services	local climate conditions
productive structures	health care / care for elderly	topography
labour market	higher education	natural heritage / biodiversity
research and development	cultural heritage	natural hazards potential
entrepreneurship		natural resources potential
revenue structure		

A SWOT analysis to regional types therefore is a technical tool oriented by judgments on the existence of strengths or weaknesses, based on an assessment of the objectives of the regions and the external and internal trends they need to relate to. For example, when considering the quality of tourism accommodation, the assessment can build on general trends in the tourism market concerning the accommodation preferences of guests. As we know from market research that customer demand increased continuously in the last decades in general and not only in the high class segment, the expert team can evaluate the strength or weakness of a region on the basis of the quality of the existing offers in relation to these trends. Similar types of methods have been applied when identifying strengths and weaknesses in the other selected fields.

Using this methodological approach to each of the five regional types a list of strategically important strengths and weaknesses was compiled (see Annex 2). Table 3 shows the general structure of the result matrixes by the economic categories applied to tourism areas.

Table 3. Compilation of strengths and weaknesses: example of tourism areas

SW tourism areas			strengths	weaknesses
economy	E1	accessibility to markets	mostly very good (information, booking, transports) good connections with lowlands and their population basin though infrastructure (rail, road, airports) and services	some punctual access difficulties in winter times because of weather conditions and valley structures
	E2	productive structure	international high competitiveness (quasi monopole in winter sports tourism) wide benefits spread from tourism implying diverse activities in services for tourists and maintenance for equipment's a capacity of the local economy to retract and expense	an economy relying heavily on revenue transfer from outside often a seasonal economy meaning the alternation of high and low season
	E3	labour market	a diverse labour market offering numerous job opportunities capacities to mix different activities to make an income all around the year good sectorial education systems	a labour market relying partly on seasonal workers from outside of the area a labour market relying on few highly qualified jobs
	E4	R & D / innovation	important induction of the tourism sector on R&S and technology but mostly located outside these areas	innovation is mostly technology driven rather than service driven
	E5	enterpre-neurship	good entrepreneurship in the field of tourism very good sectorial mix of SMEs and few large scale companies low investment is needed to start up	
	E6	revenue structure	a high level of transfers	revenues coming from outside on a seasonal basis strong level of direct or indirect subsidies
	additional remarks		*high cross sector potential (e.g. agriculture, forestry, handicraft, etc.)*	*risk level at financial market highest category (Basel II criteria)*
society	*S1*	*public services*	…	…

These strengths and weaknesses are the basis for the identification of opportunities (O) and threats (T) as an outcome of the impacts of external driving forces to the Alpine Space and its regions from different territorial types. The combinations that can occur when assessing the impact of the six driving forces on currently identified strengths and weaknesses (SW), in view of finding future opportunities or threats (OT) are described in Table 4.

Table 4. Combinations of Strengths and Weaknesses, Opportunities and Threats

No relevant impact	Many strengths and weaknesses are robust against some of the driving forces. E.g. a very good high education system will not be influenced directly by climate change. Neither an opportunity nor a threat in relation to this driving force can be detected.
S-O	A driving force supports an already existing strength for a further development. The driving force of knowledge and information society helps to bring an already existing very strong higher education system to further development and capitalization.
S-T	A driving force counteracts an existing strength. Climate change will create strong pressure to winter ski destinations in lower or medium altitude, even if these destinations have a very strong product today.
W-O	Coming from a weak position a driving force helps to turn the situation. The trend of an increasing demand for renewable energy creates to rural areas with high potential in agriculture, which at the moment is part of a weak position, new opportunities.
W-T	A driving force will potentiate an already existing weakness. In regions with already now unbalanced development of the population by low birth rate and emigration demographic change will boost this trend.

A systematic cross-analysis of all six driving forces and all identified SW (Annex 2) components of each regional type made it possible to generate a comprehensive picture of important opportunities and threats of each territorial type. Table 5 shows the general structure of the OT-result tables, which can be found as tables in Annex 3.

Table 5. General structure of the OT-result tables: example of alpine cities

Territorial type alpine cities		
raw list of opportunities		
climate change		
E4	R & D / innovation	need for climate protection / energy efficiency offers opportunities in technology and consulting/engineering
S1	public services	investments in low carbon services
S3	higher education	gaining leading position in R & D (see above)
energy		
E4	R & D / innovation	need for climate protection / energy efficiency offers opportunities in technology and consulting/engineering
S3	higher education	gaining leading position in R & D (see above)
global economy		
E2	productive structure	growing importance of regionalism in some sectors
E3	labour market	high attractiveness to highly qualified immigrants
E5	entrepreneurship	global acting companies as investors to enter European market
Ea	add remarks	opportunities of exports in global markets

Not all observed opportunities and threats are of the same strategic importance. To make use of some opportunities and to overcome certain threats can be of an existential dimension. E.g. to overcome out migration of young highly qualified people and by this the brain drain effect is a key issue of rural and tourism areas. Others as e.g. the stimulation of external investors as opportunity in some tourism areas are neither of this general dimension nor of identical importance to all tourism areas. Reflecting the questions of the long term impact level as well as the degree of general relevance to all regions of a territorial type a ranking of the OT list was produced within the expert group.

Table 6 lists those OT elements which were ranked at least on the level of a medium (3), high (2) or very high (1) strategic potential.

This overview should function as a starting point for discussions on the ways in which transnational cooperation and inter-regional activities connecting the different territorial types could contribute to capitalise on the opportunities or overcome the threats.

Table 6. Ranking of most relevant opportunities and threats in the Alpine Space by regional type

Driving force	DF NO		*opportunity (O) / threat (T)*	*M: metropolises, A: Alpine cities, S: stable rural, D: declining rural, T: tourism areas*	M	A	S	D	T
climate change	CC1	O	innovation to face climate change challenges (e.g. on water and energy supply) by existing private and public capacities		**1**				
	CC2	O	technology and consulting/engineering need for climate protection / energy efficiency			**1**			
	CC3	T	higher constraints of spatial capacities (-> higher prices for ground, higher potential for damages, need of mitigation)			2		2	3
	CC4	O	investment in low carbon services (improvement of services / quality of life / positive image)		2	2			3
	CC5	T	reduced income for intensive agriculture (e.g. higher cost water), limits for the intensive agricultural model with current crop plants				**1**	2	
	CC6	O	higher productivity, other more productive crop plants (especially northern Alps)				**1**	2	
	CC7	O	renewable energy resources inducted by climate protection measures as growing sector to support shift to low carbon technology				3	**1**	
	CC8	T	shortening season in low and mid height winter sport areas (-> ROI not anymore sure, very short working period for seasonal workers)						**1**
	CC9	T	securing water availability (especially in southern alpine area to industry, energy production)		**1**	2			
	CC10	T	higher mobilisation of scarcer water supplies for artificial snowing especially in southern Alps						2
energy	E1	O	innovation in field of low consumption models (technology and management), new energy production / distribution patterns		2				
	E2	O	more compact metropolis and shorter transport lines		2		3		
	E3	T	raising costs to commuters (side effect of strong pressure to settlement and housing in metropolis and cities)		3	2	3	3	
	E4	O	technology and consulting/engineering need for climate protection / energy efficiency			**1**			
	E5	O	economic growth by gaining leading position in R & D (also by cooperation's between public research and private sector)			**1**			
	E6	T	part-time availability of water resource for hydro production			3			
	E7	O	investing in decentralized energy production or energy autonomous regions (energy to region by region)				3		
	E8	T	hydro production faces a reduction of resource and a necessity to share it		2	2	**1**		
	E9	O	green energy: wind/ water power production / energy storage				3	**1**	
	E10	T	loss of biodiversity caused by monoculture biomass production / hydropower investments					2	
	E11	T	increasing costs to high energy consumption infrastructure (e.g. industry sector, snow making, ropeways)		3				**1**
	E12	O	making use of cross sectorial potential for local / regional economy (e.g. energy supply by farmers to tourism sector)						**1**
	E13	O	green / zero emission transport and energy supply (image factor attracting destinations to tourist)						2
global markets	GM1	O	making use of strong capacities of leading alpine universities and research centres to compete and build alliances		**1**				
	GM2	T	improving availability of capital risk out of alpine countries / reducing risk of loss of control of capital (and therefore knowledge)		**1**	2			
	GM3	O	further improvement of efficient spatial organisation (comparative advantage to investors compared to other world metropolis)		2				
	GM4	O	making use of growing importance of regionalism in some sectors by using regional cultural values (traditions / knowledge / resources)			2	2		2
	GM5	O	winning high qualified immigrants because of high attractiveness of Alpine Space		3	3			
	GM6	T	research fields (technology, medicine) with increasing need of financial resources get lost to metropolis / outer alpine R & D centres			2			
	GM7	O	using cultural heritage as basis for innovation for alpine unique products and services in global uniform markets			3	3	3	3
	GM8	O	benefiting from strong position of cities and metropolis by adapting productive structure / intensification cooperation with cities / metropolis				3		3
	GM9	O	active entrance and further growth in international source markets (high density of airports with intercontinental direct connections)						2
	GM10	O	knowledge and technology transfer to other mountain areas (together with market leaders mostly located in cities or stable rural)			3	3		2
	GM11	O	development of high education sector by on site study offers in alpine specific knowledge fields (e.g. tourism, wood construction, ...)			3			3
	GM12	T	pressure out of large scale projects financed by global investors						3
	GM13	T	SME cannot profit from economy of scale and loose leading position / market shares			3	2		

Driving force	DF NO		*opportunity (O) / threat (T)*	*M: metropolises, A: Alpine cities, S: stable rural, D: declining rural, T: tourism areas*	M	A	S	D	T
know-ledge & inno-vation	KI1	O	attracting the Alps and their metropolis to high profile professionals		3				
	KI2	O	making use of strong capacities of leading alpine universities and research centres to compete and build alliances		**1**				
	KI3	O	support of start-ups of high educated / provision of start-up centres / forcing PPP as option to transfer research results to economy		3	2			
	KI4	O	strengthening leading position in applied sciences linked to regional traditions, knowledge and resources / transfer to regions			2	2	3	2
	KI5	O	making active use of capacities to benefit from R&D results from cities and metropolis (stimulating cooperation's)				2		
	KI6	T	closing white areas on maps of high speed internet connections to open entire Alpine Space to information economy and society					2	3
	KI7	O	making use of local traditional knowledge for innovation / reducing reservation of locals against innovation in context of traditions				3	2	3
	KI8	O	profiting from knowledge and technology transfer to other mountain areas						2
	KI9	T	avoiding "innovation divide" to rural areas by supporting them out of metropolis and cities					3	2
	KI10	T	lack of innovation in tourism in the field of services (innovations mostly technology driven with need of high investments to SMEs)						2
demo-graphic chang	DC1	O	winning the fight for talents with global players - (metropolis -> cities) (metropolis and cities -> all other)		3	3			
	DC2	O	making use of the growing market potential of an ageing society (easy to use goods and services)		**1**	**1**	2		
	DC3	T	keeping the existing potential of SME by transmission to next generation (inside or outside family)			2	2	**1**	
	DC4	T	covering rising demand of public services to elderly / keeping services for children (decline of age groups)				2	**1**	
	DC5	O	activating the potential of young retired to civil society to cover rising demand of public services				2	**1**	
	DC6	T	covering the rising demand of care services: associated costs / support of relatives				3	2	
	DC7	T	safeguarding the transmission of farms to next generation (inside or outside families), capacity to keep landscape conservation				3	**1**	2
	DC8	T	keeping the transfer of immaterial cultural heritage to next generation alive / making cultural heritage as a locational factor visible				3	2	2
	DC9	T	improving the accessibility to growing demand by handicapped / low mobility people to stay competitive in market of elder tourist						2
	DC10	O	reducing the missing self-understanding of the capacity of intercultural and social diversity to attract rural areas				2	3	3
	DC11	O	making use of the potential of female by taking the gender dimension in account (supporting qualified / more leading positions)				2	2	2
	DC12	T	adaptation of tourism offers to a decreasing market potential for winter sports/ families in traditional source markets						2
	DC13	T	safeguarding high quality service labour despite of a dynamic decrease of endogenous labour potential in tourism						2
	DC14	O	making active use of the image / picture / brad "Alps" to win younger people and families to alpine regions			2	2	3	3
	DC15	O	reducing seasonality of tourism sector by offering new services in heath / cure and care						3
	DC16	T	systematic proactive management of population growth to create better starting positions to younger / reducing social unbalances		2	**1**			3
	DC17	T	high pressure by second home / retirement residents in real estate market / extrusion of younger locals						3
trans-port	TR1	O	making use of capacities to innovate in the field of transports (technology, management, new private services)		2	3			
	TR2	O	advancing the high level of public transports and infrastructures reinforcing the global attractively		3	3			
	TR3	O	using potential of compact settlement areas forced by a reoriented spatial planning		2	2			
	TR4	T	avoiding an additional gap cities/metropolis to rural areas created by new high speed train projects				3	3	2
	TR5	T	keeping high quality networks despite of increasing costs connecting rural areas in periphery as well as on site mobility (tourism)			2	3	3	2
	TR6	O	making use of increasing potential of car limited but railway connected centres of cities and metropolis		2	2			
	TR7	T	avoiding loss of attractiveness of living location because of increasing transport costs (-> rising costs of transports for commuters)				3		3
	TR8	O	attracting transport services (public and private) by green economy / carbon neutral offers to increase local and regional acceptance		3	3	2	2	2
	TR9	T	keeping competitiveness of tourism and leisure offers in face of higher transport costs (risk to short trip / periphery destinations)						2
	TR10	T	keeping economic basis for high investments and running costs to provide competitive services of ropeways						2

2.4. Strategy relevant issues identified by the SWOT analysis

The resulting matrix with 72 opportunities and threats has to be consolidated to a list of strategically relevant issues.

The consolidation was done within four steps:

1) horizontal analysis: identification of Opportunities and Threats (OTs) which are mainly relevant to one regional type (same level -> horizontal link between regions and therefore a high potential for cooperation on this level) but with a very high (1) or high strategic potential (2).
(Example: CC1[8] innovation to face climate change challenges (e.g. on water and energy supply) by existing private and public capacities and CC9 securing water availability (especially in southern alpine area to industry, energy production have mainly strategic importance to metropolises and no to rural and tourism regions.)

2) vertical analysis: identification of OTs which are highly relevant to at least three of the five territorial types (vertical: types of different territorial level – therefore high cooperation potential among different levels).
(Example: GM6 using cultural heritage as basis for innovation for alpine unique products and services in global uniform markets, KL4 strengthening leading position in applied sciences linked to regional traditions, knowledge and resources / transfer to regions and DC8 keeping the transfer of immaterial cultural heritage to next generation alive / making cultural heritage as a locational factor visible have all three a strategic importance to at least four territorial types whereby always all rural / tourism types are included)

3) content analysis crosscheck: identification of OTs which belong to the same or very nearby topic and have a at least strong impact to at least two territorial types
(Example: a keyword search looking for the content aspect of green / low carbon energy and services delivers the OT elements CC4 green energy: wind/ water power production / energy storage, CC7 renewable energy resources inducted by climate protection measures as growing sector to support shift to low carbon technology, E9 green energy: wind/ water power production / energy storage, TR8 attracting transport services (public and private) by green economy / carbon neutral offers to increase local and regional acceptance which all are linked to at least 2 territorial types)

4) merging and interpretation: identification of the issues linked to the OTs
On the basis of these three steps first a final grouping of the opportunities and threats was done. By this groups with
   a. territorial linkages (horizontal / vertical) (see examples given to step one and two)
   b. content linkages (see example of content analysis crosscheck, step 3)

were generated. In some cases a rearrangement was needed.
(Example: looking to the results of the content analysis energy related issues in step 3, it is obvious that there are two very different aspects behind. First the aspect of energy production and second the use of energy and services related to energy supply. The issues and also the actors behind are clearly different. On this based, green energy production and green economy and services were separated in the raw list.)

[8] The codes refer to the second column of Table 6 p. 63.

The expert group finally considered important current or upcoming issues when identifying the groups of OTs with high cooperation potential. As result each OT group was linked to issues. For explanation the result of the first example shall be taken. First the discussion showed that not only in the field of water the question of efficiency is crucial but also in the energy sector. Furthermore it got visible that the involved actors, which might cooperate are from the same levels and coming from the same territorial types. By this a field of action got visible dealing with low consumption and innovation in both fields, water and energy. To this field of action now the already existing or upcoming issues were linked and a justification was given. The following result emerged:

Field of action: low consumption models and innovation in the energy and water sector

Related issues: Changing energy supply framework conditions (prices, demand, networks), political drive in favour of reduced footprint, seasonal drought in some areas

Justification: why cooperation in the Alpine Space is relevant / needed? High number of energy production sites and trans-national grids to consumers, increasing energy prices, trans-national relations concerning water supply and water consumption, competition of water between regions and between sectors (industry, agriculture, energy, households)

As a next step, the strategy relevance was rated evaluating the cooperation potential on three levels. The lowest level (L1) is the exchange of information and knowledge by setting up or improving networks. The next level (L2) is more active by developing joint tools, instruments or performing joint in deep analysis or working on plans. The highest level (L3) is linked to concrete joint and comprehensive implementation. This can be concrete co-operate actions but also a politically adopted long term strategy linked to a step by step mandatory implementation plan of a strategic issue. The ranking was done on a qualitative basis. In case cooperation mainly takes place on L1 a key issue was ranked to be strategically of low importance (L). Having cooperation of type L1 and L2 the ranking was medium (M), having high potential on the levels L2 and L3 the ranking was set to high (H).

By this method 20 fields of action could be found which are listed together with related issues, justification and a qualitative rating of transnational cooperation level in Table 7.

Table 7. Strategic fields of action identified on the basis of a consolidation of SWOT

Legend for characterisation:
Relevance: H = high, M = medium, L = low
Cooperation level: L1: Information exchange, L2: joint development of tools, L3: joint implementation of actions and structures

Fields of action *related issues (italic)*	Co-op. Rele-vance	Justification (why is transalpine cooperation relevant?)	Coop Level L1	L2	L3	Examples of trans-alpine cooperation options on different levels L1 – L3
1 spatial organization, transport and mobility management *bottlenecks in transportation systems, pressure for cost-efficiency in public transportation, urban sprawl, competition between forms of landuse: leisure, housing, agriculture, protected areas…*	M	• Bottlenecks influence transalpine transport strongly • Transport networks are transalpine • Public transport has more a regional than a transalpine focus • Land-use has similar alpine related patterns but instruments to manage are not transalpine	X	X	X	L1: exchange about innovative planning and dialogue approaches, development of new management systems and experiences with them L2: joint development of demand forecast and spatial impact analysis tools L3: long term sustainable transalpine and inner-alpine transport strategy as contribution to future EU and national transport policies
2 development models for stable or declining territories *mismatch between local ambitions and European/national development models, brain drain to cities and metropolises*	M	• mismatching can be found all over the Alpine Space but is not an alpine typical issue • same with brain drain • preconditions for development models are often comparable and linked with alpine typical situations	X	X	-	L1: exchange about innovative regional development plans and their implementation considering demographic change and local economic potential L2: development of a set of modular master plans and implementation action plans L3: -
3 accessibility: digital gap and physical access *Sparse and remote areas do not get access to high speed internet without public intervention, high speed physical transport creates new peripheries, increasing pressures for cost-efficiency in public transport provision*	L	• Alpine topography causes additional constraints in the mountain areas • Disparities in field of public financing of the alpine regions cause strong differences of intervention potential • Technical solutions are not alpine specific	X	-	-	L1: collecting and disseminating examples of good practice, capacity building activities for decision makers of gap affected regions L2: - L3: -

4	low consumption models and innovation in the energy and water sector *Changing energy supply framework conditions (prices, …), political drive in favour of reduced footprint, seasonal drought in some areas*	H	• High number of energy production sites and trans-national grids to consumers • Increasing energy prices • Trans-national relations concerning water supply and water consumption • Competition of water between regions and between sectors (industry, agriculture, energy, households)	X	X	X	L1: knowledge exchange on successful low consumption models and innovation, on regional footprint and on managing regional drought (ASP, MRS) L2: develop jointly low consumption models, regional footprint systems and ways to manage regional drought, harmonise existing approaches(ASP, MRS) L3: trans-alpine implementation of new consumption models, footprint systems, and drought management is not business of ASP or MRS but of national states and EU
5	renewable energy production considering land-use interests *Combined effect of public policies and increasing prices of fossil energy, conflict with other land use interests, including preservation of biodiversity*	H	• Demand for renewable energy will increase all over Europe and the alpine area • High energy consumption economies have a high interest to keep energy prices stable • Green energy is an positive image factor to entire alpine tourism • Land-use problems are transalpine comparable	X	X	X	L1: exchange about on-going improvement of technologies and experiences with land-use conform production L2: development of a toolbox for setting up local / regional production and distribution considering land-use conflicts L3: elaboration and implementation of a transalpine long term energy strategy including local and regional production and long distance transport networks to regions with high demand.
6	competition for water: defining and safeguarding general interest *Potential conflicts between regions and sectors of activity concerning water (incl. economic returns of supply), debates concerning the economic frameworks of water supply (private/public), imbalance between financial resources of private investors and public suppliers*	H	• competition is running in all alpine areas with high water resource potential • potential conflicts private/public have real transnational background • continental and global acting supply trust have the Alps identified as strategic object of investments	X	X	X	L1: exchange about different local and regional strategies and experiences with public-private partnerships L2: elaboration of master contracts / rules for cooperation models of different levels and legal frameworks L3: transalpine strategy and implementation plan “securing and capitalizing the water tower Alps”

7	"areal" economic sectors: forestry and agriculture *paradigm shifts in agricultural production / forestry: intensive / extensive, paradigm shifts in agricultural production / forestry: other crops (e.g. other foodstuffs, biomass, etc.), territorial effects of this shift, landscape economy, need to improve resilience in the face of increasing price of inputs (energy, water, fertilizers…)*	M	• increasing income options and adaptation needs by climate change are given transalpine • funding framework conditions in agriculture and forestry are transalpine comparable (but for CH) • problems and solutions in southern Alps are different to northern and central Alps	X	X	-	L1: knowledge and experience exchange about implementing new paradigms regarding the future European agriculture and forestry policy L2: development of an analysis tool applicable by farmers and forest owners showing options and scenarios to handle adaptation efficient L3: -
8	framework conditions and support of start-ups and entrepreneurship *related issues:* *lack of risk capital / "business angels", limited culture of entrepreneurship, limited acceptance of innovative economic initiatives, need to stop brain-drain to cities and metropolises*	M	• SME are all over the Alps an important basis for employment and economic success • Startup conditions in alpine rural areas are mostly everywhere weak • No tradition and institutions to gain risk capital for fast growing or financially intensive companies • Young people have only weak incentives to return to homeland to start a business	X	X	X	L1: Exchange of information and experiences about existing start-up support activities / improvement of entrepreneurship culture L2: Handbook / guidelines "how to implement and manage start-up centres" L3: Setting up a "Transalpine risk capital bank" to collect money at the capital market to support alpine specific start-ups and innovations as well as SME entrepreneurship
9	R & D cooperation and clusters of universities and/or private research institutions *lack of capacity for R&D in SMEs, limited capitalisation of applied research results in the private sector, emerging fields, some of which of particular Alpine relevance [energy efficiency, sustainable housing…)*	H	• R & D cooperation are based on thematic focus – there exist many R & D questions with a transalpine background (see e.g. energy, water, innovation in tourism) • Limited resources of SME for R & D are a general problem • Universities and applied research institutions mostly are used to work international and transnational	X	X	X	L1: Setting up thematic (also interdisciplinary) transalpine R & D networks (public and private partners) L2: Installing a R & D "how to set up successful partnerships" tool (including yearly held partnership fairs) L3: defining an alpine R & D strategy to strengthen alpine specific applied research activities and cooperation between research institutions and SME within the EU R & D competition

10 innovation towards sustainable tourism *limited resilience of the tourism facing increasing prices of energy, water, need to adapt tourism sector to changing climate (diversification/reconversion), lack of a tradition for innovation in the tourism sector, possible shift from tourism to residential economy*	M	• adaptation needs exist all over the Alpine Space • missing tradition of cooperation as regions have the understanding to be in general direct and the only competitors • High demand / easy success in past and SME structure of tourism entrepreneurs lead to low innovation rate in the sector • Sensitivity of consumers towards sustainable and reliable products still increasing	X	X	X	L1: Creating a common understanding of "what is sustainable tourism" by merging existing knowledge and bringing existing initiatives and suppliers into a dialogue L2: Development of a quick sustainability assessment tool linked to transalpine efficient adaptation measures L3: Joint strategy "transforming the Alps to the world leading sustainable tourism destination" including all aspects of environmental and social impacts of a economically profitable tourism sector
11 making use of immaterial and material heritage as a potential resource *on-going "glocalization" creates new opportunities to products and services with authentic background* *increase of risk of loss of cultural heritage if not used to create local and regional benefit*	H	• traditional existence of rich comparable alpine aspects of cultural heritage all over the Alps • lack of understanding of cultural heritage as a starting point for innovation can be found all over the Alps • value and potential of immaterial cultural heritage as regional source often underestimated	X	X	X	L1: setting up thematic clusters to exchange know how out of immaterial cultural heritage and transfer to innovative applications L2: based on national UNESCO heritage inventory creation of a Transalpine Alpine Space cultural heritage inventory connected with examples of successful transition into modern life L3: development and implementation of a transalpine cultural heritage strategy: "conservation by using our alpine cultural background"
12 regional economic cycles and networks *unexploited potentials to generate additional added value based on local resources, local know-how getting lost as an effect of international competition*	L	• No alpine specific approach • Because of strong regional (and cultural) identification of local population in valleys high potential for realization • Especially in field of using renewable resources alpine specific opportunities • Transalpine benefit potential low	X	X	-	L1: Exchange of know how and experiences from successful regions with comparable backgrounds / structures L2: Collecting, structuring and documenting examples of good practice "how to set up regional cycles" in a handbook L3: -

13 Keeping and developing social services securing quality of life *increasingly homogenous and "urban-influenced" norms of quality of life, ageing of rural communities, combined effect of out-migration of young people and reduced fertility, increased demands for cost-efficiency in public service provision*	M	• different patterns of effects of demographic change in the Alpine Space • comparable regional situations and scenarios all over the Alpine Space with same pattern • different financial background to keep services in alpine regions	X	X	-	L1: creation of new and strengthening of existing transalpine networks of local authorities working in the field of adapting their social services to future needs and changed population structure L2: development of a generalized action plan to attract rural areas to young families especially with high qualified parents (turning the brain drain) L3: -
14 innovation and adaptation of infrastructure and services in an aging society *Increasing demand for services and products for elderly people, pressures on budgetary balance for bodies providing public services for elderly people, new roles for the "young retired" (support to society/economy), lack of barrier-free infrastructures*	H	• same adaptation needs everywhere • out of alpine typical aspects (topography, spatial structure, climate) high potential for development of common solutions • Tourism areas all under pressure to adapt products to future older guests • Lack of barrier-free and low barrier infrastructure / service to overcome barriers can also be found everywhere in the Alps	X	X	X	L1: Exchange of know how in the field of adapting public buildings towards low barrier level L2: Developing and distributing a handbook "innovation management considering elderly consumers and citizens" L3: Developing, testing, introducing a transalpine low barrier label including the installation of a central organization "Alps are no barrier"
15 regional intergenerational human resource management *lack of available labour force in some branches and communities, mismatch between offer and demand in terms of capacities, need for improvement of support of young families, growing youth unemployment, missing culture to reactivate and integrate elderly as experienced labour force*	M	• need of safeguarding and developing human resources in rural areas all over the Alpine Space • Approaches and solutions are mainly of regional and local character • Capacity building to complex EU and alpine related topics is a general task	X	X	X	L1: Transalpine exchange between and connection of pilot actions / programmes running in alpine regions L2: Action oriented check-list to improve regional intergenerational HR-management (-> capacity building) L3: Installing a network of training centres (e.g. together with regional universities of applied sciences / chambers of commerce / hotel owner associations) offering a transalpine human resource management training programme.

16 alternative lifestyles and modes of economic functioning *increasing role of informal activities and voluntary work, pressure to public finances by growing demand for public services*	L	• Living in isolated alpine communities implies more limited access to public and private services • Economic sustainability in these communities can, to a larger extent than in "mainstream territories" be based on multi-activity and informal exchanges • As such, these small and isolated alpine communities can embody an alternative model of society, that neither fits with the general rationale economic development nor with prevailing models of society	X	X	-	L1: Identifying isolated alpine communities: where are they, how many people live there, how do they function? L2: Producing general guidelines on how the specific needs to small alpine communities can be met; identifying the relative importance of informal work; L3: -
17 governance: think "glocal" / act local *mismatch between local ambitions and European/national development model, role of NGOs, civil society…, capacity of local/regional actors to interact with other players (EU, global economic players…), unclear division of responsibilities, especially for structural changes (challenge of institutional adaptation, changing inadequate instruments)*	M	• mismatch is a general issue all over the Alpine Space, but not alpine specific • policy understanding in alpine rural areas because of traditions very different from cities and higher level, therefore alpine culture part of political decision processes • very high diversity of political structures open a broad variety of current governance and discussions about future models as test basis to improve systems	X	X	X	L1: know-how exchange about governance approaches and L2: elaboration of a guideline "participatory Alpine Space governance" showing and explaining typical elements of alpine governance systems L3: development and installation a exchange programme improving the mutual exchange of public administration members from all administrative levels to get an improved understanding of local, regional and higher level governance in other alpine regions
18 management of ecological pressures in growing territories *increasing impacts of noise, air pollution… affecting health, limited available land as a constraint for growth and protection against hazards, sealing of surfaces limiting water absorption capacity etc.*	M	• problems caused by alpine specific spatial and territorial structures often comparable • conflict fields of interest comparable • specific solutions have local or regional character as linked to very specific problem patterns in each territory	X	X	-	L1: exchange of know-how and information about national action plans to reduce or stop land-use L2: merging all existing management plans on transnational level (so far not yet done) L3: -

19 sustaining landscape conservation regarding the future EU agriculture policy *on-going loss of biodiversity, opportunities and threats out of growing demand for renewable energy and natural resources (esp. water), next generation problem of farms increases already today*	M	• The connection of habitat systems is a transalpine task – not only cross-boarder • Opportunities and threats from new demand structures but also from future EU agriculture policy (except CH and LI) are all over the Alps quite comparable • Demographic change as driver causing the next generation problem has similar impacts on a transalpine level	X	X	X	L1: Information and know-how exchange "how to attract farming to next generation" L2: Giving guidelines for making better use of additional income options to mountain farmers L3: Elaboration and political achievement of a specific Transalpine Agriculture policy under the framework of EU agriculture policy with higher weight of landscape conservation with instruments
20 keeping alpine biodiversity by stopping habitat loss and fragmentation *on-going loss of biodiversity by loss and fragmentation of habitats, need for creation of a functioning ecological transalpine cooperation, low acceptance of predators as wolf, bear or lammergeier (bearded vulture)*	H	• network of habitats must be spread all over the Alps • need of enlargement and mixture of genetic pool of endangered species • migration of species does not end at boarders • conflict fields of interest especially agriculture, forestry and hunting comparable	X	X		L1: Transalpine exchange between and connection of pilot actions / programmes running in alpine regions L2: Laying the ground for adapted transnational and cross-border instruments focusing on the preservation of ecological connectivity in the Alps L3: Installing a functioning transalpine network by closing the existing gaps and securing existing habitats against fragmentation

2.5. Conclusions: Strategic implications of the SWOT

It is quite obvious from the SWOT that alpine rural areas have limited options, and that many of tourism areas will need to adapt to changing framework conditions, while peri-alpine metropolitan areas possess major assets that could help addressing these challenges. By way of consequence, it is a priority to improve the vertical connection of metropolises down to the rural and tourism areas through adapted forms of cooperation. This cooperation can take many forms and concerns a wide range of strategic fields of action, e.g. by capitalizing on R&D activities of metropolises and cities to develop new low carbon energy supply or to establish systems for stable water supply. A range of opportunities to overcome identified energy and water supply related threats can be identified. It is also notable that these opportunities could benefit the different types of territories if they are handled appropriately. Such win-win situations can form the basis for strategic alliances strengthening cohesion between territorial actors of the Alpine Space.

Better vertical cooperation when setting up on trans-alpine concrete actions and when implementing commonly developed measures therefore contributes to ***Fostering resilience in the Alpine Space***. "Resilience" is a notion that has gained increasing currency in European policy debates over recent years. It can be defined as the "capacity to absorb shocks while maintaining function" (Folke et al., 2002), to reorganise as a response to change and to regenerate when needed. Many of the 20 fields of action contribute to improve resilience[9]: the concept of resilience refers to ecological challenges like the management of ecological pressures (18), sustainable landscape development (19) and the maintaining of alpine biodiversity by stopping habitat loss and fragmentation (20). Resilience is also directly linked to accessibility (3) and low consumption models regarding alpine resources (4). Within each of these actions fields, making use of opportunities and facing threats contributes to build a more resilient Alpine Space. The series of alpine specific vulnerabilities that have been identified in the SWOT analysis justify a focus on resilience in the Alpine context. These vulnerabilities include natural hazards, climate change, alpine ecosystems and accessibility constraints, but also external dependencies on e.g. touristic demand and demand for specific natural resources.

In addition, a series of powerful external driving forces have been identified as having a direct impact on the Alps. For example the dependency of the Alpine Space on external demand for alpine natural resources and tourism products implies that its economic sustainability can only be envisaged within the framework of specific hypotheses for European and global market dynamics. When focusing on "resilience" one therefore acknowledges that many factors of alpine vulnerability are permanent and unavoidable.

There are also economic and social dimensions to resilience. The support of start-ups and entrepreneurship (8), R&D cooperation (9), sustainable tourism (11) and the strengthening of regional economic cycles and networks (12) are all factors that contribute to the creation of a more resilient alpine economy. However, these effects can be voided if social aspects such as maintaining and developing of social services (13), regional human resource management (15) and the strengthening of regional governance capacities (17) are not taken into account.

[9] Numbers correspond to numbering of field of actions in Table 7

On-going processes that are part of the driving forces “climate change”, “energy availability” and “global economy“ and the continuous growth of traffic flows create increasing incentives to ***turn to a green economy***. Greening the economy would also contribute to improve the perspectives of continued high economic performances in the alpine space in a context of uncertainty with regards to environmental and natural resource related framework conditions. This objective is supported by the OECD (2011) and as part of the United Nations Rio+20 process. In addition, many opportunities and threats are connected to the profound transformation of modes of production, distribution and consumption this presupposes. This especially concerns the following fields of action: spatial organization and mobility management (1), low consumption (4), renewable energy (5), paradigm-shifts in agriculture and forestry (7), sustainable tourism (10), alternative lifestyles (16) and management of ecological pressure (18)

A green economy is not only a vision for the Alpine Space. Because of the Alps’ numerous and abundant natural resources, combined with a traditionally ecologically minded population and well-established traditions of finding innovative solutions for sustainable resource exploitation, many leading actors in the field of green economy are to be found in the Alps. Turning to a green economy can furthermore be a promising solution to reverse the downward spiral of economic and demographic decline in many rural areas, as the economic returns from resource exploitation and ecosystem services can increase. The Alpine Space could become a model region for the turn to a green economy.

Solidarity and close social ties are traditionally a hallmark of alpine communities and regions. Living in or near the mountains is associated with constraining framework conditions for economic activities, exposure to sometimes extreme natural conditions and hazards and resource sparsity. This has created the basis for civil societies with a very stable value system. This strength of alpine communities can also in some respects be a challenge, as societies become more multifaceted, with a greater diversity of lifestyles and cultural identities. This tension between alpine traditions and social change, from which major opportunities can be drawn if it is handled well, is reflected in a series of fields of action of the SWOT: The rich immaterial and material heritage of the Alpine Space is an important resource for the future, which is still only partly valorised (11) regional economic cycles and networks can be strengthened (12), the supply of social services can be better adapted to local expectation, and improve quality of life in a more efficient way (13), intergenerational solidarity can be improved (14), and human resources of different groups can be better mobilised (15), governance arrangement can be customised to fit local conditions (17) and the added value of landscape conservation can be better identified (19). All these factors improve the capacity of Alpine regions and communities to face challenges resulting from driving forces such as global market dynamics and demographic change. ***Building on cultural diversity and social solidarity*** is an instrument to enable and encourage traditionally inward-looking alpine local communities and regions to join forces and establish the strategic alliances that will be needed to address the effects of these driving forces.

This traditional lack of interactions between alpine regions and local communities makes it an all the more important for policies at the level of the Alpine Space to focus on cultural diversity and social solidarity. Based on the fields of action listed above, one can identify a potential to build on cultural

heritage and social solidarity in the Alpine Space. Finding out how one can make better use of alpine values and inherited cultures, while adapting to social change and to the evolving aspirations of alpine populations, is an important strategic objective for the Alpine Space associated with major development potentials.

The synthesis of the evidence-base compiled (driving forces and SWOT) therefore leads to three proposals for strategic objectives for the Alpine Space:

- Turning to a green economy;
- Building on cultural diversity and social solidarity;
- Fostering resilience in the Alpine Space.

Other strategic objective may of course also be envisaged. The selection of these three ones is based on an understanding of the purpose of the Alpine Space Programme and its positioning in relation to other levels of decision-making. The underlying rationale for this selection is further developed in chapter 3.

Primarily resilience is a reaction to powerful external driving forces, which cannot be influenced by single regions and which require adaptation strategies. Proposals how to adapt are already given at the end of chapter 2, where the contribution of several fields of action to fostering alpine resilience is described. With reference to existing programmes, resilience is a new approach (see also chapter 3.1.1). It is to put up for discussion if resilience as strategic objective would be an inspiring and fruitful element of future alpine strategies.

3. Strategic orientations

The conclusion of chapter 2 led us to outline three proposals for strategic objectives for the Alpine Space. The purpose of these three strategic objectives is to specify long-term strategic orientations for the Alpine Space. As such, they constitute a framework for the elaboration of strategic objectives for the forthcoming Alpine Space Programme, but should not necessarily be equated with these objectives.

This chapter presents a proposal for a future strategy for the Alpine Space, which can serve as a basis for the next Alpine Space Programme as well as inputs to debates on a possible future alpine macro-regional strategy Macro-regional Strategy.

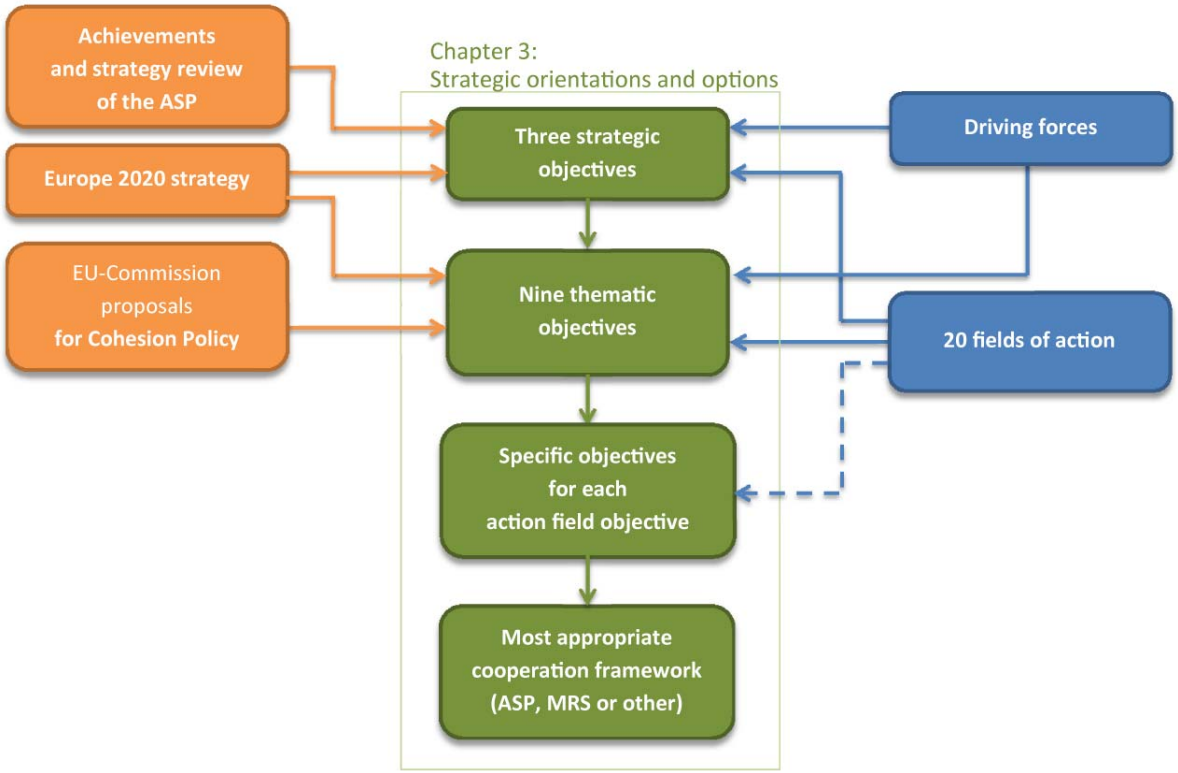
The "strategy architecture" is similar to other trans-national or national strategies (such as the Baltic Sea and Danube region macro-regional strategies and on-going INTERREG programmes, e.g. South East Europe). It has 3 levels:

- The level of **strategic objectives**, which have already been outlined in the conclusion of chapter 2 and which give a superordinate orientation to the future development of the Alpine Space;
- The level of **thematic objectives** addressing thematic and sectoral issues and opening the door to discussions with alpine stakeholders belonging to specific thematic and sectoral fields;
- The level of **specific objectives**, which describe more in detail each of the thematic objectives. and describe what could be achieved. The specific objectives must not contravene the strategic objectives.

Key actors and sectors are then identified. Key actors and sectors are those, who should be involved in order to achieve the thematic objectives and the specific objectives in a trans-alpine approach. "Implementation partnerships" similar to those in the Danube MRS could be considered.

Finally, **Actions** are interventions to meet the specific objectives. Actions can range from changing the knowledge base over implementing new procedures to projects with a clear defined start and end. In this report, the proposal of actions is not included, but examples for trans-national cooperative activities are provided.

Figure 6. Framework for the development of an Alpine Space Strategy



3.1. The selection of strategic objectives

The Alpine Space is approached as a component of wider European and global processes. The strategic objectives have therefore been selected to strengthen the Alpine Space in the face of identified driving forces (see p. 37), addressing the threats and opportunities pertaining to each of them as they have been identified on the basis of the SWOT analysis (see Table 6 p. 63). This implies that they are informed by evidence compiled in chapter 2. However, even if the strategic objectives are disconnected from the political and regulatory contingences of the Alpine Space Programme, they necessarily also incorporate an understanding of the purpose of the Alpine Apace and its positioning in relation to other levels of decision-making. As described in chapter 1, the relevance of the alpine level of policy design and implementation has progressively been recognised, as a result of parallel initiatives spanning over multiple decades. The importance of the environmental dimension in these initiatives needs to be highlighted. However, in its current setup, as an area incorporating the alpine core area and surrounding regions, the Alpine Apace is a European construct whose justification derives from its capacity to contribute to the implementation of Community objectives. The strategic objectives of the Alpine Space will therefore necessarily be at the crossroads of preoccupations that have triggered pan-alpine cooperation and policy agendas of the European Community.

The normative framework for alpine strategic objectives can therefore be decomposed in two major elements. On the one hand, the Alpine Space needs to define and implement a model of sustainable

development that is adapted to alpine ecological, social and economic framework conditions. The triangle of sustainable development, with its three dimensions (economy, ecology and society), offers a methodological framework to translate this goal into concrete objectives. On the other hand, the Alpine Space Programme is an instrument for the achievement of the core objective of the European project of transnational cooperation and integration in the context of a "highly competitive social market economy", as defined in the Treaty. Non-EU member states such as Switzerland and Liechtenstein are associated to this European project.

As described in chapter 1, this normative agenda is currently specified by the Europe 2020 strategy. This strategy sets out the targets and objectives of smart, sustainable and inclusive growth, which constitute a general framework for future trans-national programmes for the Alpine Space. The main topics of the Europe 2020 strategy are a greener and more competitive economy based on knowledge and innovation, resource efficiency and high employment delivering social and territorial cohesion.

Chapter 2 concluded the analysis of driving forces and fields of action by proposing three strategic objectives for the Alpine Space. These objectives were therefore derived from the observation of alpine opportunities and threats. Other strategic objectives could obviously have been chosen. This three were selected because of they correspond to aspirations expressed by stakeholders engaged in alpine cooperation initiatives, while at the same time reflecting the Europe 2020 priorities or at least engaging into a dialogue on the relevance of these priorities for the Alpine Space. Therefore, their selection is informed by the evidence compiled in chapter 2, but not "evidence-based" insofar as they do not result from this evidence only but have been chosen on the basis of a wider range of considerations.

Although the concept of resilience is not explicitly mentioned in the Europe 2020 strategy, the strategic objective of ***Fostering resilience in the Alpine Space*** is linked to the Europe 2020 priority of "smart growth", insofar as a highly educated population and well-developed research and innovation capacity are considered as key factors of resilience. It is also linked to the priority "sustainable growth", but takes the focus away from factors of unsustainability that result from the interplay between actors at other, wider scales. Compared to "sustainability", resilience is more directly applicable to the Alpine Space, its regions and localities.

"Capitalising on Europe's leadership in developing new green technologies and production methods" is one of the headings used by the European Commission when specifying the meaning of the "sustainable growth" priority in the Europe 2020 strategy. The strategic objective of **Turning to a green economy** in the Alpine Space is therefore well in line with European strategic orientations.

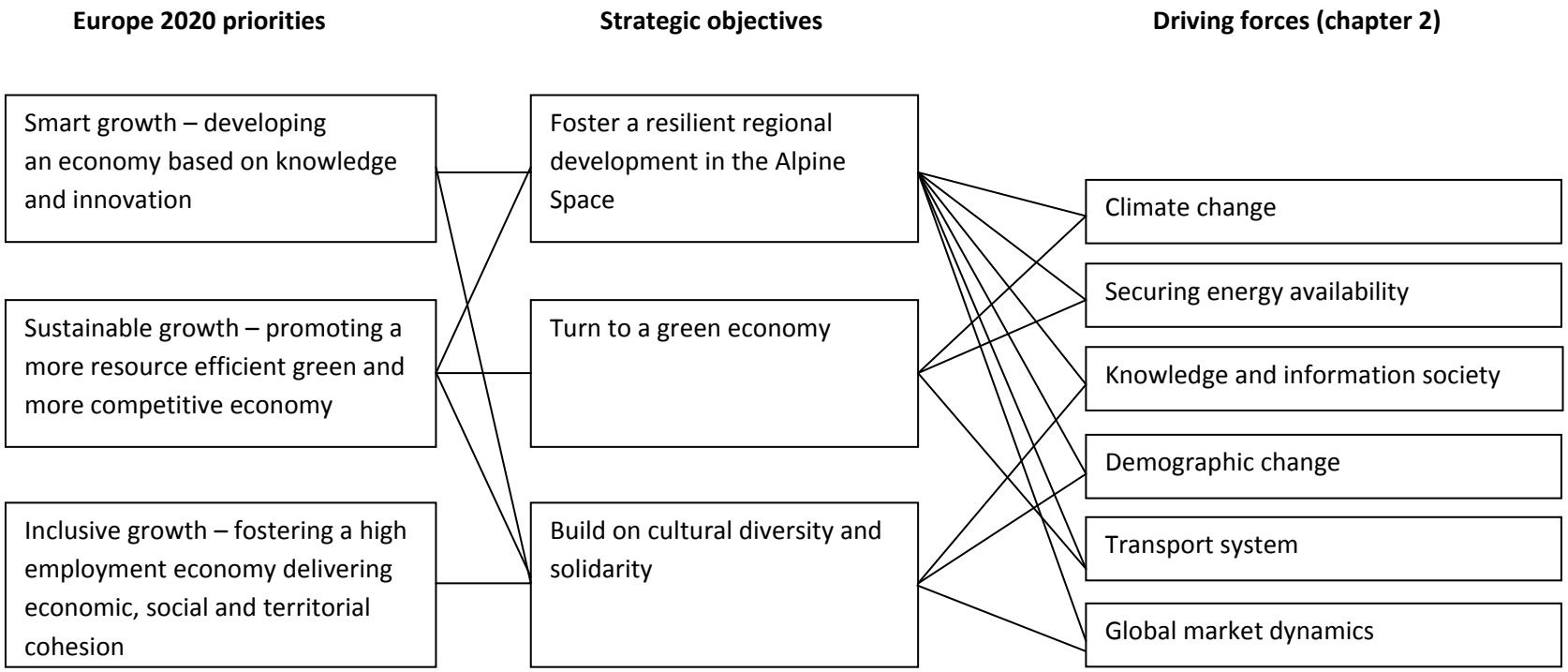
The Europe 2020 priorities of "inclusive growth" and "smart growth" emphasize the importance of education, investment in skills and a more balanced distribution of the benefits of growth. Similar ambitions are pursued when proposing "**Building on cultural diversity and social solidarity"** as a strategic objective. However, the reference to the cultural dimension, which is absent in the Europe 2020 strategy, implies that a different perspective is advocated on how transnational cooperation could best contribute to achieve these ambitions. The underlying idea is that there are alpine-specific challenges linked to the extent of differences in institutional and decision-making capacity between different territorial types and to the increasing polarisation between prosperous and declining areas accentuate.

Therefore, the three strategic objectives correspond to an adaptation of Europe 2020 priorities to the Alpine Space:

- They highlight the aspects of the Europe 2020 strategy that are most relevant for the Alpine Space;
- They propose headlines that are better suited to mobilise alpine actors;
- They contribute to bridge the gap between the project and programme level within the Alpine Space Programme identified in section 1.2. These objectives are designed to allow for more stringent assessments of whether each project application has elaborated logical links to them.

The following sections describe the implications of these three strategic objectives in further detail, while Figure 7 below shows how each of them are linked to the Europe 2020 priorities and the relevant driving forces for the future development of the Alpine Space identified in chapter 2.

Figure 7. Strategic objectives embedded in EU 2020 priorities and relevant driving forces for the development of the Alpine Space



Foster a resilient development

The introduction of resilience in the debate on regional development is quite new. Originally the basic concept has been developed in ecological sciences, but got soon adopted by economics, social sciences, organisational and management sciences, pedagogics and medicine. The introduction in the context of regional development has been pushed by the scientific network "Building Resilient Regions", coordinated by the Institute for Urban and Regional Development of the University of Berkeley[10].

The concept of resilience is based on an understanding of regions as "systems within systems": regions in a globalised world are affected substantially by decisions (politics), patterns (market) and behaviour (households and individual persons), which they can influence only to a certain extent. Climate change, international treaties, energy costs, international migration flows or financial crisis affect regions seriously and require adaptation strategies because of missing instruments for effective mitigation.

Against this background regional resilience means the capacity of a region to absorb endogenous or exogenous disturbances in a way that the structures, functions and relationships that are essential for its prosperity and sustainability remain intact (LUKESCH et al 2010).

Throughout history the Alpine Space has been a place of high vulnerability. Natural threats as well as economic risks have formed the identity and the self-evidence of people living and working in the Alpine Space. At the same time the Alpine Space was characterised by low accessibility and with regions and valleys organised quite autonomously with a high diversity of governance models and cultural assets (such as languages and dialects). But the main determinant of fluctuations in economic welfare was external demand for natural resources and external investments leading to the creation of exploitation and processing activities based on these resources.

Although never named explicitly, resilience is a theme where alpine regions are supposed to have a lot of experience and tradition.

The last decades were characterised by a remarkable growth of welfare in many alpine regions, in particular due to the development of mass tourism not only in summer but also in wintertime. Again natural resources and demand from outside have been the driving forces for this development. In parallel alpine agriculture and the preservation of alpine landscapes depend on external public subsidies.

The driving forces for future development of the Alpine Space and its regions will bring about challenges putting the stability of regional alpine systems at risk. The need to mobilise capacities to face these challenges is one results emerging from the SWOT. Following fields of action contribute to fostering resilience in the Alpine Space (number of the field of action in brackets, see also chapter 2): accessibility (3), low consumption (4), start-up conditions (8), R&D cooperations (9), cultural heritage use (11), regional economic cycles (12), quality of life (13), regional human resources (15) governance (17), biodiversity (19) and habitats (20).

[10] http://brr.berkeley.edu

Based on the steering model for regional resilience put up by LUKESCH et al (2010) regional resilience addresses two domains: that of the region as a socio-economic-cultural-political fabric; and that of regional governance, the set of actors having the explicit task and legitimacy to shape regional development.

Within the domain of the region the model stipulates two components:

- The dimensions of sustainability: environment, society and economy.
- The equity principles: social cohesion, territorial cohesion and inter-generational equity.

Within the domain of regional governance the model stipulates two more components:

- The steering perspectives with the five influence factors: strategy, cooperation, steering structures, steering processes and learning.
- The operational principles: diversity, redundancy, modularity, feedback and efficiency.

By learning from successful strategies from the past, by developing scenarios for the future development and by invention of experimental approaches to improve the balance between preparedness for adaptation, mitigation and preservation, the strategic objective should support the development of joint resilience strategies for the Alpine Space as a whole and empower the different regional units to improve their own resilience.

Turn to a Green Economy

In the final document for the Rio + 20 Conference the United Nations state the following for the definition of Green Economy (UN-secretary general 2012): *"In this regard, we consider green economy in the context of sustainable development and poverty eradication as one of the important tools available for achieving sustainable development and that it could provide options for policy making but should not be a rigid set of rules. We emphasize that it should contribute to eradicating poverty as well as sustained economic growth, enhancing social inclusion, improving human welfare and creating opportunities for employment and decent work for all, while maintaining the healthy functioning of the Earth's ecosystems."* The "Green Growth Strategy" of the Organisation for Economic Cooperation and Development (OECD) focuses on mutually reinforcing aspects of economic and environmental policy and stresses innovation as a means to decouple growth from natural capital depletion (OECD 2011). The United Nations Department of Economic and Social Affairs (UN DESA 2011) argue for a great green technological transformation by scaling up green technologies, waste reduction and sustainable farming.

In the Europe 2020 strategy: "A strategy for smart, sustainable and inclusive growth" and in the "Road map to a resource efficient Europe" (European Commission 2011) the Commission proposes a fundamental transformation of the European economy within the time span of one generation. Reducing resource use and increasing resource efficiency are the key mechanism for coping with environmental problems and resource shortages and, at the same time, strengthening European

competitiveness. In the Commission Provisions for the Cohesion Policy 2014-2020 the shift towards a low carbon economy in all sectors is one of the 11 thematic objectives (European Commission 2012).

The turn to a green economy needs efforts at all levels of governance. Production patterns as well as consumer behaviour have to be changed. For the Alpine Space again the natural resources, the mountainous landscape and the climate conditions make a difference to other areas. Opting for green economy could be well tied to alpine identities and integrated into the external branding of the Alps (see existing public image, touristic marketing strategies). alpine regions can build on wide experience in "green" production:

- a high share of biological and ecological food production,
- traditional experience in the utilisation of green products and materials (for example wood sector),
- usage of renewable energies (water, biomass),
- various initiatives to foster regional value added chains.

Also the SWOT analysis has shown, which fields of action support the potentials of green economy in the Alpine Space (see chapter 2): spatial organization and mobility management (1), low consumption (4), renewable energy (5), "areal" economic sectors (7), sustainable tourism (10) and management of ecological pressure (18).

Green economy furthermore can be estimated as the most promising approach to the rural areas of the Alpine Space to reverse the long lasting negative economic and demographic trend. A crucial challenge for the Alpine Space and its regions is the question how to capitalise the green turn of the economy without harming biodiversity, cultural landscape and nature protection areas. Green economy requires a new combination of decentralised production units embedded both in regional added value chains and in an international network economy. Therefore the turn to a Green Economy needs a trans-national alpine approach as well as regional approaches. It will be important to exchange experiences, to learn from each other, to share good practice and to speed up the dissemination of innovations towards a Green Economy revolution.

Build on cultural diversity and social solidarity

Investing in people and their skills is the best way to valorise a key resource of the alpine future: the inhabitants. The alpine core area (delineation of the AC, see chapter 1, map 2) covers about 14 million people, the wider Alpine Space area including the metropolises covers nearly 70 million. Not only the individuals, also the different social groups represent a valuable potential, which is actually only partly used: young and elderly people, women, immigrants. Against this background, social solidarity is much more than just a catchword.

The alpine society will become more and more multi-faceted with an increasing variety of life-styles, self- understandings as well as cultural and social identities. Being aware of and respecting the old and welcoming the new can be a promising concept with a high potential for success for the Alpine Space as a whole and for different types of regions in particular. In the SWOT analysis, the following

fields of action have been identified to strengthen cultural diversity and social solidarity (see chapter 2): cultural heritage (11), social services and quality of life, (13), solidarity in an aging society (14), region intergenerational activities (15), governance (17).

Based on the framework of the Europe 2020 strategy, social inclusion aims at contributing to high employment as well as to social and territorial cohesion. Improvements in the education system shall facilitate the entry of young people to the labour market. Empowerment of people through education and training throughout their life cycle helps them to develop their individual skills, their social and inter-cultural competences as well as their active participation in society.

The challenge of territorial cohesion and social and economic efficiency for public services in the Alpine Space are important issues emerging from the SWOT (see chapter 2). The main reason for this is that the Alpine Space is characterised by strong internal polarisation and limited functional integration between neighbouring regions, made difficult both by topographic obstacles and a limited traditions of cooperation and exchange. Numerous other studies have stressed a polarisation and internal differentiation process between prosperous and peripheral areas in the Alpine Space over the last decades. This trend of polarisation, as it is the outcome of parallel growth and decline processes, is considered as one of the major threats for the Alpine Space. Especially the inter-linkages between the peri-alpine metropolises and the core alpine area are of specific concern. (Price et al 2011).

This issue is connected to the challenge for regional development policies taking into account the different territorial types, their specific needs and the relations between them. Solidarity in this respect does not only mean social solidarity but also regional solidarity. Active participation of individuals, interest groups and initiatives in decision making at local, regional or even trans-national level is another important element of social inclusion..

Conclusions: Towards a hierarchical system of objectives for the Alpine Space

The strategy approach presented in the above chapter on the one hand integrates the content of chapters 1 and 2 (EU policy background, SWOT results) and on the other hand introduces a hierarchy of objectives at three levels. This architecture gives a first horizontal and vertical orientation, which helps to tailor the general European policy framework and the wide range of global, European and alpine topics to a consistent strategy for the Alpine Space. In the next chapter 3.2 the different thematic objectives are explained in more detail.

3.2. Thematic objectives

The purpose of defining thematic objectives for the Alpine Space is first of all to break down and specify the 3 strategic objectives. The thematic objectives should give answers to these guiding questions: What is needed to turn to a green economy? How can cultural diversity and social solidarity be strengthened? How can resilience be fostered in the Alpine Space?

However, thematic objectives have also been defined for pragmatic reasons, in view of facilitating a dialogue on alpine strategies. The 20 fields of action emerging from the SWOT (see chapter 2) are too numerous and specific to allow for a dialogue. Furthermore, they are not organised according sectors and themes which most alpine stakeholders operate within. Thematic objectives are therefore designed to correspond to established thematic fields and sectors related to regional development such as agriculture and forestry, water management, nature protection, handicrafts and industry, the service sector with a special focus on tourism, transport and mobility, cultural heritage, human resources etc. Discussion based on the thematic objectives should therefore make it easy for alpine stakeholders to see their role in future programmes.

A series of other criteria have been used for the selection of thematic objectives:

- The thematic objectives should ***respond to the 6 driving forces*** (see chapter 2).
- The thematic objectives should ***consider the EU policy framework*** (Europe 2020, cohesion policy 2014-2020, see chapter 1).
- The thematic objectives should take into account the ***results of the Alpine Space Programme 2007-2013*** (see chapter 1)

Based on this complex mixture of requirements the thematic objectives have been derived as described below (see also Annex 4). The thematic objectives that are put up for discussion are also presented in Figure 8.

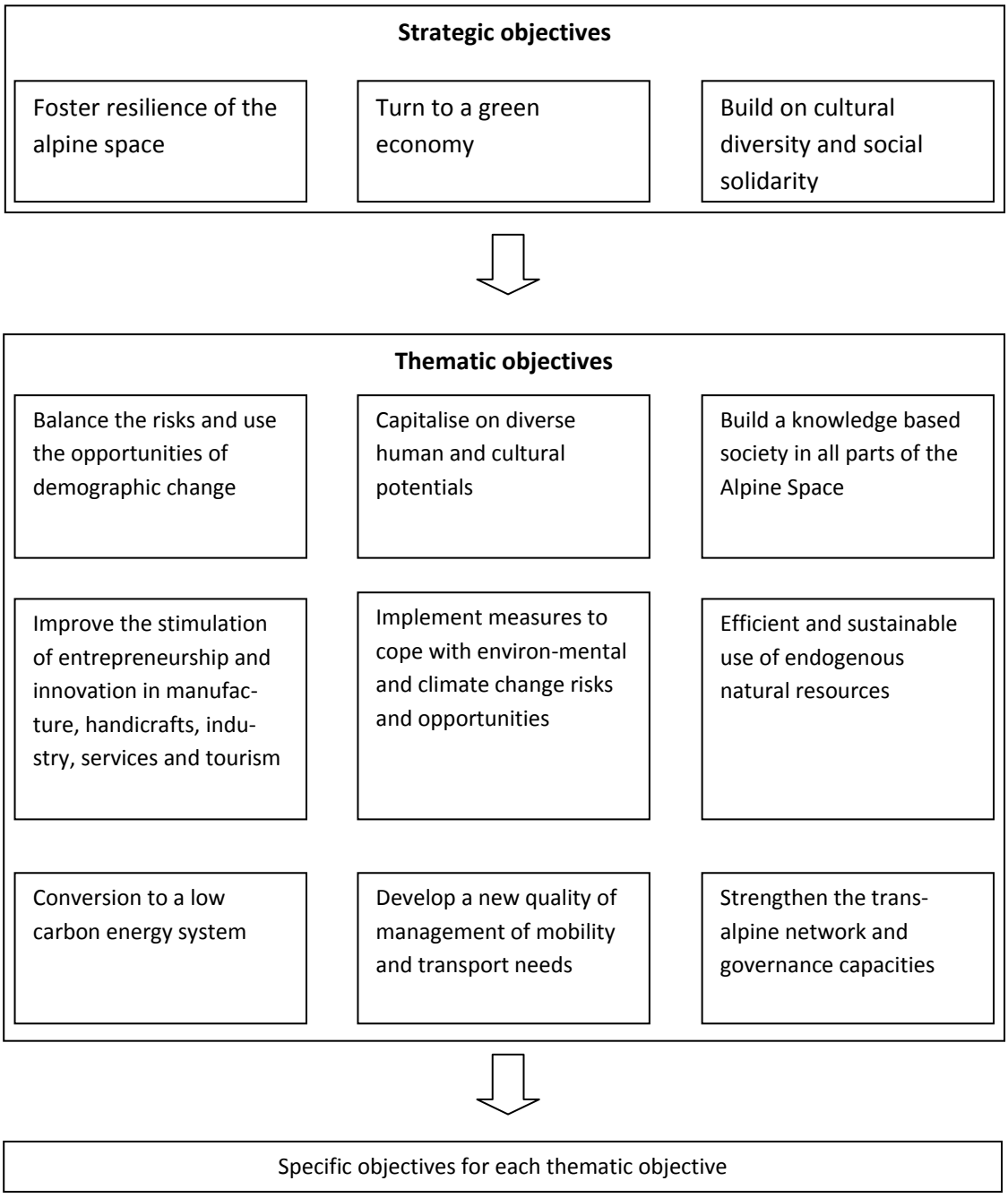
Background for the selection of thematic objectives:

1. Balance the risks and use the opportunities of demographic change

First of all, this objective refers to demographic change as a strong external driver a future strategy for the Alpine Space has to cope with. Additionally there is a strong link to the strategic objective "Build on cultural diversity and social solidarity", as an instrument to counter depopulation and the loss of social services in a number of remote valleys and other isolated rural areas and limit demographic concentration in cities and metropolitan areas. Balanced demographic trends are also a precondition for "Fostering resilience in the Alpine Space". In the EU policy framework this objective is only partly covered, but the SWOT results show that an ageing society also brings about new opportunities such as products and services for elderly people (14)[11] and a broad variety of lifestyles and modes of economic functioning (16).

[11] Numbers refer to the first column of Table 7 p. 67

Figure 8. Proposed thematic objectives



2. Capitalise on diverse human and cultural potentials

This objective has mainly been derived from the fields of action (2), (11), (13), (14) and (15). It is directly linked to the strategic objective "Build on cultural diversity and social solidarity", and encourages further reflections on the most relevant factors of human and cultural diversity in the Alps, both between and within territories. As such, this thematic objective is part of the strategy to face challenges resulting from the driving forces "global market dynamics" and "demographic change". An improved awareness of these differences, and of social and territorial groups whose potentials are under-exploited, is also part of a strategy to "Foster resilience in the Alpine Space". In the Europe 2020 strategy this objective is covered within the priority "Inclusive growth", which emphasizes the importance of lifelong learning, equal opportunities independently of age and gender, well-functioning labour markets and welfare systems. With regard to the strong external drivers of globalisation and demographic change, the capitalisation of the rich cultural and social diversity as well as of the rich human potentials of the Alpine Space will be an important objective for future strategies.

3. Build on a knowledge based society in all parts of the Alpine Space

This objective is based on the fields of action (9) and (15), which highlight the need to strengthen R&D cooperation and clusters of universities and private research institutions and to better manage inter-generational human resources on regional level.

Better education, research and innovation are also key elements of the Europe 2020 priority of "Smart growth". By taking into account the increasing importance of knowledge as a key resource on a global market it also contributes to all three strategic objectives, and is related to the driving forces "global market dynamics" and "knowledge and information societies as a basis for innovation". The strengthening and better valorisation of alpine specific knowledge and skills is an important task for the next generation of Alpine strategies.

4. Improve the stimulation of entrepreneurship and innovation in manufacture, handicrafts, industry, services and tourism

This objective is mainly based on the results of the SWOT, where the need for support of start-ups and entrepreneurship is clearly stated (8). A special focus has to be on sustainable tourism as a key sector in the economy of the Alpine Space (10) and on the general strengthening of regional economic cycles and networks (12).

This objective is also closely related to the strategic objectives "Foster resilience in the Alpine Space" and "Turn to a green economy" as well as to the Europe 2020 priority of "Sustainable growth", where the improvement of the business environment, in particular for SMEs, is mentioned. Relevant driving forces are "global market dynamics" and "knowledge and information societies as a basis for innovation".

5. Implement measures to cope with environmental and climate change risks and opportunities

First of all, this objective refers to the high level of biodiversity and attractive landscapes in the Alpine space and to the strong external driver of climate change. Several fields of action emerging from the SWOT are bundled under this objective: the management of the competition for water (6), the paradigm shifts in the agriculture and forestry sector (7), the innovation towards

sustainable tourism (10), as well as the management of ecological pressures in prosperous territories (18), sustaining landscape conservation (19) and keeping alpine biodiversity (20).
Obviously, this objective is closely related to the driving force "climate change" and to the strategic objectives "Foster resilience in the Alpine Space" and "Turn to a green economy". The link to these two strategic objectives provides indications on the kind of measures that would be best suited for the Alpine Space, putting the emphasis on how one could improve the capacity of alpine communities to cope with uncertain future environmental and climatic trends. Admittedly, the strategic objective also refers to the Europe 2020 priority of "Sustainable growth" with the key topics of "capitalising on green technologies" and "helping consumers to make well informed choices".

6. Efficient and sustainable use of endogenous natural resources

This objective brings several fields of action emerging from the SWOT under one roof: low consumption models for alpine resources such as energy and water (4, 6), renewable energy production (5) by considering ecological and landscape pressures (18, 19 and 20) as well as agriculture and forestry (7) and innovation towards sustainable tourism (10).
In addition, this objective strongly contributes to all three strategic objectives and also to the Europe 2020 priority of "Sustainable growth", where the efficient and sustainable use of resources is highlighted. The wise use of natural resources of the Alpine Space is a key element of future strategies, and brings up important questions on how the needs of different alpine and peri-alpine regions may be weighed against each other. As energy is one of the natural resources, "securing energy availability" is one of the relevant driving forces for this thematic objective, alongside with "global market dynamics".

7. Conversion to a low carbon energy system

The need for a conversion to a low carbon energy system is on the one hand derived from several fields of action emerging from the SWOT such as renewable energy production (5), low consumption models (6), sustainable tourism as well as spatial organisation, transport and mobility management (1).
This objective also refers to the strategic objectives "Foster resilience in the Alpine Space" and "Turn to a green economy". Moreover, it is directly linked to the building of a more competitive low-carbon economy, which is part of the Europe 2020 priority "Sustainable growth". As part of a climate change mitigation strategy, this strategy is obviously linked to this driving force, as well as to "securing energy availability".

8. Develop a new quality of management of mobility and transport needs

This objective is on the one hand derived from the SWOT, where spatial organisation, transport and mobility management as well as physical and digital accessibility in general are mentioned as fields of action (1) and (3).
On the other hand, this objective contributes to the strategic objective "Foster resilience in the Alpine Space", as functional integration between neighbouring labour markets and regions helps diversifying economies and improving adaptive capacity. It also refers to external driver "increasing

traffic flows" and to the Europe 2020 priorities "Smart growth", which specifically mentions the need to develop the use of information and communication technologies to build a "digital society". The continuous growth of traffic flows described as part of the driving force "transport of goods and persons" is one of the key challenges to be addressed as part of this thematic objective.

9. Strengthen the trans-alpine network and governance capacities

The improvement of multilevel governance in the Alpine Space is a needed for all thematic objectives mentioned above. But this is not enough. Independently from sectors and topics, the enhancement of co-operation know-how, capacities and skills of alpine key actors needs special attention, as it is also stated in the SWOT results (17). This is why it is introduced here as an independent thematic objective. In addition, it is strongly linked to the strategic objective "Foster resilience in the Alpine Space", as decision-making capacity and mechanisms for cooperation and dialogue are of key importance when adapting to changing conditions or facing extreme events. However, it needs to be acknowledged that this thematic objective is of a different nature than the eight other ones, as governance is a relevant dimension of all of them. The ways in which it may be discussed and eventually implemented may therefore be specific.

Specific objectives and key actors within each thematic objective

On the following pages we describe each thematic objective on one page according to the following structure:

- Short general introduction
- Specific objectives and their appropriate trans-alpine cooperation framework (ASP, MRS or others
- Key actors to be addressed.

From the point of view of the authors, the appropriate cooperation framework for a specific objective is the following:

- The Alpine Space Programme (ASP), when the focus is mainly on exchange of information and joint development of tools.
- A macro-regional strategy (MRS), when a stronger commitment and legitimation and a more binding character of activities is required. This asks for enhanced coordination and cooperation among alpine partners. In addition, a MRS can be needed for the alignment of EU-funding at the transnational level. Admittedly, enhanced coordination of funding by the European Social Fund, the European Agricultural Fund for Rural Development and Cohesion Fund within the framework of "integrated territorial development" is already one of the objectives the Common Strategic Framework for cohesion policy, rural development and fisheries funds for the period 2014-2020. However, in a transnational territory such as the Alpine Space, a MRS may be considered as a prerequisite for an effective coordination of funding

- Other frameworks (Oth): Funding instruments other than ASP or MRS like the ones mentioned above but ***independent*** from a MRS like ESF, CF, EAFRD, in addition environmental policy instruments like LIFE or Natura 2000, transport policy instruments like TEN and also R&D policy instruments like the research framework programmes

Based on this approach, many of the proposed specific objectives could be dealt with in a future ASP as well as in a MRS. The criterion for determining he most adequate framework is not only the content of an activity. One also has to consider which aspect of a topic is high-lighted, how closely the alpine partners want to co-operate and how binding the results should be. This again depends very much on the strategic interests and aims of these partners. The indications provided below should therefore only be considered as exploratory first assessments. Case-by-case negotiations are needed (see also discussion of MRS aspects in chapters 1 and 4).

Thematic objective "Balance the risks and use the opportunities of demographic change"

Demographic change is characterised by various elements, which affect the alpine regions in different ways. Peripheral rural areas with low level of touristic activities are facing low fertility rates, emigration due to insufficient supply of workplaces, shrinking population, the remaining of the elderly, brain drain to cities and metropolises, decline of basic services, deterioration of buildings and abandonment of agricultural activities shaping the cultural landscape. On the other hand, urban areas outside of the core alpine area with different cultural background, an increasing diversity of lifestyles and subcultures and an increasing demand for educational, social and health services. An increasing gap between these different types of spatial development can be observed. In particular issues addressing a better inclusion of immigrants, preservation and development of the cultural heritage, coping with gender aspects and changing family structures are unsolved problems not only in the Alpine Space. Besides the risks, there are also new chances of demographic change: the social and economic potential of an ageing society.

Specific objectives	**ASP**	**MRS**	**Oth**
• Develop policies, instruments and activities to improve social and cultural infrastructure capable to deal with an ageing society and changing family systems	✓	✓	
• Improve policies, instruments and activities how to better integrate immigrants and to manage increasing social diversity in urban and especially in rural areas	✓	✓	✓
• Improve instruments to cope with declining population, erosion of basic services and structural changes	✓	✓	
• Develop policies, instruments and activities to find tailored solutions for small and isolated municipalities in remote areas	✓	✓	
• Develop strategies to deal with the growing demand for secondary homes in attractive areas	✓		

ASP – Alpine Space Programme; MRS – Macro-Regional Strategy; Oth – Other frameworks

Key actors and sectors to be addressed:

National and regional departments dealing with social affairs in general and with population, integration and gender policies in particular; research institutes specialised in demography and life style development; national and regional institutions dealing with spatial and regional development; intermediary institutions like regional management units; other national and regional institutions as well as NGOs dealing with social and cultural affairs, networks like Alliance in the Alps.

Thematic objective "Capitalise on diverse human and cultural potentials"

Individuals and social groups, their traditional knowledge and skills as well as their diverse cultural backgrounds are one of the key resources of the Alpine Space, which is only partly used up to now. This leads to problems like unemployment on the one hand and lacking qualified labour force in some regions and some sectors on the other hand. The Alpine Space can valorise the existing potentials through a better inclusion of young and elderly people, women and immigrants into the working process and into political and administrative functions. The increasing speed of change in a globalised world even underlines these challenges affecting directly social and territorial cohesion. In addition, the rich cultural potential of the Alpine Space could be better valorised and linked with new social and cultural trends. Respect the old and welcome the new could be a way to cope with the challenges of change.

Specific objectives	**ASP**	**MRS**	**Oth**
• Develop policies, instruments and activities to better capitalise on traditional knowhow, cultural and natural heritage for alpine products and services as a specific feature of alpine competitiveness	✓	✓	
• Make use of alpine cultural heritage (especially immaterial cultural heritage) in research and development		✓	✓
• Empower individuals and specific social groups through education, training and life-long learning		✓	✓
• Support the improvement of organisational and self-governance capacities of local and regional units with a special focus on the potentials of young and elderly people, women and immigrants	✓	✓	✓
• Develop policies, instruments and activities to better valorise the potentials of the "young elderly" for voluntary work	✓	✓	
• Support the fight for talents in a global competition			✓
• Develop frameworks to better use of the potentials of emigrants, who are still interested in the region of their origin by offering them opportunities for temporary comeback or other ways of "being present in distance"	✓		✓

ASP – Alpine Space Programme; MRS – Macro-Regional Strategy; Oth – Other frameworks

Key actors and sectors to be addressed:

Ministries and regional departments for social affairs, education, family and gender issues; institutions specialised in education, training and capacity building, NGO´s dealing with social issues (gender, integration, generations etc.) and cultural heritage, networks like Alliance in the Alps or Alpine Town of the Year.

Thematic objective "Build on a knowledge based society in all parts of the Alpine Space"

A society's ability to create and exploit knowledge is a key factor for progress, growth and better living conditions. Competitive research and education infrastructure, institutions supporting innovation and facilitating institutions and high performing information and communication technologies are a prerequisite to be classified as innovation leaders. The metropolitan areas in the lowlands of the Alpine Space and the alpine cities have high-ranking knowledge and innovation capacities at a global scale. Keeping and developing this position, especially in alpine specific fields of know-how like tourism, technologies tied to alpine sports and life styles, the wood sector, biological and high quality food production etc. is crucial to stay competitive at the European and global scale. To stimulate excellence in research and development, cooperation between knowledge providers, companies and the public sector should be enhanced. An improved cooperation between research institutions located in the Alpine Space and those in the metropolitan areas and in other mountain regions should be further developed: the key priority is not to develop world-leading research institutions Alpine Space, but to ensure that alpine stakeholders can influence knowledge-production processes and have access to the knowledge they need through appropriate networks, maintained by local-resource-persons and institutions.

Specific objectives	ASP	MRS	Oth
• Strengthen the capacities of research infrastructure and the connections to world-leading institutions		✓	✓
• Strengthen cooperation among universities and other research facilities within the Alpine Space, with metropolitan areas and with other mountain areas	✓	✓	✓
• Foster the transfer of research results to practitioners in education and training, in the private sector as well as in municipalities and administration	✓	✓	✓
• Improve the knowledge base on alpine issues through the provision of alpine wide harmonised data and information, e.g. through pan-Alpine databases	✓		✓
• Improve instruments to strengthen the digital economy: e-content and e-services to improve the efficiency and effectiveness of public and private services (social services, grocery etc., e-commerce for alpine products, e-learning and e-government)	✓	✓	✓

ASP – Alpine Space Programme; MRS – Macro-Regional Strategy; Oth – Other frameworks like research policy

Key actors and sectors to be addressed:

National and regional institutions responsible for research and development; development agencies providing support for start-ups and innovative products; research funds; universities and other research institutions; trans-alpine research networks (ISCAR); private foundations supporting research.

Thematic objective "Improve the stimulation of entrepreneurship and innovation in handicrafts, manufacturing, services and tourism"

The Alpine Space has a manifold economic structure with a high share of SME´s. On the one hand, alpine economy can build on traditional knowledge close to the alpine territory, on the other hand, the link between the high number of small enterprises to research and development institutions and innovation centres is weak in many alpine areas. Technical, financial and organisational frameworks have to be improved in order to attract the so called "new rurals" or "new mountaineers" setting new entrepreneurial courses, to stimulate innovation processes and to provide high quality products and services which can be successful on a global market. Tourism faces big challenges due to global competition and climate change and an ageing society. Innovation towards sustainable tourism with strong links to the agricultural sector could offer new chances and opportunities for a key sector of alpine economy. Beside the orientation towards the global market, the different initiatives need to focus more specifically on the internal functioning of alpine economies: How could alpine providers of goods and services better satisfy the demand of alpine population and improve the circularity of local economies? What types of job creation would improve the social qualities of alpine communities by providing attractive employment opportunities for the spouses and children of the currently employed population? Approaching entrepreneurial initiatives from a wider perspective, e.g. by taking better account of internal demand, the gender and age dimension and the current factors of imbalance in local communities would help improving the perspectives of success. Generating internationally competitive activities is an important, but not all-encompassing objective.

Specific objectives	**ASP**	**MRS**	**Oth**
• Develop policies, instruments and activities to better link new industrial cluster and milieus with traditional knowhow in order to improve the basis of alpine economy in a global competition	✓	✓	
• Improve technical, financial and organisational framework conditions to stimulate alpine entrepreneurship and to speed up innovation of alpine products and services		✓	
• Improve technical, financial and organisational framework conditions to widen existing excellence in the value added chain of green building with regional materials, innovative architecture, passive house standards and regional handicrafts	✓	✓	✓
• Strengthen the role of metropolises and alpine cities as competence centres on a global market		✓	✓
• Provide technical, financial and organisational frameworks to support start-ups of highly educated experts and provide start-up centres	✓	✓	✓
• Foster innovation towards sustainable, low carbon and experience-oriented tourism by combination of traditional knowledge and new research results	✓	✓	

ASP – Alpine Space Programme; MRS – Macro-Regional Strategy; Oth – Other frameworks

Key actors and sectors to be addressed: National and regional departments for economic affairs, economic development and innovation; chambers of commerce and industry, roof organisations of handicrafts, tourism organisations, innovation centres, cluster organisations and networks.

Thematic objective "Implement measures to cope with environmental and climate change related risks and opportunities"

The cultural landscape and the richness of biodiversity are key assets of the Alpine Space providing high quality of life and global attractiveness. Due to their topography, the Alpine Space is also characterised by a high environmental vulnerability. In addition, the Alpine Space is affected by climate change impacts more than lowlands: rising temperature, water scarcity, increase of natural risks like flooding, decline of snow-oriented tourism on lower altitude are expected to have far reaching impacts on alpine economy, society and nature. Trans-national efforts are required to cope with these increasing environmental and climate change related risks. These trans-national efforts may have different justifications, depending on whether the risk has a trans-national dimension (e.g in the case of structural changes in precipitations and in the flow of rivers) or is similar across alpine regions (e.g. upslope migration of mountain plants and new pests). The focus therefore needs to be on the identification of the appropriate modes and levels of intervention. Besides the risks, climate change will also create new opportunities, which should be taken advantage of. Environmental pressure in the Alpine Space does not only come from climate change, but also from various human activities. This is true mainly for urban and touristic areas as well as for areas with high ranking transport infrastructure, where high intensity of different activities lead to enhanced air, noise and water pollution, to increased land consumption and to fragmentation of habitats and landscapes.

Specific objectives	**ASP**	**MRS**	**Oth**
• Deepen trans-national cooperation in environmental protection and maintaining landscapes and biodiversity	✓	✓	✓
• Improve the environmental situation (air, soil, water, noise) mainly in urban areas		✓	✓
• Improve the connectivity of areas of high ecological value	✓	✓	✓
• Adapt agriculture and forestry and their different functions to the impacts of climate change	✓	✓	✓
• Develop trans-national standards to mitigate and adapt to climate change	✓	✓	✓
• Develop innovative strategies for the conversion of snow-oriented tourism areas on lower altitude	✓	✓	
• Forecast, mitigate and manage the impacts of natural and technological hazards	✓	✓	✓
• Cope with cross border risk management in general and flood management in particular	✓	✓	✓

ASP – Alpine Space Programme; MRS – Macro-Regional Strategy; Oth – Other frameworks like instruments of environmental policy

Key actors and sectors to be addressed: National and regional departments for environment, nature protection, risk management, agriculture, forestry and spatial planning; research institutes specialised in climate change, risk prevention, biodiversity and agriculture, forestry and spatial planning; protected areas and their alpine networks like ALPARC, environmental NGO´s, the Alpine Convention.

Thematic objective "Efficient and sustainable use of endogenous natural resources"

The Alpine Space is rich in natural resources and raw materials. Alpine agriculture and forestry do not only deliver high quality products, they also provide valuable ecosystem services (water, air, soil, cultural landscapes) for millions of people. The Alpine Space plays an important role as European water tower. Considering the above-mentioned strategic objectives of increasing resilience and turning to green economy, resource use has to be reduced and become more efficient and low carbon oriented in order to decouple economic growth from resource consumption. The objective is to ensure that existing resources are exploited without jeopardising the perspectives of sustainable development. Additionally, the interests of actors at different levels have to be taken into account. The exploitation of a mineral resource considered as an attractive opportunity to generate employment opportunities and wealth at the national or European levels, may from a local and regional perspective be considered destructive and economically less interesting than e.g. tourism development. Trans-national projects can therefore on the one hand help local and regional stakeholders to deal with complex decision-making processes in the field of natural resource exploitation by ensuring that they have access to the necessary expertise and exchanges of experience. On the other hand, they can contribute to improve the multi-level governance of resource exploitation, with the objective of ensuring that interests of different territories and groups are weighed against each other and a more balanced distribution of economic returns.

Specific objectives	**ASP**	**MRS**	**Oth**
• Develop policies, instruments and activities to realise the turn to green economy	✓	✓	
• Valorise natural heritage as basis for unique alpine products and services on a global market	✓	✓	
• Develop further policies and instruments to strengthen the role of the Alpine Space as a European water tower considering the various public and private interests		✓	
• Improve the framework conditions for sustainable agriculture and forestry considering their ecosystem services		✓	
• Improve instruments to diversify agricultural production and foster synergies with sustainable tourism	✓	✓	
• Foster quality standards for forest management (like FSC)		✓	✓
• Improve instruments for more efficient resource use in the different sectors in order to minimize negative impacts on environment and biodiversity	✓	✓	✓

ASP – Alpine Space Programme; MRS – Macro-Regional Strategy; Oth – Other frameworks

Key actors and sectors to be addressed:

National and regional departments for water related issues, for agriculture and forestry issues; research institutes specialised in agriculture, forestry and water topics, chambers of agriculture, regional associations of producers and consumers, pan-alpine NGO´s, the Alpine Convention.

Thematic objective "Conversion to a low carbon energy System"

The conversion of the energy system towards a post-fossil and low carbon system is one of the main priorities of the turn to a green economy. The Alpine Space offers a high variety of renewable energy resources: hydropower, biomass, wind and solar energy. The turn to green energy production is an opportunity to re-gain more energy autonomy for alpine regions or even to turn to an exporter of energy like for peak load power at the moment. In particular peripheral regions could profit from the exploitation of energy resources and the offer of reliable and affordable energy supply to the production sector. In the mobility sector the turn to electric vehicles could be a promising green alternative to the combustion engine if the electric energy production is based on renewable resources and the recharge of the batteries can be adopted to the volatility of production capacities and their utilisation. It has to be considered, that a more intensive exploitation of natural resources for the purpose of energy production leads to conflicts with aims of protecting nature, landscape and biodiversity, with touristic interests and the various interests of local residents.
From the technological point of view the growing usage of solar energy (wind, photovoltaic) for electricity production will require new accumulator technologies and new high voltage power networks. The implementation of smart grids is only in the beginning. Based on the existing natural resources and on the long term experiences in the field of renewable energy the Alpine Space has the chance to become a model region for a new generation of green energy production.

Specific objectives	**ASP**	**MRS**	**Oth**
• Develop policies, instruments and activities to foster energy saving and energy efficiency at all levels and in all sectors	✓	✓	✓
• Develop and improve planning instruments for decentralised energy production based on renewable energy resources	✓	✓	✓
• Improve regional frameworks for the sustainable use of wind and solar energy	✓	✓	✓
• Develop policies, instruments and activities to strengthen the cross border coordination of high voltage power lines		✓	
• Develop future perspectives for the Alpine Space as energy storage space for peak load power		✓	
• Develop of an alpine position regarding the TEN-E-policy		✓	✓
• Foster instruments and procedures to negotiate and balance the interests of energy production and other land use and protection functions	✓	✓	
• Support concepts and strategies for regional energy self-sufficiency and autonomy	✓	✓	
• Develop and test comprehensive mobility concepts based on renewable resources	✓		

ASP – Alpine Space Programme; MRS – Macro-Regional Strategy; Oth – Other frameworks like TEN

Key actors and sectors to be addressed:

National and regional departments responsible for energy and resources; national and regional departments for regional and spatial planning; research institutes for energy economics, energy technologies; energy production and distribution companies; Intermediary organisations for regional development, pan-alpine NGO´s, the Alpine Convention.

Thematic objective

"Develop a new quality of management of mobility and transport needs"

Motorisation, road infrastructure as well as telecommunication have transferred the Alpine Space to an area of generally high accessibility. However, the inner alpine connections are still facing more transport barriers than lowlands. The construction and maintenance of infrastructure in the alpine area is much more expensive and the environmental impacts are much stronger than in other non-mountainous regions. The scarcity of space for different land uses in the valleys limits the further expansion of infrastructure. Especially in urban areas and around touristic hot spots frequently congestions and chaotic traffic situations appear. On the other hand the service of sparsely populated areas by public transport is declining due to the increasing motorisation and decreasing population. Social groups without car ownership or driving licenses (young and elderly people) loose mobility opportunities. The decline of public services even exacerbates the mobility restrictions for these groups. In addition, sparse and remote areas do not get access to high speed internet without public intervention and subsidies. An increasing digital gap might be an additional reason for remote areas to be left behind.

As regards the future infrastructure development the extension of the main road network (motorways, expressways) is limited due to costs and environmental impacts. The next development phase will be the extension of the high speed railway network favouring the metropolitan areas and bigger alpine cities. This will deepen the accessibility gap between urban and peripheral rural areas. At the same time, the opening of new infrastructures such as the Gotthard Base Tunnel (to be opened in 2016) will significantly change the conditions for transit traffic through the Alps. Against this background the management of mobility and the improvement of logistics will have clear priority against the further extension of transport infrastructure. At the moment national and regional borders are often limiting the supply with integrated public transport services as well as with traffic information systems. But individual mobility does not know administrative borders. Therefore trans-national efforts are needed to develop a new quality of target oriented mobility management.

Specific objectives	**ASP**	**MRS**	**Oth**
• Improve policies, instruments and activities to better integrate cross border public transport services	✓		✓
• Develop multimodal and multilingual traffic information systems	✓	✓	
• Develop joint cross border transport planning instruments and networks	✓	✓	
• Strengthen policies, instruments and activities focusing on environmentally friendly goods transport and logistics	✓	✓	
• Foster environmentally friendly inter-linkages between transport modes and spatial structures	✓	✓	
• Strengthen spatial policies to reduce the growth of trip distances and the dependency on car usage	✓		
• Minimize negative impacts from traffic (noise and air pollution)	✓	✓	
• Develop policies, instruments and activities to reduce the digital gap in remote areas	✓		✓

ASP – Alpine Space Programme; MRS – Macro-Regional Strategy; Oth – Other frameworks

Key actors and sectors to be addressed:

National and regional departments dealing with transport, mobility management and spatial development; public transport companies; integrated public transport organisations at national and regional levels; developers and providers of traffic information systems; tourism marketing organisations, NGO´s dealing with alpine traffic issues, the Alpine Convention.

Thematic objective "Strengthening of transalpine network and governance capacities"

Considering the different driving forces, the increasing speed of change in a globalised world which is getting more and more complex, individuals and small entities are less and less capable to develop adequate solutions on their own. Cooperation between the different sectors and levels are a must. In addition, the cooperation between regions with different patterns (urban, rural, touristic, prosperous, stable, declining) should be improved to strengthen territorial cohesion in the Alpine Space.

In order to cope with the options and threats mentioned in the SWOT and to contribute to the strategic objectives described, multilevel governance is not only a promising concept, it is a pre-requisite. Whereas the need for vertical and horizontal trans-national cooperation is more and more accepted and considered in strategies and concepts, the institutional background and the resource base to breathe life into these concepts and to make them work often remains weak. Also the options for participation of civil society organisations and other interest groups in political decision making at the different levels are often unclear. Lacking communication in addition leads to conflicts between the different groups.

Enhanced trans-alpine cooperation requires a clear identification of the relevant cooperation fields and issues (do the right things!), in addition it requires networking and cooperation knowhow, skills and capacities (do the things right!).

Specific objectives	**ASP**	**MRS**	**Oth**
• Develop trans-national governance capabilities, procedures and institutions	✓	✓	
• Offer training and education to improve cooperation and network skills and capacities of alpine stakeholders	✓	✓	✓
• Strengthen knowledge transfer regarding vertical, horizontal and sectoral governance	✓		
• Develop and foster existing and new trans-national networks in different fields: transport, economy, environment, research & development, education and culture, policy making and administration	✓	✓	
• Support cooperation between municipalities and regions considering PPP models	✓	✓	
• Develop different types of regional governance models	✓	✓	
• Improve the cooperation of alpine cities and their surroundings	✓		
• Improve the interaction between the cooperation of the neighbouring metropolises and their alpine surroundings	✓		
• Foster urban-rural partnerships	✓	✓	
• Foster the exchange of knowledge and experiences between the Alpine Space and other mountain regions in Europe and on other continents		✓	✓

ASP – Alpine Space Programme; MRS – Macro-Regional Strategy; Oth – Other frameworks

Key actors and sectors to be addressed:

Alpine Space Programme, Alpine Convention, Arge Alp, alpine networks like CIPRA, ALPARC, ISCAR, Alliance in the Alps, Alpine Town of the Year, Alpine Pearls, Nena, metropolises like Munich, Vienna, Milano, Turin, Lyon; Euro-Regions; Sectoral trans-national network organisations in the field of transport, tourism, energy, water management, risk management, agriculture and forestry, research networks.

Conclusions: A tailor-made strategy for the Alpine Space

Chapter 3.2 presented a proposal for nine thematic objectives, which have been detailed by specific objectives and possible key actors for implementation. The nine thematic objectives help to structure the 20 fields of action emerging from the SWOT and break down the three strategic objectives. The nine thematic objectives are quite close to the eleven thematic objectives for Cohesion Policy 2014-2020 proposed by the Commission. The detailed links between the fields of actions emerging from the SWOT, the related strategic objectives, the nine thematic objectives proposed by the expert team and the eleven thematic objectives proposed by the Commission are given in annex 4. In annex 5, examples for trans-alpine cooperation are presented for each thematic objective.

From the point of view of the authors, the most relevant thematic objectives with regard to future strategies for the Alpine Space are:

- Efficient and sustainable use of endogenous natural resources
- Capitalise on diverse human and cultural potentials
- Conversion to a low carbon energy system
- Balance the risks and use the opportunities of demographic change
- Implementing measures to cope with environmental and climate change risks and opportunities.

3.3. Conclusions

The strategy architecture presented in chapter 3 is a proposal how to tailor the general European policy framework and the wide range of global, European and alpine topics to a consistent strategy for the Alpine Space. This architecture should give a first horizontal as well as vertical orientation, which will be discussed with the alpine stakeholders in the next months.

There is no simple answer to the question, which of the proposed specific objectives should be dealt with in a future Alpine Space Programme and which in a Macro-regional Strategy. The main criteria in order to assess, which framework is more appropriate, are not so much the content in general, but the question which aspect of a topic should be high-lighted, how closely the alpine actors want to co-operate and how binding the results should be. This again depends very much on the strategic interests and aims of involved partners and has to be negotiated from case to case.

This more theoretical questioning also needs to be confronted with the concrete conditions for the adoption of a future Alpine Space Programme and for the elaboration, submission and approval of a possible macro-regional strategy, e.g. in terms of regulatory frameworks and time schedules. It is also important to consider how the respective roles of a macro-regional strategy and a European territorial cooperation programme for the alpine space can be made sufficiently distinct, so that they are not perceived as overlapping instruments. These aspects ate further developed in the concluding chapter 4.

4. Perspectives on strategy development for the Alpine Space

The Expert team has identified three objectives around which a long-term strategic orientation for the Alpine Space can be constructed:

- Foster a resilient development;
- Turn to a green economy;
- Build on cultural diversity and solidarity.

These strategic objectives also function as a basis for identifying key priorities and strategic orientations for the future Alpine Space Programme in the period 2014-2020. By breaking them down into nine thematic objectives, the expert team has analysed their concrete implications within established sectoral fields of policy-making. These Alpine thematic objectives have then been cross-analysed with the thematic priorities for cohesion policy proposed by the European Commission.

This makes it possible to explore how an Alpine Space Programme strategy could be formulated in a context of so-called "thematic concentration" without losing sight of the wider and more long-term priorities for the Alpine Space, as described in section 4.1. The expert team considers that the focus should be on themes and issues through which exchanges, integration and alliances between alpine territories of different types could be established. This is one component of the complex issues of governance and of involving key actors in strategy design, policy development and concrete measures at the level of the Alpine Space (section 4.2). The possibility that a macro-regional strategy for the alpine space would be adopted in parallel with a renewed Alpine Space Programme in the next programming period (2014-2020) makes it particularly important to reflect on these issues of alpine governance (section 4.3).

4.1. Thematic concentration

The SWOT analysis shows an Alpine Space caught between external influences and locally and regionally and nationally embedded strategies. On the one hand, global driving forces have very different impacts depending on the types of territories considered within the Alpine Space. On the other hand, strategies to cope with current challenges and to prepare for forthcoming ones are formulated with limited consideration to the balance and harmonious development of the Alpine Space as a whole. Establishing connections between different components of the Alps appears as a priority for the Alpine Space Programme. These would ideally be based on the identification of win-win situations, e.g. by demonstrating how alpine rural areas could help cities and metropolitan areas to overcome foreseeable challenges for example concerning energy provision. Constructing new strategic alliances between the different types of territories and across national boundaries would contribute significantly to strengthen the territorial and institutional cohesion of the Alpine Space.

However, the European Commission's legislative proposals for Cohesion Policy focus on thematic concentration rather than on territorial cohesion. This implies that the Alpine Space Programme would need to focus on a limited number of themes and issues, rather than building its strategy on around measures to promote inter-territorial alliances. The question is therefore how the Alpine

Space could construct a rationale for more balanced and cohesive territorial development within the framework of a limited selection of thematic objectives chosen from the list the Commission proposes.

The European Commission suggest that two environmental thematic objectives could be compulsory for transnational cooperation programmes organised around a mountain range such as the alpine space. These thematic objectives are “promoting climate change adaptation, risk prevention and management” and “protecting the environment and promoting resource efficiency”. Their relevance is confirmed by the SWOT analysis. Furthermore, these European thematic objectives are very similar to the alpine thematic objectives “Implement measures to cope with environmental and climate change risks and opportunities” and “Efficient and sustainable use of endogenous natural resources” identified by the expert team. A compulsory thematic focus on these two themes therefore appears as a relatively unproblematic.

Following the current recommendations of the European Commission, the Alpine Space Programme could then choose two additional thematic objectives. This selection should be based on a wide reflection on the thematic focus that would be most relevant to create new functional connections and alliances between different types of alpine territories may lead to other conclusions, which would need to be undertaken in interaction with alpine stakeholders.

A problem with the thematic concentration principles proposed by the European Commission is that the capitalisation on cultural potentials is not among the proposed options. This is identified as an important strategic objective by the expert team. Chapter 3 describes the challenges linked to increasing diversification of alpine cultures and lifestyles. Building on cultural heritage, social cohesion and quality of life while incorporating more diverse social groups and lifestyles is also a natural component of strategies to promote more balanced patterns of in- and out-migration in the alpine space. Measures focusing alpine cultures can help reversing demographic and economic decline in isolated rural communities The Alpine Space Programme therefore needs to reflect on ways of integrating this dimension within the framework of the proposed thematic concentration.

4.2. Governance in the Alpine Space and of the Alpine Space

The absence of a vision for the Alpine Space can be considered as a weakness for the formulation for strategic specific strategic priorities. However, a vision should rather be envisaged as the outcome of a process leading to increased convergence among alpine stakeholders than as a prerequisite for alpine policies. Therefore, the focus first needs to be on strategies to improve the governance of the Alpine Space and on facilitating exchanges between alpine relevant stakeholders.

The expert team has identified this issue as a separate thematic objective, entitled “strengthening of transalpine network and governance capacities”. The underlying idea is that the Alpine Space Programme could implement dedicated projects dealing with governance, e.g. exchanges of experience on participative processes and initiatives to promote a better mutual understanding of institutional setups across national boundaries. The observed tendency of alpine communities and

regions to be inward-looking, as a result of important topographic constraints to interaction and cooperation, calls for dedicated actions in the Alpine Space to promote inter-territorial coordination and multi-level governance. This is already a significant component of the "intangible impacts" of many projects without any explicit focus on governance-related issues in the current and previous programmes.

The problem is that these effects have been too disparate and uncoordinated. In view of overcoming the gap between the programme and project level, the expert team has argued in favour of mapping key actors belonging to the specific thematic objectives that will have been chosen, as the first step of a process of pro-active project generation. Such a more active involvement in existing governance networks of the Alpine Space could contribute to change the Programme's perception. It would not only be considered as a funding stream, but also as an organisation with a distinct agenda.

The governance of the Alpine Space as such is a distinct issue, which calls for measures at a different level and of a different nature. The Alpine Space Programme is in this respect one actor among others, as illustrated by the current multiplicity of contributions to debates on macro-regional strategies. The limited sample of alpine initiatives reviewed in the present report showed an accumulation of networks with different understandings of the Alps, diverging political agendas and variable approaches to the elaboration of democratically legitimate pan-alpine strategies. Table 8 below synthesises the diversity of functions the Alps may play for a coalescence of actors.

We have noted that the Alps are understood in different ways, e.g. as a biogeographical region, a border region and as an area with specific preconditions for socio-economic development. The notion of "plural Alps" needs to be promoted to overcome conflicts between these different understandings and between different views on who the legitimate alpine stakeholders are. In other words, discussions need to be opened up based on strategies to ensure that the involved partners engage in them without apprehensions regarding their own autonomy or possible effects on current institutional arrangements. One can therefore not recognise the Alpine Convention perimeter as the only relevant delineation of the Alps. Instead, multiple alpine "functional regions" need to be considered depending on the issue considered: the geography of alpine ecosystems does not follow that of alpine labour markets, which is again different from alpine cultural regions. The notion of "Alps" is then used as a generic term designating the areas within which specifically alpine social, economic and environmental realities are observed. Their geographical delineation is necessarily fuzzy.

Secondly, the weakness of the alpine level of governance and debates surrounding the legitimacy of existing bodies at the alpine level implies that bottom-up approaches involving regions and local communities are required for the development of alpine strategies. A shared sense of ownership to new measures and regulatory frameworks is a prerequisite for their successful implementation on

Table 8. Possible functions of the Alps

Function of the Alps	Description	Principle	Main challenges
Political lobbying	Identifying shared alpine issues and putting them on the agenda at the national and European levels through joint awareness raising efforts	Actors faced with similar issues reach the critical mass needed to weigh in policy-making processes	A shared understanding of issues, instruments and objectives is required
Horizontal Coordination	When measures adopted in one part of the Alps affect other alpine areas, efforts are made to ensure to take these effects are taken into account.	Local and regional actors become aware of the long-term added value of dialogue with other localities/regions when designing certain types of measures	Selecting fields where coordination is needed and would be cost-efficient; avoid creating complex systems with limited output ("Rube Goldberg machines")
Harmonisation	Developing harmonised regulations and technical solution to facilitate exchanges and flows.	Unnecessary obstacles to cross-border flows and exchanges are eliminated	National regulatory frameworks and administrative cultures may be difficult to overcome.
Transfer of good practices, learning	Drawing inspiration from the ways in which public and private actors in other parts of the Alps deal with specific types of situations	Areas within the Alps face similar or parallel types of opportunities or challenges, making transfers in this context worthwhile.	It may be difficult to take proper account of the framework conditions and unique local characteristics leading to a "success story"
Contribution to European integration	As a transnational grouping of 33 European regions, the Alpine Space Programme contributes to European integration	Regions of the Alpine Space function as one group is some key respects at the European level	Alpine regions share some issues, but not all; the thematic focus of the "alpine group" needs to be clearly identified and communicated
Management of pan-alpine challenges and opportunities	The Alps may be a single "functional region" for some challenges or opportunities calling for public intervention	Public policies are implemented at the transnational level where the challenge or opportunity occurs	Some parts of the Alps may be more concerned than others, e.g. in terms of management of freight flows transiting through the Alps

the long term. At the same time, addressing alpine issues presupposes that one involves a series of actors that are not based within the Alps or the Alpine Space and for which alpine issues may be a peripheral concern. The complex challenge of alpine multilevel governance can only be overcome through gradual change in institutional habits and the progressive construction of appropriate forums of exchange and dialogue. This is one of the reasons for which the expert team expresses scepticism concerning current proposals for an alpine macro-regional strategy to be finalised by mid-2013

4.3. The future of the Alpine Space Programme in the event of an alpine macro-regional strategy

The purpose of the present draft report is not to focus on macro-regional strategies for the Alps; these are only relevant insofar as they influence the strategic options for the Alpine Space Programme in the forthcoming programming period. Irrespective of uncertainties on whether a macro-regional strategy will ultimately be submitted to the European Council, on the form it may take and on whether it will be accepted, it will be important for the Programme to contribute to building solid foundation for pan-alpine governance. The main recommendation of the expert team is therefore for the Programme to focus its efforts on the identification of existing obstacles to the emergence of an effective alpine level of governance and on the promotion of projects designed to overcome them. In other words, the Programme should help constructing the Alpine Space as a meaningful space for policy making. Establishing links and alliances between the different types of alpine territories is in this respect a key objective.

Discussions focusing on solving carefully identified concrete shared challenges may be a favourable option in this respect. This is the initial principle for macro-regional strategies, e.g. in the Baltic Sea where such a strategy has been implemented to solve the problem of eutrophication. A focus on concrete problems, rather than on overall development strategies, contributes to take the focus away from institutional issues while creating a sense of collective achievement on which one may later capitalise for other transnational actions.

Such an approach does not prevail in the current proposals for a macro-regional strategy elaborated by the Alpine Convention and by the alpine Regions. These proposals rather advocate a thematically wide approach to macro-regional strategies, respectively reflecting the scope of Alpine Convention protocols and the range of issues for which coordinated or joint actions would be of added value. This understanding of macro-regional strategies has the advantage of involving a wide range of actors, and creating a dynamic of discussion and exchange between them as they position themselves in relation to alternative macro-regional strategies. However, as has been emphasized by the Association of European Border Areas (see section 1.3), the respective roles of the macro-region and of the Alpine Space Programme remain largely unsettled in such a scenario. The “alignment of funding” around the macro-region would presuppose that the strategy of the ASP follows the same principles and objectives as that of the macro-region. This would imply that the ASP would primarily function as a funding stream for the macro-region.

However, given the profound differences between the regulatory frameworks for macro-regions and for transnational territorial cooperation programmes, it remains unclear how the programme document of the future ASP could be elaborated so as to be fully in line with a possible macro-regional strategy. The more likely scenario is therefore that there would be two parallel European strategies and instruments for the Alpine Space. This would increase the complexity of alpine governance, reduce the visibility of European policies for the Alpine Space and may potentially lead to uncoordinated measures.

These risks would be much reduced if the alpine macro-regional strategy focused on a limited number of "very specific and visible opportunities or problems" (Samecki, 2009). It would then directly concern only a limited number of objectives pursued by the Alpine Space Programme. Furthermore, one could then more easily organise a coordination between the macro-regional strategy and the ASP, which would be one actor among others contributing to its achievement rather than a potentially competing instrument. The division of roles between the ASP and the macroregion would be more clearly established: the macroregion would focus on a limited number of specific, critical issues for which a joint active involvement of regions and states across the alpine States is required; the role of the ASP would be to develop a more holistic long-term strategy, which the projects would contribute to implement.

As has been noted in the report, it appears unrealistic to get a targeted macro-regional strategy that is well-embedded among alpine stakeholders adopted before the end of 2013. A broader macro-regional strategy has clear advantages in terms of triggering dialogue and discussions, but is associated with a number of risks.

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