Strategy Development for the Alpine Space

Final Report
ACKNOWLEDGEMENTS

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Glossary

**Alps** is used generically to refer to different understandings of the alpine area of cooperation and exchange and to the space identified as alpine from different scientific points of view.

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

**Cooperation** means the interaction of protagonists 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 megatrends with a powerful, mostly global or continental impact on general development conditions.

**Fields of intervention** are blocks of issues with a high potential for interregional and thematic (1-2 territorial types affected) development approaches.

**Macro-regional initiatives** result from a commitment of regions and countries to achieving a limited number of concrete targets within a transnational cooperation area. They constitute an initial tentative step towards the adoption of a macro-regional strategy.

**Specific objectives** are the subordinate level of strategic objectives. They provide 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: a hierarchical system of objectives (strategic objectives, and specific objectives) and a set of instruments composed of an instrumental framework and a set of actions.

**SWOT** is an impact analysis technique combining internal analysis to identify strengths and weaknesses and external analysis to extract opportunities and threats as an impact of 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 certain particularly significant patterns or trends. The objective is to distinguish between territories where different strengths, weaknesses, opportunities and threats can be identified or foreseen.

**Thematic objectives** are the eleven goals proposed by the European Commission as a basis for the thematic concentration of cohesion policy (see Text box 1 p. 33).
### List of acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>AdaptAlp</td>
<td>Adaptation to Climate Change in the Alpine Space</td>
</tr>
<tr>
<td>AEBR</td>
<td>Association of European Border Regions</td>
</tr>
<tr>
<td>Alparc</td>
<td>Alpine Network of Protected Areas</td>
</tr>
<tr>
<td>Alpe-Adria</td>
<td>Alps-Adriatic Working Community</td>
</tr>
<tr>
<td>ARGE ALP</td>
<td>Arbeitsgemeinschaft Alpenländer / Association of Alpine States</td>
</tr>
<tr>
<td>ASP</td>
<td>Alpine Space Program</td>
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<tr>
<td>BSR</td>
<td>Baltic Sea Region</td>
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<tr>
<td>CAA</td>
<td>Club Arc Alpin</td>
</tr>
<tr>
<td>CIPRA</td>
<td>International Commission for the Protection of the Alps</td>
</tr>
<tr>
<td>ClimAlpTour</td>
<td>Climate Change and its Impact on Tourism in the Alpine Space</td>
</tr>
<tr>
<td>ClimChAlp</td>
<td>Climate change, impact and adaptation strategies in the Alpine Space</td>
</tr>
<tr>
<td>CLISP</td>
<td>Climate Change Adaptation by Spatial Planning in the Alpine Space</td>
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<tr>
<td>EAFRD</td>
<td>European Agricultural Fund for Rural Development</td>
</tr>
<tr>
<td>EEA</td>
<td>European Environmental Agency</td>
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<tr>
<td>EGTC</td>
<td>European Grouping of Territorial Cooperation</td>
</tr>
<tr>
<td>EMFF</td>
<td>European Maritime and Fisheries Fund</td>
</tr>
<tr>
<td>ERDF</td>
<td>European Regional Development Fund</td>
</tr>
<tr>
<td>ESDP</td>
<td>European Spatial Development Perspective</td>
</tr>
<tr>
<td>ESF</td>
<td>European Social Fund</td>
</tr>
<tr>
<td>ESPON</td>
<td>European Observation Network for Territorial Development and Cohesion</td>
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<tr>
<td>ETC</td>
<td>European Territorial Cooperation</td>
</tr>
<tr>
<td>FUA</td>
<td>Functional Urban Area</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GEOSEPS</td>
<td>ESPON project on Geographic Specificities and Development Potentials in Europe</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>IEA</td>
<td>International Energy Agency</td>
</tr>
<tr>
<td>IPCC</td>
<td>International Panel on Climate Change</td>
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<td>ISCAR</td>
<td>International Scientific Committee on Research in the Alps</td>
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<tr>
<td>MANFRED</td>
<td>Management strategies to adapt Alpine Space forests to climate change risk</td>
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<tr>
<td>MARS</td>
<td>Monitoring the Alpine Regions' Sustainability</td>
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<tr>
<td>MONTIRAF</td>
<td>Monitoring of Road Traffic related Effects in Alpine Space and Common Measures</td>
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<td>MRS</td>
<td>macro-regional strategies</td>
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<td>NENA</td>
<td>Network Enterprise Alps</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>NUTS</td>
<td>Nomenclature of territorial units for statistics</td>
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<tr>
<td>OT</td>
<td>Opportunities, Threats</td>
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<tr>
<td>PACA</td>
<td>Provence-Alpes-Côte d'Azur</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>REGALP</td>
<td>Regional Development and Cultural Landscape Change: The Example of the Alps</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprise</td>
</tr>
<tr>
<td>SW</td>
<td>Strengths, Weaknesses</td>
</tr>
<tr>
<td>SWOT</td>
<td>Strengths, Weaknesses, Opportunities, Threats</td>
</tr>
<tr>
<td>TEN</td>
<td>Trans-European Transport Network</td>
</tr>
<tr>
<td>TRACC</td>
<td>Transport accessibility at regional/local scale and patterns in Europe</td>
</tr>
<tr>
<td>WEO</td>
<td>World Energy Outlook</td>
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</table>
Executive summary

The aim of the Alpine Space strategy development project is threefold

(1) elaborate a long-term strategic orientation
    and help identify priorities for the Alpine Space,

(2) pave the way towards a future Alpine Space Programme (ASP)
    in the period 2014-2020 by identifying key priorities and strategic orientations,

(3) contribute to the debate on a possible macro-regional strategy for the Alps,
    investigating whether there are topics and stakeholder support which call for a broader
    European perspective within a macro-regional strategy.

It was carried out by a team of six experts from the different alpine countries, in close cooperation
with the Alpine Space Managing Authority, Joint Technical Secretariat and a Task Force composed of
representatives from the Programme Monitoring Committee. As part of the process, an extensive
stakeholder dialogue was organised, with workshops in all alpine languages and an online survey.
However, the present report is published under the sole responsibility of the team of experts.

The specificities of the alpine framework for policy-making stem both from the territorial
characteristics of the Alps, and from the diversity of the existing alpine organisations for
transnational cooperation and dialogue. In terms of its geography, the Alpine Space is composed of a
core area that corresponds to the perimeter of the Alpine Convention and of a number of piedmonts
and adjacent regions. Topographical constraints have generated a space with marked contrasts in
terms of economic development, sociodemographic trends and cultural patterns. At the same time,
the unique landscape qualities of the Alps, the exceptionally well-developed tourism industry, the
water resources and their potential for renewable energy production are all likewise linked to alpine
topography.

The numerous alpine cooperation bodies approach the Alps in different ways, e.g. as a bioregion, as
an area with conditions for economic development, as a leisure area and as a border region. These
different understandings of the Alps are associated with different expectations with regards to alpine
cooperation, as shown by the stakeholder dialogues. To function as a promoter of alpine policy
development and of pilot actions, an alpine strategy needs to relate to this diversity of approaches.

As mentioned above, the project addresses two main instruments:

- The Alpine Space Programme, which is about to enter its third programming period. Like all
  Territorial Cooperation programmes, it functions within the framework of regulations and
  administrative procedures of the European Union; its project-based mode of operation based
  on calls for tender also limits the extent to which it can act strategically. However, it is
described as one of the most successful European programmes and is actively seeking to
promote strategic policy development and stakeholder dialogues in the Alps. While its
impact is characterised as mainly “intangible”, the numerous projects have generated a
wealth of knowledge, ideas and suggestions that call for further implementation.
Macro-Regional Strategies (MRS) have been implemented in the Baltic Sea and Danube Region. The European Council has also asked the Commission to elaborate an MRS for the Adriatic-Ionian Sea. While this push for Macro-Regional Strategies is sometimes described as a European “buzzword” or “fashion”, it has stimulated cross-sectoral dialogue and a more direct regional commitment to transnational cooperation in some instances. In the Alpine Space, the macro-regional initiatives of the Alpine Convention and of the alpine regions have been accompanied by extensive discussions and reveal a widely shared enthusiasm for this idea. However, both initiatives illustrate the difficulty of agreeing on priorities and targets within the wide field of “important issues for the Alps”.

The strategic objectives proposed by the team of experts are based on a synthesis of empirical evidence on patterns and trends in the Alpine Space. The starting point of this analysis is twofold:

- Six driving forces, considered as the main external determinants of local and regional development processes in the Alps
  - climate change;
  - tensions on the energy market;
  - economic globalisation;
  - increasing emergence of an information society and a knowledge economy;
  - sociodemographic change,
  - increased mobility of goods and persons.

- Five types of territories, associated with typical socio-economic challenges and opportunities:
  - Alpine metropolises
  - Alpine cities
  - stable or growing rural areas
  - declining and shrinking rural areas
  - tourism areas

The SWOT analysis is based on a cross-analysis of these driving forces and territorial types, and on a system of 15 policy-making fields (see Figure 3 p. 44). The resulting matrix of 72 opportunities and threats was consolidated with a view to identifying the most strategic issues, linking different territorial types and with a high cooperation potential. This method led to the identification of 20 fields of intervention, which through a cluster analysis made it possible to identify six strategic objectives. Each of these objectives is described in terms of a state towards which the Alpine Space should strive:

- Objective 1: Balance and equity in access to services of general interest across the Alps
- Objective 2: A dynamic and innovative SME sector and thriving entrepreneurship
- Objective 3: Enhanced capacities based on alpine traditions and social diversity
- Objective 4: Sustainably managed biodiversity and landscapes
- Objective 5: Sustainable resource management and production
- Objective 6: Shared responsibilities and fair co-operation among alpine territories
The rationale for the selection of these strategic objectives is therefore a combination of their importance for the balanced development of alpine regions and the relevance of the transnational level to address each of them. Series of “specific objectives” proposed under each “strategic objective” provide suggested directions for policies that would be implemented to pursue them. As such, the proposed strategic and specific objectives fulfil the first of the three missions assigned to the project.

In view of addressing the two other dimensions, “paving the way towards a future Alpine Space Programme” and “contributing to the debate on a possible macro-regional strategy for the Alps”, these two alpine policy instruments are put into perspective together with the Alpine Convention. This overview demonstrates that none of the organisations meet all requirements to achieve the strategic objectives presented in this study and that they would need to function in a more cooperative and integrated way.

Overcoming these organisational challenges requires that one solves a “catch-22” type of situation. Strategic objectives can only meaningfully be adopted once the organisational issues have been solved; at the same time, organising a convergence between the main alpine policy frameworks and a possible macro-region appears to be difficult without an a priori agreement on a policy platform or shared purpose. The report makes a series of proposals to overcome this situation.

First, a series of principles of action are proposed as a starting point for discussions. These principles encompass a shared value basis for alpine cooperation, including notions such as sustainability and resilience, territorial cohesion, equity, cultural diversity and social solidarity. However, they also include so-called “implementation principles” which identify the transnational dimension and alpine relevance of general principles for public interventions designed to contribute to more balanced and sustainable development. Together, these principles offer a basis for identifying the overarching purpose and added-value of transnational alpine cooperation.

Second, a stepwise approach to an alpine macro-region is suggested. Broad macro-regional strategy covering a number of fields without clear priorities and targets, such as those previously advocated by the macro-regional initiatives of the Alpine, are unrealistic on a short to medium turn and unlikely to lead to concrete results. Instead, an alpine macro-region should in a first phase be focused on a limited number of issues, for which concrete and time-bound targets should be identified. The main priority is not to establish a shared overarching strategy for the Alps but to mobilise alpine regions and countries around some key objectives for which they are prepared to fund joint actions. The objective is to create a sense of common achievement, which can later be capitalised upon with a view to progressively constructing a broader macro-regional strategy.

The Alpine Space Programme projects have identified a number of issues and concrete suggestions on which an alpine macro-region could focus its efforts in this first phase. The macro-region could therefore function as a framework for the implementation of transnational measures of which the programme has shown the necessity, but for which it does not itself provide the adequate organisational and financial framework. However, the starting point for an alpine macro-region is a political agreement between alpine states, regions and organisations and a commitment to address certain issues jointly.
An advantage of the stepwise approach is that it makes it possible to make a “limited-scale test” of the commitment of alpine stakeholders to joint concrete actions and their cooperation in a macro-regional context before establishing a fully-fledged strategy. This implies that one should bear in mind the possible future evolution of the macro-region from a “targeted initiative” to a possible “broad strategy” when setting up its organisational framework. It may be organised as a “European Grouping of Territorial Cooperation” (EGTC). It appears important that the experience and competence accumulated by persons currently involved in the management and technical support of the Alpine Space is mobilised when setting up such a macro-regional initiative.

The objectives of the macro-regional pilot initiative would therefore be:

- To demonstrate the shared political commitment of alpine regions to jointly pursue some shared objectives and targets at the alpine level;
- To coordinate European, national and regional funding sources in the pursuit of these objectives and targets;
- To create a sense of common achievement among the alpine protagonists involved;
- To bring together alpine organisations, local, regional and national authorities around some key opportunities and challenges for which an clear added value can be identified;
- To progressively pave the way for a wider and more ambitious alpine strategy, solidly based on the commitment of the alpine regions and of other relevant protagonists.

In this context, the Alpine Space Programme would continue to carry the dialogue on overall alpine strategy forward, taking it from a “targeted macro-regional initiative” to a “fully fledged macro-regional strategy”. It therefore appears all the more important for the programme to combine three types of functions:

- Trigger and fund actions within a limited number of fields, considering the regulatory framework to be adopted for European Territorial Cooperation;
- Provide input to debates on the long-term strategy for the Alpine Space, that are necessarily based on a comprehensive approach to alpine development;
- Be a catalyst of improved cooperation and coordination among alpine-related protagonists, bridging policy sectors, stakeholders and territories both within and outside the Alpine Space.

These three functions feed into each other: being active within networks of alpine protagonists will help generating projects that contribute to the achievement of the strategic objectives; long-term strategy development presupposes a wide dialogue with alpine protagonists and stakeholders; actions to be supported are selected on the basis of a comprehensive strategy for the Alpine Space. However, they presuppose different modes of interaction with external stakeholders and geographical scopes of action. To preserve the coherence of the programme and strengthen its external visibility, a clear rationale for how these different functions would co-exist and interact is required.
Introduction

The partner states of the Alpine Space programme launched a strategy development process in May 2011 as a result of an internal programme revision process and discussions concerning a possible alpine macro-regional strategy. A group of experts was appointed in August 2011 and started meeting in the fall of the same year. The present report presents the outcomes of this group’s analyses and reflections.

A consultation process was organised on the basis of a draft version of this report during the fall of 2012. A series of workshops was organised in the different alpine languages. Furthermore, an online survey was conducted in November and December 2012 in which over 700 stakeholders participated. The report has greatly benefited from the inputs of the workshops and survey participants, as well as from regular exchanges with members of the programme committee. However, the opinions expressed here are solely those of the authors and do not necessarily reflect the views of the Alpine Space Programme partner states or of the members of the monitoring committee.

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, and establishing whether 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 orientation but cannot be based upon 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 protagonists, 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 protagonists or that would have been carried out by them if the Alpine Space had not done so. Such considerations are complex and partly speculative, as they are based on hypotheses on alpine-related 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 as measured within different action fields, but it does not go so far as to carry out such an assessment.
The strategic objectives, action fields and actions, and the examples of cooperation identified by the team of experts for the Alpine Space Programme in the next programming period are based on the involved experts’ general knowledge of strategies of alpine-related protagonists, on exchanges that took place during the workshops mentioned above and on inputs from the survey. Their elaboration has furthermore been enriched by discussions with a task force composed of programme partners, by desk research and by interviews with other experts.

The strategy development process

In its contribution to debates on the alpine macro-regional strategy, the team of experts 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 with a view to producing the present report. As a first step, chapter 1 describes the alpine level of reflection and action for balanced territorial development. A number of strategies and cooperation areas exist in the Alps. Each of them is based on a delineation of an alpine cooperation area and an understanding of its added value. It is important to take this diversity of approaches and understandings of the Alps into account when developing a strategy. While mountain topography has created constraints and opportunities for social, economic and environmental development, the analyses of these specificities does not lead to the identification of a “naturally given” territorial context or rationale for alpine policies. 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 achieve 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.

Chapter 2 presents the European policy context for alpine strategy development. Two components are considered: The first of these, the European Commission legislative proposals for Cohesion Policy 2014-2020, are 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.

Secondly, macro-regional strategies (MRS) in Europe are considered. Two such strategies are currently in progress, in the Baltic Sea and Danube regions. Evaluation reports are due during the summer of 2013. An additional strategy for the Adriatic-Ionian Sea is being elaborated by the European Commission at the request of the Council. This remains a new instrument whose principles of functioning are not fully defined, especially with regards to its interaction with European Territorial Cooperation programmes. Alpine stakeholders can contribute to discussions on how it could be of added value, based on past achievements of cooperative initiatives in the Alps and on challenges that need to be overcome to pursue these efforts in coming decades. The Alpine Convention and the alpine regions have produced inputs to debates on an alpine macro-regional strategy.

The empirical analysis (chapter 3) is organised around a SWOT analysis, identifying Strengths, 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 studies available. Secondly, the team of experts 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 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 to transnational cooperation in the Alps.

A clustering of these fields of intervention, informed by stakeholder dialogues and more qualitative assessments of priorities for the Alpine Space makes it possible to propose a list of six strategic objectives (chapter 4). These objectives are also related to the Europe 2020 strategy. Each of these objectives is described in terms of its justification considering the present situation, and of the state towards which the Alpine Space could strive through appropriate measures. A number of specific objectives are listed under each strategic objective. They describe key measures to be taken at the alpine level to this end.

On this basis, the team of experts proposes recommendations for 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. These are based on an overview of different instruments for alpine strategies and proposals for certain principles of action that can guide the elaboration of actions at the alpine level. On this basis, perspectives for an alpine macro-regional strategy are proposed, emphasizing the active role the Alpine Space Programme could play in this process.
Figure 1. Overview of the strategy development process
1. The alpine framework: territories and strategies

The objective of this chapter is to illustrate different understandings of the Alps and rationales for alpine cooperation (section 1.1). This provides a backdrop against which an alpine strategy will be identified.

From the point of view of physical geography, 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 that identify with the Alps and consider 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, for most alpine inhabitants (economic protagonists, elected representatives, institutions and other organisations), the primary functional and political context 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.

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. In 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.

1.1. Several territorial strategies and cooperation areas

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

\(^1\) 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 different understandings of the alpine area of cooperation and exchange and to the space identified as alpine from different scientific points of view. The term “alpine core area” describes the areas with a distinctly mountainous character, also corresponding to the perimeter of the Alpine Convention.
regions, such as the Austrian, Swiss, Italian, German, French and Slovenian alpine associations that were established even earlier, respectively in 1862, 1863 (Switzerland and Italy), 1869, 1874 and 1893. Even if they are not necessarily focused 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 protagonists who seek to work on the Alps and to promulgate 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 protagonists. CIPRA also contributed to the drafting and signing of the Alpine Convention, which broke new ground as a legally binding agreement through which all alpine countries recognise the common challenges of the Alps as a transnational mountain area. Admittedly, commentators have noted that the Convention 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). However, 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 protagonists concerned with having a say in the matter”. CIPRA has been instrumental in this process, e.g. through its contribution to the creation of the Alliance in the Alps, the Alpine Town of the Year and Network Enterprise Alps (NENA). CIPRA and the Alpine Convention have thus established their position as promoters of bottom-up dynamics encouraging the participation of alpine citizens in projects designed to preserve the quality of alpine natural environments. The Alpine Convention’s 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 appropriateness for the success of alpine policies. In many respects, the ways in which processes lead to the adoption of measures and actions can be more important than the measures or actions themselves.

Table 1 includes a selection of pan-alpine initiatives which presents a succinct description of the way in which the notion of “Alps” is understood. 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 crossroads of multiple influences. This in turn creates a series of unique potentials and challenges in the context of European integration.
The “Cooperation ideas” and “Principles of Cooperation” listed in Table 1 are correspondingly diverse. The Alparc initiative vividly demonstrates that the notion of “Alps” has different functions within a given theme. Alparc supports exchanges of 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. So the underlying idea is that the Alps are a form of “ecologically 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 stakeholders which can be capitalised upon in transnational projects. 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 geographical, cultural and social identities (e.g. INTERREG France-Suisse, 2007, ALCOTRA, 2007).

It is necessary to combine these different understandings of the Alps if the objective is to adopt a holistic perspective vis-à-vis alpine territorial development. These points will be further developed in the strategy proposal. However, the formulation of a strategy could gain in clarity and efficiency if their differences and interrelations were more clearly highlighted. 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 with a view to developing a sense of ownership to the resulting policy outcomes.

It is also important to bear 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 a few examples of alpine transnational organisations federating grassroots local and regional protagonists. Alliance in the Alps may be considered an example of such a bottom-up network involving local authorities that aims 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 which take 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 primary objective of a strategy for the Alps 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)*

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Understanding of the Alps</th>
<th>Cooperation idea</th>
<th>Principle of Cooperation</th>
<th>Current added value for the Alps and broader area</th>
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<tr>
<td>CIPRA, International Commission for the Protection of the Alps</td>
<td>NGO</td>
<td>Focus on the Alps as a living environment with which the alpine population identifies</td>
<td>Connecting the activities of different stakeholders</td>
<td>Information platform and discussion forum, serving as a marketplace of knowledge about the Alps, cooperation with other Alpine Space initiatives</td>
<td>Discussion forum, reports, wide range of concrete actions initiated.</td>
</tr>
<tr>
<td><a href="http://www.cipra.org/">http://www.cipra.org/</a></td>
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<tr>
<td>Alpine Town of the Year</td>
<td>Award, association</td>
<td>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</td>
<td>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 has co-operated with the Permanent Secretariat of the Alpine Convention.</td>
<td>Increased visibility for alpine towns and cities. Enhanced dialogue between alpine towns and cities. Promotion of urban sustainable development in the Alps.</td>
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<tr>
<td><a href="http://www.alpenstaedte.org">www.alpenstaedte.org</a></td>
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<tr>
<td>Alpine Convention</td>
<td>International treaty, regular meeting of a political decision-making body supported by a permanent secretariat and working groups/platforms.</td>
<td>“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”</td>
<td>Sustainable and prudent use of resources, applying the principles of prevention (the “polluter pays” principle), pursues the preservation and protection of the Alps through commitments and obligations and the adoption of shared sets of regulations.</td>
<td>Conservation of natural and cultural diversity and the use of natural resources in an economic way, without negative consequences for future generations, based on eight protocols and 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)</td>
<td>Provides a basis for argumentation and discussion. Has made obvious the need for a pro-active approach to multilevel and cross-sectoral governance of alpine issues.</td>
</tr>
<tr>
<td>Alliance in the Alps</td>
<td>Network of nearly 300 municipalities from seven countries</td>
<td>Applying the principles of the Alpine Convention at the local level, where its individual members are given the opportunity to develop their environment and take part in initiatives and projects.</td>
<td>Offers a sharing of experience and information beyond the boundaries of language and culture</td>
<td>Common concrete activities with a wide array of initiatives and programmes in the Alpine Space (at the local, regional and transnational level)</td>
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<tr>
<td>Name</td>
<td>Type</td>
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<tr>
<td>Alparc</td>
<td>Alpine Network of Protected Areas</td>
<td>Alps defined as a biogeographical region, but also references to linguistic heritage, craftsmanship and collective imagination.</td>
<td>Facilitating exchange between the alpine parks, nature reserves, biosphere reserves, tranquility zones and many other kinds of protected areas.</td>
<td>Exchange ideas on the practices, know-how and experience of the personnel working in protected areas.</td>
<td>- 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.</td>
</tr>
<tr>
<td>Alpine Space Programme 2007-2013 (<a href="http://www.alpine-space.eu">www.alpine-space.eu</a>)</td>
<td>Transnational European Territorial Cooperation Programme</td>
<td>Defined - by topographic criteria (mountainous areas or “alpine core”) and surrounding foothills and lowlands - as a meeting point of cultures and languages</td>
<td>Promotes sustainable regional development Three priorities: Competitiveness, Accessibility and Connectivity, and Environment and Risk Prevention.</td>
<td>Partners from the seven alpine countries work together, covering whole area of the Alps and many adjacent territories</td>
<td>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.</td>
</tr>
<tr>
<td>International Scientific Committee on Research in the Alps (ISCAR)</td>
<td>Alpine research body; official observer of the Alpine Convention</td>
<td>Primarily approached as an ecoregion</td>
<td>Promote research on topics of relevance to the Alps and in the interest of the Alpine Convention</td>
<td>Agreement between seven research organisations in the Alps and working on alpine relevant issues</td>
<td>Scientific support to the Alpine Convention, (monitoring and scientific integrity), result dissemination.</td>
</tr>
<tr>
<td>Name</td>
<td>Type</td>
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<tr>
<td>ARGE ALP - Arbeitsgemeinschaft Alpenländer (<a href="http://www.argealp.org/">http://www.argealp.org/</a>)</td>
<td>An association of 9 Länder, provinces, regions and cantons of Austria, Germany, Italy and Swiss</td>
<td>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.</td>
<td>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.</td>
<td>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)</td>
<td>Discussions, conferences, awareness-raising events, projects, studies.</td>
</tr>
<tr>
<td>Club Arc Alpin (CAA) (<a href="http://www.club-arc-alpin.eu/index.php">www.club-arc-alpin.eu/index.php</a>)</td>
<td>Association</td>
<td>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</td>
<td>Alpinism / mountaineering</td>
<td>Connecting national alpine clubs</td>
<td>National alpine clubs are influential protagonists in national policy debates. The Club Arc Alpin has started the process of federating their positions at the transnational level.</td>
</tr>
<tr>
<td>Name</td>
<td>Type</td>
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</table>
| Alpe-Adria               | Working community bring together 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 “coherent geographical basis” that justifies the cooperation (together with the contact with the Mediterranean Sea) | Strengthening links between citizens, socio-economic protagonists, 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 areas 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 local and regional stakeholders involved |
Alpine geographies from a strategic perspective

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, potentially clarifying the interpretations of the institutional protagonists that produce them, and they are needed as soon as one seeks to use quantitative evidence to support policy development.

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.

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\(^2\) The EEA data describe a series of mountainous areas in Europe as belonging to the “Alpine biogeographical 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-related issues - illustrates the multiple meanings of the notion of “alpine neighbourhood”, e.g. including all or parts of Bavaria. The subdivision of the Alps into 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) is a relevant example of the differences between geographical structures and cooperation areas. All cooperation areas encompass several river basins and all river basins are wider than a give cooperation area. These differences 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 the relevance of pan-alpine measures, as compared to strategies focusing on individual alpine river basins.

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 to 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 may be considered to be “functional areas” for water-related issues.
Finally, the Alps are a barrier to flow, functional integration and 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) makes it possible to further increase the flow of persons and goods along these corridors and to increase 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 transport infrastructure of sufficient quality and capacity to allow for functional integration. This is particularly visible along national borders in the alpine core area: areas within daily mobility to the border within the alpine core area are very narrow.

**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, on the one hand, and the rest the Alpine Space area and adjoining regions, on the other. This suggests that cross-border cooperation functions as a vector of transnational integration in the Alpine Space to a lesser extent than in other parts of Europe without corresponding physical obstacles to flow patterns.

The Alps are delineated using the perimeter of the Alpine Convention in this map.
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 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 to the development of alpine transnational cooperation.

Conclusions

These considerations on the specificity of alpine accessibility patterns and on the different geographic boundaries for alpine cooperation are not new. However, they remain important both when considering strategic perspectives for the Alps and as an input to current debate on an alpine macro-region. 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 constraints 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 an “area with fuzzy boundaries”, where each type of issue should be dealt with in different types of geographical context.

However, it is not sufficient for a strategy to take into account the spatial configuration of settlements, economic activities, flow patterns and ecosystems. A strategy necessarily also relates to alpine stakeholders’ diverse understandings of the Alps and a wide range of ideas as to 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 pilot actions, an alpine strategy needs to relate to this diverse range of approaches.
1.2. Alpine Space Programme perspectives: strengthening the strategic vision and long-term impact

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 insight 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 Alpine Space Programme is an initiative of the European Union and of the Member States, to which regions, local authorities and other alpine protagonists are invited to participate with both project ideas and co-financing. The Alpine Space Programme has also produced various studies, e.g. the Alpine Space Prospective Study (2005), as well as organising 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 (Bausch et al., 2005).

The current Alpine Space Programme engaged in a revision process in 2009, as a response to three 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 Alpine Space Programme was carried out in 2009-2010 (Schneidewind et al., 2010). This study and the ensuing discussions demonstrated that, as a funding-driven programme, the Alpine Space Programme 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 selection tends to be disconnected from strategic considerations at the programme level. However the Alpine Space Programme provides good opportunities for networking and sharing experience. Three main benefits of the programme are highlighted: exchange of knowledge, strengthening of networks, and development of new contacts. At the present stage, the assessment of projects is mainly based on
output with a view to results, but the success of the programme will, in the long run, depend on the impact of project activities. In general, any long-term impact is not yet tackled by the project. The main question is the missing link between programme and project objectives. One of the challenges for the Alpine Space Programme 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 strategy development. The above-mentioned prospective study commissioned by the Interreg IIIB Alpine Space programme (Bausch et al., 2005) identified the need for a visioning process involving all relevant stakeholders. These authors emphasized that a vision cannot be expert-based but that it is a “matter of consensus-building” involving the “the real institutional and socioeconomic decision-makers at stake”. This has not yet been carried out and does not seem realistic in the immediate future. The review process therefore more modestly aimed to help improve the coherence between strategic objectives at the programme level and the activities of individual projects, without seeking to construct an overarching vision as a framework for these objectives.

The Alpine Space Programme strategy revision process also concluded that it would be necessary to enhance programme quality. An initial strategy in this respect was to shift from output orientation (i.e. focus on what project protagonists have done), to impact orientation (i.e. focus on the repercussions of the project outside its organizational boundaries). Impact orientation is much more difficult to access and would require a different approach to project generation and project presentation as well as assessment. Considering that the success of the programme will in the long run depend on the impact of project activities, a new approach to project appraisal seems to be 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 impact is not necessarily measurable and certainly not within the timeframe 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).

With a view to 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” (see Figure 2 p. 28), which allows for a better understanding of the potential impact to be expected of 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 of projects 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-year 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 type, the programme improves its capacity to achieve its strategic ambitions. The focus of programme management is shifted from reaction to results and impact.

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: the impact of a “type 1” project (strategic policy development) is 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 scenarios) and testing them. The impact of these projects is mostly intangible, i.e. limited to raising awareness on topical issues and exchange expert knowledge across Alpine borders. However, depending on the focus of the strategy and the thematic fields, a limited tangible impact was observed in some regions. Unsurprisingly, the third type of project, which focus on policy implementation through fully developed instruments, has the most tangible impact. Policy implementation for example implies the development of legal or planning instruments such as regulations and laws with a transnational character.

Source: Schneidewind et al. (2010)

Figure 2. The policy cycle
The challenge is both to make the limited tangible impact visible and to ensure that stakeholders understand the potential added value of the intangible impact in terms of the prospective long term development 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 Alpine Space Programme is not merely a funding stream, but carries a number of objectives. One of the difficulties of establishing such an identity is the position of the programme between the European, national and 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.

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. These workshops, which involved both an external audience and project partners, are an important achievement of the Alpine Space Programme in the current period. 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 protagonists, institutions and organisations involved in Alpine Space Programme activities are not a representative sample of alpine local and regional communities taken as a whole. While it is not an objective of the programme to be all-encompassing, reflections could be initiated to identify alpine-related protagonists with whom further interactions would need to be developed.

Conclusions

The review of achievements and strategy of Alpine Space Programme shows that the impact is mostly intangible. 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 effects appears to be the main priority. Overcoming the identified gap between programme and project level should, for this reason, form 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 achieve specific targets and outputs.

This general objective has implications both in terms of overall programme design and 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 protagonists. 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 a protagonist-mapping exercise is carried out once these 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 protagonists and beneficiaries. The present programme’s workshops and other discussion events provided the opportunity to present and discuss experiences and results of existing or past projects in relevant topics and to point out the main challenges faced by future projects. Potential partners and invited political stakeholders were offered the chance to share ideas on mutual expectations and to generate strategic projects. This experience may be capitalised upon in the forthcoming programme.
2. European perspectives: cohesion policy and macro-regional strategies

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 cooperation 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 this section is to identify the elements of the current policy context which the strategy development process needs to relate to. The focus is on the prevailing types of discourse on harmonious territorial development and their implications for alpine territories.

The European policy-making context for strategy development in the Alpine Space is composed of a number of elements belonging to different Institutional frameworks and located at different programming levels. It is not possible to fully reflect this complexity of frameworks and levels, but some key aspects of relevance to 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. They were discussed by the Council and European Parliament through 2012 with the aim of a final adoption in 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 responsibility 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 regard to Territorial Policy. Significantly, the Green Paper on Territorial Cohesion, published by the European Commission in 2008 and the impetus 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 to the design of strategies for the Alps.

- **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 Europe 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 Europe 2020 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 would need to be agreed upon. These priorities would have 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) and governance (1 objective).

For each of the objectives, 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 protagonists 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 replace national or regional funding (the so-called principle of “additionality”). 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.


| (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 programme 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” (European Commission, 2012d, part II (annex 2), p. 41). If one applies this suggestion literally, this would imply that 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 into 11 fields and focusing on the effect and impact 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 on the proposed regulation of 24 May 2012 this list is criticised for “not reflect[ing] the specificity of 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 results-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, measures of achievement require 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 furthermore presupposes a pro-active approach to project generation and a more detailed follow-up of individual project achievement.

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 on changes in these indicators and to evaluate impacts.

Considering the extent of these challenges and limitations, it appears that while a shift from “process” to “results orientation” in European Territorial Cooperation may be informed by quantitative evidence policies, it is by no means guaranteed by the production of output and outcome indicators. Such a shift requires more profound revisions at all levels of the policy design and implementation, e.g. by reflecting on how an Alpine Space Programme and an alpine macro-regional strategy could complement each other.
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 to explore 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.

European guiding principles: proven added value and subsidiarity as a key for macro regional strategy

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 experience: from a specific maritime issue to a wider strategy

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 the strategy also opened up 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 key challenges identified. However, it later appears that this thematic focus was 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 experience: no specific focus but a wide strategic perspective

The Danube Region has not had a distinct thematic focus from the outset. 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 “stresse[d] 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). The European Commission and the European Council therefore observe a change of focus towards broader macro-regional strategies, built on the conviction of regions and member states involved that transnational cooperation will make them better equipped to face economic, social and environmental challenges.

The Adriatic-Ionian initiative: macro-regions as an instrument for Integrated Maritime Policy and a framework for neighbourhood policy

The European Council of December 14th, 2012 asked the European Commission to elaborate a proposal for a new macro-regional strategy for the Adriatic-Ionian Region before the end of 2014. The strategy therefore does not yet formally exist. However, as one of the main proponents of this strategy, the Italian government puts forward maritime cooperation, infrastructure projects and energy initiatives as the themes to be addressed in this framework. In addition, macro-regional cooperation is explicitly described as a means to encourage a process that should ultimately lead to the inclusion of the Western Balkans in the European Union. In documents produced by the European Commission before the Council resolution, the Adriatic Ionian macro-regional strategy is primarily approached as an instrument to expand and deepen the Integrated Maritime Policy in this sea basin, based on four pillars: “Maximising the potential of the blue economy”, “Healthier marine environment”, “A safer and more secure maritime space” and “Sustainable and responsible fishing activities” (European Commission, 2012e). A wide thematic focus therefore prevails within the framework of maritime policy.

A diluted initial logic but an emerging concept of the “functional macro-region”

Such trends imply 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 amidst a broader background that also needs policy action (Bengtsson, 2009), macro-regions would seek to improve the perspectives of achieving the pan-European objectives of the “Europe 2020” strategy and become instruments of
European integration. This makes it more important to justify why strategies and actions at the macro-regional, transnational level are needed. Indeed, when macro-regions are 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 broad 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, 2012a).

The notion of a “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 [i.e. different boundaries] in the definition of the macro-regional scales”. Macro-regions therefore tend to have fuzzy boundaries with a view to adapting the actions to the spatial extent of the different issues it addresses. Such a flexible approach, however, presupposes a detailed understanding of the geography of stakeholder interactions and territorial processes within each thematic field, if the functional approach is to be anything but a pipe dream.

“Three no’s” vs. “three yes’s”: debates over the European support to macro regional strategies

The concept of the “three no’s” 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” (Samecki, 2009), 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 has voiced the opinion that there should also be “three yes’s”, 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 yes’s rule’: more complementary funding, more institutional coordination and more new projects” (European Council, 2011). More generally, even if the “three no’s” 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). Furthermore, article 6 (2) of the European Commission’s proposal for a regulation for the support from the European Regional Development Fund to the European
territorial cooperation goal (European Commission, 2011c) suggests that the “development and implementation of macro-regional [...] strategies” should be one of the thematic objectives of transnational cooperation programmes. It is thus foreseen that Transnational Cooperation Programmes such as the Alpine Space Programme could actively contribute to a macro-regional strategy.

It is therefore not surprising that fears are voiced in other parts of Europe of more limited funding should macro-regional strategy not be adopted. 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 appropriate instrument to address identified territorial challenges and opportunities. 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 ensure 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, for example, 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 is lost. Considering that macro-regional strategies have a significant cost to stakeholders involved, as emphasized by the DG REGIO senior adviser David Sweet (Sweet, 2010), it will be important to assess whether the game is worth the candle.

A working definition of macro-region strategies

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

1. With regard to content
   - Joint challenges need to be identified;
   - A thematic focus and priorities need to be agreed upon;
   - Targets with measurable output need to be defined.
2. With regard to the three no's (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;
- 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 six 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 the 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 the direction of a macro-regional strategy could be to make an assessment of the relevance of these difference tensions for the Alpine Space and, if 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 of such a broad 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 timeframe, which implies that proposals for macro-regional strategies would need to be finalised by the end of 2013, does not allow for such a process.
Current approaches of alpine macro-regional strategy

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

- 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 MRS. 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, the 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 9\(^{th}\), 2012 and adopted on June 29\(^{th}\), 2012 (Arge Alp, 2012). This roadmap initially proposes four concepts of the Alps, as an area for transport planning, as an energy production region, as a link between Northern and Southern Europe and as a “water tower”. However, the roadmap description of objectives and measures addresses most 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 have been 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 this 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.

\(^4\) 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 14\(^{th}\), 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 regions involved were Provence-Alpes-Cote d’Azur, Rhône-Alpes and Franche-Comte (France), the states of Bavaria and Baden 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.
2.3. Conclusions: alpine strategy development as an interactive and creative process

Considering an alpine strategy, the question will be whether to focus it on a limited number of key issues or to set it a broader set of issues made coherent by the alpine territorial frame.

Strategies for the Alps cannot be developed independently of alpine stakeholders’ diverse understandings of the Alps and the wide range of ideas as to how and why transnational cooperation in the Alps would be of added value. This integration of protagonists’ perspectives has been part of stakeholder dialogues.

One of the alpine strategy’s roles is to bridge these local, regional and national perspectives on the Alps and strategic priorities elaborated at the European level. Continued efforts to promote the dialogue between alpine protagonists, to raise awareness on alpine issues and to propose solutions at the alpine level may progressively help overcome the diversity of positions of alpine stakeholders. 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 3 identifies a series of strategic fields of action based on an extensive analysis of development patterns and trends, challenges, opportunities and threats in the Alps.
3. Upcoming strategic fields for transnational cooperation

As all other parts of Europe, the Alpine Space is subject to permanent changes. The driving forces can have different dimensions and backgrounds. Some have a global or at least a large-scale dimension, while others are more related to levels for the EU, nations, regions or local authorities. The Alpine Space Programme area is economically comparable to the global economy but is a politically 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\(^6\), the team of experts has identified the following driving forces as the most important:

- climate change;
- tensions on the energy market;
- economic globalisation;
- rise of an information society and a knowledge economy;
- sociodemographic change,
- increased mobility of goods and persons.

These long-term driving forces affect the Alpine Space as a whole. However, the nature and extent of the impact on each alpine territory depends mainly on two aspects: on the one hand 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 its 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 plateaus all create different preconditions for economic and social development. There is therefore a large variety 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 of 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.

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\(^6\) See Section 3.2. 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 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 3.1 based on certain criteria, characteristics and examples.

In the centre of this chapter, a SWOT analysis is carried out for each of these five territorial types. First or all, a list of general strengths 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 was drawn up based on the identified strengths and weaknesses (SW) and identified opportunities and threats (OT) of each territorial type. This was done by imagining different ways in which the six driving forces listed above could influence each strength and each weakness and thereby impact on the territories’ future positive or negative development.

As the last step of the SWOT analysis, a synthesis of all opportunities and threats was created. The group of experts 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 associated driving force. Using these blocks of similar or interlinked OT elements, the team of experts was able to highlight fields of intervention and related issues with a high potential for interregional cooperation between different types of alpine territories. Whenever possible, the fields of intervention also covers more than one of the policy fields listed in the bottom right box of Figure 3 below, which illustrates the methodology of the SWOT analysis and interpretation of results.

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 categories. 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 entire range of situations. The team of experts nonetheless considered

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7 Each field of intervention concerns at least 2 or 3 territorial types.
that the strategic key issues identified in the concluding section of this chapter are general enough to cover these areas too.

- 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 team of experts is aware of the fact that there exist driving forces on a smaller-scale level as well as for the short term, which may have a strong impact on regional development policy. A current example is the European financial crisis 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 with 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
• There is no general scientific basis for the identification of SW and the OT elements derived from them. 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 guarantees neither completeness nor objectivity. The planned stakeholder dialogue installed a platform for further discussion and addenda.

• All considerations are based on the assumption of continuity. Unforeseeable events such as global crises because of war, terrorism, mega natural hazards or insoluble economic crises do not form part of the analytical work undertaken. These types of events - also called “wild cards” - could be envisaged as part of the stakeholder consultation processes.

3.1. Territorial types

As mentioned above, the team of experts 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 a 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 described below is applied according to these five territorial types, which are further set out in Table 2.

These widely differing territories have contrasting preconditions for economic and social development. They confront diverse challenges. Their respective authorities and stakeholders also pursue different policy agendas and objectives. It is a 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 by 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 constraints can for example be approached in a way which interacts 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 make 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

<table>
<thead>
<tr>
<th>Type</th>
<th>key indicators</th>
<th>examples</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Metropolises</td>
<td>Lyon, Milan, Munich, Vienna, Zurich (full metropolises) Geneva, Bern, Ljubljana, Torino, Venice region etc. (partial metropolises)</td>
<td>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 status 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 transport, though the widespread development of suburban areas induces extensive use of personal vehicles and which involves congestion and associated effects (pollution, loss of time, etc.). The economic basis of the metropolises is broad and diverse and makes them multifunctional areas with a wide range of high-level services. Their area of influence 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. The level of R&amp;D is high and supports a high input of innovation in the economy.</td>
</tr>
<tr>
<td>Type</td>
<td>key indicators</td>
<td>examples</td>
<td>description</td>
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<td>-----------------------------------------------</td>
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</tr>
<tr>
<td>2 Alpine cities</td>
<td>• at least 50,000 inhabitants in the functional urban area&lt;br&gt;• connection to high speed transport networks (railways/motorways)&lt;br&gt;• suburban area with relevant commuting share (30-45 minutes)&lt;br&gt;• R&amp;D centres</td>
<td>Bolzano, Innsbruck, Salzburg, St. Gallen, Konstanz, Annecy, Grenoble</td>
<td>A significant 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 wider level and combine good connections to the metropolises as well as the vicinity with core alpine areas. They often have valued urban features contributing to that attractiveness (setting, cultural heritage). 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 nearby area of influence through public services, but urban sprawl and a widening influence other peri-urban rural areas increase the global level of mobility and the share of individual motorised transport. The economic base is often strong and relies on a wide range of activities and services. The level of R&amp;D is more limited than in the metropolises but can be above average in Europe for a category of comparable cities. These cities are linked to the global economy through their relations with the metropolises and also sometimes directly within certain specific sectors.</td>
</tr>
<tr>
<td>3 Stable or growing rural areas</td>
<td>• stable or growing population&lt;br&gt;• significant share of workers employed in cities and metropolis&lt;br&gt;• average ageing population&lt;br&gt;• GDP per capita 80%-100% of average&lt;br&gt;• good to very good connectivity to a metropolis or city</td>
<td>Parts of Allgäu, Valle d’Aosta, Chablais, vallée de l’Ain, Außerfern, ...</td>
<td>These are large stable or growing rural areas in the Alps which are well connected to alpine cities and benefit from their dynamic in terms of activity and services. They can be lowland, pre-alpine or alpine core areas, depending on proximity to cities and the quality of transport to them. They are well connected to the nearest city (or cities) but often rely heavily on individual motorised transport. At the local scale, these rural areas are organised around small towns. 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 a high quality of living.</td>
</tr>
<tr>
<td>Type</td>
<td>key indicators</td>
<td>examples</td>
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</table>
| **4 Declining rural areas** | • declining population  
• no significant share of workers employed in cities and metropolis  
• above average ageing population  
• GDP/capita below 80% of average  
• weak connectivity to next city or metropolis | parts of all Bavarian alpine districts, 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 investment in smaller cities. They may be located in lowlands, pre-Alps or alpine core areas, but they do not have the transport infrastructure and need to compensate for the distance from urban centres and potential markets. They therefore 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 failing 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 sectors (overnight stays / (inhabitants x 100) > 1)  
• high land/property prices  
• immigration of elder and outmigration of younger people  
• highly seasonal activity | St. Moritz, Crans-Montana, Avoriaz, south part of Oberallgäu, Val Gardena, Ischgl... | Tourism activities have had a particularly powerful 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 then have to be dimensioned according to the peak seasons 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 also has important seasonal variation and the core activity and level of services for the year round 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 metropolises and cities on the peri-alpine rim and the limited size and influence of cities in the mountainous core of the Alps because of topographical constraints and resulting limited settlement options. The influence of metropolises and their locations around the Alps can be underlined. Their role not only within the Alpine Space Programme area but also in 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 in the map with an alpine core (Alpine Convention perimeter) and a wider space encompassing peri-alpine areas (Alpine Space Programme area). Metropolises are located in the peri-alpine area and are connected to the alpine core.

Source: Vanier (2006)
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 a tourist destination. Tourism is the predominant sector of activity only in a limited number of areas with specific tourism-related attractions.

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

Source: University of Geneva (2012)
Map 7. Population accessible within 45 minutes

This map represents the number of persons that can be reached within 45 minutes by road. These figures are considerably higher in peri-alpine areas than at the core of the Alps, but more than 1 million persons are nonetheless within commuting distance of considerable parts of the Alps. 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)
3.2. Driving forces

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

- long-term effects on regional development: they have at least an ongoing or upcoming impact for the next 20 to 30 years
- large-scale relevance: the impact occurs at multiple regions and places within the Alpine Space
- unyielding 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 in negative ways (natural hazards, health of elderly people in metropolises, change of regional natural resources as economic basis). But within a small range, higher temperatures and changes of precipitation may have a positive impact. The dynamic of climate change is slow but its impact is 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 and mostly require local and regional approaches (see Alpine Space Programme projects as e.g. AdaptAlp, ClimAlpTour. ClimChAlp, Clisp, Manfred). Climate change is therefore a driver with two separate dimensions:
- direct and indirect impact of changing climate conditions
- pressures to contribute to fulfil national, European and global climate protection objectives.
The second dimension implies that protagonists from all sectors are affected, even if they are not directly impacted 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 are stimulated to change behaviour in such alpine-related fields as food selection, choice of energy suppliers and travel. |
### 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 at low altitude dropped from 20% to 30% in 45 years (1951–1996). This trend is less significant 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 an average increase of 0.5°C – 0.8°C. The annual rate of the melting of ice contained within permafrost more than doubled between 1970 and 1980.


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### 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 impact spatial organisation.

Source: Permanent Secretariat of the Alpine Convention (2010)
## Tensions on the energy market

| Tensions on the energy market | The dynamics of the world economy are still closely linked to the availability of fossil fuel at a moderate price. In the World Energy Outlook 2008 (WEO) the International Energy Agency (IEA) forecasts a stagnation of oil production up until 2030 and a growing demand. Other scenarios state that the maximum of global oil production (see peak oil study by the German Bundeswehr, Bundeswehr transformation centre (2010)) was already reached in 2010. The Fukushima Daiichi nuclear disaster that started in March 2011 in Japan led to debates on the future of nuclear power in some European countries, especially 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 will increase faster than the availability of old sources decreases. The absolute price of energy will most likely increase. Therefore the central question is whether the relative price of energy will be kept stable because of improvements in efficiency. Those industries, economic sectors and especially transport with high energy consumption will come under pressure. On the other hand, regions with a high potential for 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-intensive activities to these areas. |

## Alpine evidence

| 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 gigawatts [GW] producing over 46 terawatt-hours of electricity per year [TWh/yr]. In addition 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 m³ 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 CO². (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 reservoirs 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 possess high potential for use as biomass 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))
### Economic globalisation

| Economic globalisation | National and European economic strategies (see also EU 2020 strategy) are still based on a general philosophy whereby economic growth as measured in market prices is the leading objective. Inside the 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 standardize products that consumers can rely on globally. This opens opportunities for products which are unique and which cannot be copied as they are only authentic in the region of their origin. Authenticity is based upon the existence of material and immaterial cultural heritage. The Alpine Space therefore has a very good starting position to benefit from the general global market dynamics and also by making use of its regional traditional competencies. Globalisation has also changed the framework conditions for public policies in each country. Fiscal competition between states and tax reduction strategies of transnational corporations have reduced the resources of public authorities. This leads to a reduction in the range and extent of public services. Deregulation combined with pressures to privatise the production and delivery of services of general interest has also limited the capacity of public authorities to influence the sectors of activity concerned. Additionally, globalisation has changed the mindset of decision-makers at all levels. While there is an increasing focus on export-oriented activities and on international competitiveness, the attention paid to economic exchanges within local and regional contexts is more limited. Different types of discourse have emerged in reaction to these trends, e.g. a renewal of the “social economy”, which is interpreted in different ways across Europe, and attempts at corporate self-regulation based on notions of corporate environmental and social responsibility. |

### Alpine evidence

| 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. At the same time, small and isolated alpine communities are particularly exposed to reductions in public service provision and changes in the regulatory regimes of services of general interest. Regions with the highest and regions with the lowest per capita income differ by a factor of five. Globalisation-related processes contribute to processes of economic polarisation. Global market pressures are not among the main factors explaining the decline of alpine agriculture. Source: Permanent Secretariat of the Alpine Convention (2007) |

source: Permanent Secretariat of the Alpine Convention (2007)
### Rise of information society and knowledge economy

| Rise of information society and knowledge economy | In former times, knowledge and access to information was a privilege of the old leading economies. Today, as a result of R&D and information technologies, knowledge moves quickly 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 quickly increasing academic base in nearly all countries of the world and the dispersal of R&D, global competition in the scientific and economic community among the “best minds” will escalate. The inter-linkage between leading research institutions and the economy monetizing research results is a core issue. As in mass production, the European countries, because of their labour and other location-related costs, are often no more competitive than other regions. The 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 not just to the product itself but also the technical process, production still plays a major role in the Alpine Space. Furthermore, knowledge in the service industry is becoming more and more important. This can be strengthened by making use of local and regional knowledge as a part of the immaterial cultural heritage. |

### Alpine evidence

| 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 11) |
|                | Compared to many other rural parts of Europe, most isolated alpine core areas are relatively close to metropolitan regions with R&D environments and higher education institutions of global significance. Existing connections between the two types of areas are an asset to be further exploited. |
Map 11. Innovation areas in Europe

The Alpine Space is shown to be one of the most innovative places in Europe with large areas of Switzerland, Germany and Austria in the lead. Other areas such as the French and Italian Alps significantly lower.

Source: BEST et al. (2012)
Map 12. Knowledge economy in Europe

Large parts of the Alpine Space are shown to be strongholds of the European knowledge economy.

Source: BEST et al. (2012)
Sociodemographic change

| Sociodemographic change | Demographic change is an ongoing European process leading to uneven growth of the European population. In most European countries the fertility rate is too low to balance the number of births and deaths. In some countries, restrictive immigration rules for non-EU citizens lead to net out-migration. Yet within Europe, strong regional disparities are observed (EUROSTAT 2008). While metropolises and cities tend to grow, many rural areas stagnate or decline. Younger people take their opportunities in higher education or qualified jobs in the larger agglomerations while elderly people stay in the rural areas or look for attractive retirement locations, often in tourism areas. All companies need to adapt the services and goods they offer to ageing consumers, both within individual localities and regions and at the level of the single market as a whole. The demand for services in healthcare and medicine will increase. At the same time, voluntary work and community engagement among young retired persons are an increasingly important asset for a rapidly changing civil society. Demographic change is often underestimated, but it is an important underlying factor behind a wide range of challenges and opportunities. In parallel, a number of changes in lifestyle preferences and social patterns over the last decades influence economic trends and settlement patterns. Quality of life, cultural opportunities and the natural environment are increasingly important parameters when choosing a place of residence. The focus on personal fulfilment leads to weakened ties with family and local communities. Greater mobility, both in terms of travels and migration, enhances the exposure to external influences and cultural diversity. At the same time, while television, films and the internet create a convergence of aspirations and lifestyles, cultural heritage and traditions may be more highly valued in response. A number of diametric processes are therefore observed. |

| Alpine evidence | • In most alpine locales, 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 and in 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)

• Changing consumer behaviour in tourism is leading to a decreasing potential in the field of winter sports but new opportunities in outdoor experience and wellness / spa tourism. A still ongoing trend towards short-trip tourism has transformed many alpine tourism areas from main-holiday to short-stay and event destinations. |
Map 13. Old to young age dependency ratio

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

Source: Tappeiner et al. (2008)
**Increased mobility of goods and persons**

| Increased mobility of goods and persons | The increased mobility of goods and persons is driven by the relatively low price of fossil energy and by economic globalisation. On the one side, there is generally an excessive belief in the mechanical effects of increased accessibility for 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 hand, while Transportation Equity Network (TEN) projects have had a major influence on economic development (EC 2009) along the European major transport axes or in the surroundings 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 plans to the last work day. In prosperous and fast growing regions, the real demand for transport capacity on opening day often exceeds initial estimates. 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, created by a reinforcing cycle: discussion and plans for transport infrastructure cause reactions related to regional development. The concrete impact or anticipated impact of transport then force decision-makers to act. |

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**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 transport are considerably higher in sensitive alpine areas than in lowland areas 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.
Global traffic is increasing steadily and the share of rail transport is falling even if it remains stable in absolute terms.

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

Source: Monitraf project, Region Rhône-Alpes et al. (2008)
3.3. 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 is often “what is special about this region compared to other regions?”. A kind of normative framework can be generated by considering surrounding areas, and more particularly those with better performances, as a “norm” or “model”. 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 approach used collected strengths and weaknesses along the sustainability triangle: economy, society and ecology. Furthermore the cross-sector field of spatial planning and territorial development was evaluated. Table 3 shows the evaluation grid used.

<table>
<thead>
<tr>
<th>Economy</th>
<th>Society</th>
<th>Ecology</th>
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</thead>
<tbody>
<tr>
<td>accessibility to markets</td>
<td>public services</td>
<td>local climate conditions</td>
</tr>
<tr>
<td>productive structures</td>
<td>health care / care for elderly</td>
<td>topography</td>
</tr>
<tr>
<td>labour market</td>
<td>higher education</td>
<td>natural heritage / biodiversity</td>
</tr>
<tr>
<td>research and development</td>
<td>cultural heritage</td>
<td>natural hazards potential</td>
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<tr>
<td>Entrepreneurship</td>
<td></td>
<td>natural resources potential</td>
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<tr>
<td>revenue structure</td>
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</table>

A SWOT analysis by regional types is therefore a technical tool guided 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 recent decades in general and not only in the high class segment, the team of experts 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 in each of the five regional types, a list of strategically important strengths and weaknesses was compiled. Table 4 shows the general structure of the results matrices by the economic categories applied to tourism areas.

### Table 4. Compilation of strengths and weaknesses: example of tourism areas

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

These strengths and weaknesses form 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), with a view to finding future opportunities or threats (OT) are described in Table 5.
A systematic cross-analysis of all six driving forces and all identified SW components of each regional type made it possible to generate a comprehensive picture of the main opportunities and threats of each territorial type. Table 6 shows the general structure of the OT result tables.
Table 6. General structure of the OT result tables: example of alpine cities

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

Not all observed opportunities and threats are of the same strategic importance. To make use of some opportunities and to overcome certain threats can have an existential dimension. For example, to overcome the out-migration of young highly qualified people - the brain drain effect - is a key issue facing rural and tourism areas. Others, as, for example, 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. The group of experts produced a ranking of the OT list by comparing long term impact levels and the degree of general relevance to all regions of a territorial type.

Table 7 lists the OT elements that 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 capitalising on opportunities or overcoming threats.
### Table 7. Ranking of most relevant opportunities and threats in the Alpine Space by regional type

<table>
<thead>
<tr>
<th>Driving force</th>
<th>M: metropolises, A: alpine cities, S: stable rural, D: declining rural, T: tourism areas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>climate change</strong></td>
<td></td>
</tr>
<tr>
<td>CC1 O</td>
<td>innovation to face climate change challenges (e.g. on water and energy supply) by existing private and public capacities</td>
</tr>
<tr>
<td>CC2 O</td>
<td>technology and consulting/engineering need for climate protection / energy efficiency</td>
</tr>
<tr>
<td>CC3 T</td>
<td>higher constraints of spatial capacities (-&gt; higher prices for ground, higher potential for damages, need of mitigation)</td>
</tr>
<tr>
<td>CC4 O</td>
<td>investment in low carbon services (improvement of services / quality of life / positive image)</td>
</tr>
<tr>
<td>CC5 T</td>
<td>reduced income for intensive agriculture (e.g. higher cost water), limits for the intensive agricultural model with current crop plants</td>
</tr>
<tr>
<td>CC6 O</td>
<td>higher productivity, other more productive crop plants (especially northern Alps)</td>
</tr>
<tr>
<td>CC7 O</td>
<td>renewable energy resources induced by climate protection measures as growing sector to support shift to low carbon technology</td>
</tr>
<tr>
<td>CC8 T</td>
<td>shortening season in low and mid height winter sport areas (-&gt; ROI not sure anymore, very short working period for seasonal workers)</td>
</tr>
<tr>
<td>CC9 T</td>
<td>securing water availability (especially in southern alpine area to industry, energy production)</td>
</tr>
<tr>
<td>CC10 T</td>
<td>higher mobilisation of scarcer water supplies for artificial snowing especially in southern Alps</td>
</tr>
<tr>
<td><strong>energy</strong></td>
<td></td>
</tr>
<tr>
<td>E1 O</td>
<td>innovation in field of low consumption models (technology and management), new energy production / distribution patterns</td>
</tr>
<tr>
<td>E2 O</td>
<td>more compact metropolis and shorter transport lines</td>
</tr>
<tr>
<td>E3 T</td>
<td>raising costs to commuters (side effect of strong pressure to settlement and housing in metropolis and cities)</td>
</tr>
<tr>
<td>E4 O</td>
<td>technology and consulting/engineering need for climate protection / energy efficiency</td>
</tr>
<tr>
<td>E5 O</td>
<td>economic growth by gaining leading position in R &amp; D (also by cooperation’s between public research and private sector)</td>
</tr>
<tr>
<td>E6 T</td>
<td>part-time availability of water resource for hydro production</td>
</tr>
<tr>
<td>E7 O</td>
<td>investing in decentralized energy production or energy autonomous regions (energy to region by region)</td>
</tr>
<tr>
<td>E8 T</td>
<td>hydro production faces a reduction of resource and a necessity to share it</td>
</tr>
<tr>
<td>E9 O</td>
<td>green energy: wind/ water power production / energy storage</td>
</tr>
<tr>
<td>E10 T</td>
<td>loss of biodiversity caused by monoculture biomass production / hydropower investments</td>
</tr>
<tr>
<td>E11 T</td>
<td>increasing costs to high energy consumption infrastructure (e.g. industry sector, snow making, ropeways)</td>
</tr>
<tr>
<td>E12 O</td>
<td>making use of cross-sectoral potential for local / regional economy (e.g. energy supply by farmers to tourism sector)</td>
</tr>
<tr>
<td>E13 O</td>
<td>green / zero emission transport and energy supply (image factor attracting destinations to tourist)</td>
</tr>
<tr>
<td><strong>global markets</strong></td>
<td></td>
</tr>
<tr>
<td>GM1 O</td>
<td>making use of strong capacities of leading alpine universities and research centres to compete and build alliances</td>
</tr>
<tr>
<td>GM2 T</td>
<td>improving availability of capital risk out of alpine countries / reducing risk of loss of control of capital (and therefore knowledge)</td>
</tr>
<tr>
<td>GM3 O</td>
<td>further improvement of efficient spatial organisation (comparative advantage to investors compared to other world metropolis)</td>
</tr>
<tr>
<td>GM4 O</td>
<td>making use of growing importance of regionalism in some sectors by using regional cultural values (traditions / knowledge / resources)</td>
</tr>
<tr>
<td>GM5 O</td>
<td>winning high qualified immigrants because of high attractiveness of Alpine Space</td>
</tr>
<tr>
<td>GM6 T</td>
<td>research fields (technology, medicine) with increasing need of financial resources get lost to metropolis / outer alpine R &amp; D centres</td>
</tr>
<tr>
<td>GM7 O</td>
<td>using cultural heritage as basis for innovation for unique alpine products and services in globally uniform markets</td>
</tr>
<tr>
<td>GM8 O</td>
<td>benefiting from strong position of cities and metropolis by adapting productive structure / intensification cooperation with cities / metropolis</td>
</tr>
<tr>
<td>GM9 O</td>
<td>active entrance and further growth in international source markets (high density of airports with intercontinental direct connections)</td>
</tr>
<tr>
<td>GM10 O</td>
<td>knowledge and technology transfer to other mountain areas (together with market leaders mostly located in cities or stable rural)</td>
</tr>
<tr>
<td>GM11 O</td>
<td>development of high education sector by on-site study offers in alpine-specific knowledge fields (e.g. tourism, wood construction, ...)</td>
</tr>
<tr>
<td>GM12 T</td>
<td>pressure from large-scale projects financed by global investors</td>
</tr>
<tr>
<td>GM13 T</td>
<td>SME cannot profit from economy of scale and lose leading position / market shares</td>
</tr>
</tbody>
</table>

### Notes
- **NO**: Ranking of Driving forces
- **O**: Opportunity
- **T**: Threat
<table>
<thead>
<tr>
<th>Driving force</th>
<th>DF NO</th>
<th>opportunity (O) / threat (T)</th>
<th>M: metropolises, A: alpine cities, S: stable rural, D: declining rural, T: tourism areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>knowledge &amp; innovation</td>
<td>KI1 O</td>
<td>making the Alps and their metropolis attractive to high-profile professionals</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>KI2 O</td>
<td>making use of strong capacities of leading alpine universities and research centres to compete and build alliances</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>KI3 O</td>
<td>support of start-ups of high educated / provision of start-up centres / forcing PPP as option to transfer research results to economy</td>
<td>2, 3, 2</td>
</tr>
<tr>
<td></td>
<td>KI4 O</td>
<td>strengthening leading position in applied sciences linked to regional traditions, knowledge and resources / transfer to regions</td>
<td>2, 2, 3, 2</td>
</tr>
<tr>
<td></td>
<td>KI5 O</td>
<td>making active use of capacities to benefit from R&amp;D results from cities and metropolises (stimulating cooperation’s)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>KI6 T</td>
<td>closing white areas on maps of high speed internet connections to open entire Alpine Space to information economy and society</td>
<td>2, 3</td>
</tr>
<tr>
<td></td>
<td>KI7 O</td>
<td>making use of local traditional knowledge for innovation / reducing reservation of locals against innovation in context of traditions</td>
<td>3, 2, 3</td>
</tr>
<tr>
<td></td>
<td>KI8 O</td>
<td>profiting from knowledge and technology transfer to other mountain areas</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>KI9 T</td>
<td>avoiding “innovation divide” to rural areas by supporting them out of metropolises and cities</td>
<td>3, 2</td>
</tr>
<tr>
<td></td>
<td>KI10 T</td>
<td>lack of innovation in tourism in the field of services (innovations mostly technology driven with need of high investments by SMEs)</td>
<td>2</td>
</tr>
<tr>
<td>demographic change</td>
<td>DC1 O</td>
<td>winning the fight for talents with global players - (metropolis -&gt; cities) (metropoli and cities -&gt; all other)</td>
<td>3, 3</td>
</tr>
<tr>
<td></td>
<td>DC2 O</td>
<td>making use of the growing market potential of an ageing society (easy to use goods and services)</td>
<td>1, 1, 2</td>
</tr>
<tr>
<td></td>
<td>DC3 T</td>
<td>keeping the existing potential of SME by transmission to next generation (inside or outside family)</td>
<td>2, 2, 1</td>
</tr>
<tr>
<td></td>
<td>DC4 T</td>
<td>covering rising demand of public services to elderly / keeping services for children (decline of age groups)</td>
<td>2, 1</td>
</tr>
<tr>
<td></td>
<td>DC5 O</td>
<td>activating the potential of young retired to civil society to cover rising demand of public services</td>
<td>2, 1</td>
</tr>
<tr>
<td></td>
<td>DC6 T</td>
<td>covering the rising demand of care services: associated costs / support of relatives</td>
<td>3, 2</td>
</tr>
<tr>
<td></td>
<td>DC7 T</td>
<td>safeguarding the transmission of farms to next generation (inside or outside families), capacity to keep landscape conservation</td>
<td>3, 1, 2</td>
</tr>
<tr>
<td></td>
<td>DC8 T</td>
<td>keeping the transfer of immaterial cultural heritage to next generation alive / making cultural heritage as a locational factor visible</td>
<td>3, 2, 2</td>
</tr>
<tr>
<td></td>
<td>DC9 T</td>
<td>improving the accessibility to growing demand by handicapped / low-mobility people to stay competitive in market of elder tourist</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DC10 O</td>
<td>improving the awareness of intercultural and social diversity as development levers in rural areas</td>
<td>2, 3, 3</td>
</tr>
<tr>
<td></td>
<td>DC11 O</td>
<td>making use of female potential by taking the gender dimension in account (supporting qualified / more leading positions)</td>
<td>2, 2, 2</td>
</tr>
<tr>
<td></td>
<td>DC12 T</td>
<td>adaptation of tourism offers to a decreasing market potential for winter sports / families in traditional source markets</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DC13 T</td>
<td>safeguarding high quality service labour despite a dynamic decrease in endogenous labour potential in tourism</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DC14 O</td>
<td>making active use of the image / brand of the “Alps” to attract younger people and families to alpine regions</td>
<td>2, 2, 3, 3</td>
</tr>
<tr>
<td></td>
<td>DC15 O</td>
<td>reducing seasonality of tourism sector by offering new services in heath / cure and care</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DC16 T</td>
<td>systematic proactive management of population growth to create better starting positions to younger / reducing social imbalances</td>
<td>2, 1, 3</td>
</tr>
<tr>
<td></td>
<td>DC17 T</td>
<td>high pressure from second home / retirement residents in real estate market / exclusion of younger locals</td>
<td>3</td>
</tr>
<tr>
<td>transport</td>
<td>TR1 O</td>
<td>making use of capacities to innovate in the field of transports (technology, management, new private services)</td>
<td>2, 3</td>
</tr>
<tr>
<td></td>
<td>TR2 O</td>
<td>advancing the high level of public transports and infrastructures to reinforce global appeal</td>
<td>3, 3</td>
</tr>
<tr>
<td></td>
<td>TR3 O</td>
<td>using potential of compact settlement areas forced by a reoriented spatial planning</td>
<td>2, 2</td>
</tr>
<tr>
<td></td>
<td>TR4 T</td>
<td>avoiding an additional gap cities/metropolises to rural areas created by new high speed train projects</td>
<td>3, 3, 2</td>
</tr>
<tr>
<td></td>
<td>TR5 T</td>
<td>keeping high-quality networks despite increasing costs connecting rural areas in periphery as well as on site mobility (tourism)</td>
<td>2, 3, 3, 2</td>
</tr>
<tr>
<td></td>
<td>TR6 O</td>
<td>making use of increasing potential of car- limited but railway-connected centres of cities and metropolises</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TR7 T</td>
<td>avoiding loss of attractiveness of living location because of increasing transport costs (-&gt; rising costs of transports for commuters)</td>
<td>3, 3</td>
</tr>
<tr>
<td></td>
<td>TR8 O</td>
<td>attracting transport services (public and private) by green economy / carbon neutral offers to increase local and regional acceptance</td>
<td>3, 2, 2, 2</td>
</tr>
<tr>
<td></td>
<td>TR9 T</td>
<td>keeping competitiveness of tourism and leisure offers in face of higher transport costs (risk to short trip / periphery destinations)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TR10 T</td>
<td>keeping economic basis for high investments and running costs to provide competitive services of ropeways</td>
<td>2</td>
</tr>
</tbody>
</table>
3.4. 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 carried out in 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: CC18 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 not 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 of unique alpine products and services in globally 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 all have a strategic importance for at least four territorial types whereby always all rural / tourism types are included)

3) content analysis cross-check: identification of OTs which belong to the same or very similar topics and have a strong impact for 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 investment in low carbon services (improvement of services/quality of life/positive image), 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) merger 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 carried out. By this method, groups with
   a. territorial linkages (horizontal / vertical) as well as a content link (see examples given to step one and two)
   b. content linkages (see example of content analysis crosscheck) were identified, and in some cases led to a to a reorganisation of the OTs.
   (Example: looking to the results of the content analysis of step 3 it is obvious that there are two very different aspects involved. First the aspect of energy production and second the use of energy and service provision connected to energy consumption. The issues and also the protagonists involved are clearly different. Because of this, green energy production was separated in the raw list from green economy and services.)

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8 The codes refer to the second column of Table 7 p.69.
The group of experts finally considered important current or upcoming issues when identifying the groups of OTs with high cooperation potential. As a result, each OT group was linked to issues. The first example shall be taken for explanation purposes. First the discussion showed that the question of efficiency is crucial not only in the field of water but also in the energy sector. Furthermore it became clear that the protagonists involved who might cooperate are from the same level and the same territorial type. In this way, a field of intervention became visible regarding low consumption and innovation in the two fields of water and energy. The existing or upcoming issues were then linked to this field of action and a justification was provided. The following result emerged:

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

By this method, it was possible to identify 20 fields of intervention which are listed together with related issues, justification and a qualitative rating of transnational cooperation level in Table 8.
<table>
<thead>
<tr>
<th>Fields of intervention related issues (<strong>italic</strong>)</th>
<th>Co-op. Relevance</th>
<th>Justification (why is transalpine cooperation relevant?)</th>
</tr>
</thead>
</table>
| 1 Spatial organization, transport and mobility management  
*Bottlenecks in transportation systems, pressure for cost-efficiency in public transportation, urban sprawl, competition between forms of land use: leisure, housing, agriculture, protected areas...* | M | • Bottlenecks influence transalpine transport strongly  
• Transport networks are transalpine  
• Public transport has a more regional than transalpine focus  
• Land-use has similar alpine-related patterns but instruments of management are not transalpine |
| 2 Development models for 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 typical of the Alps  
• Same with brain drain  
• Preconditions for development models are often comparable and linked with alpine typical situations |
| 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  
• Not all technical solutions are alpine specific |
| 4 Low consumption models and innovation in the energy and water sectors  
*Changing energy supply framework conditions (prices, ...), seasonal drought in some areas due to climate change, political drive in favour of reduced footprint and resource efficiency in general* | H | • High number of energy production sites and transnational grids to consumers  
• Increasing energy prices  
• Transnational relations concerning water supply and water consumption  
• Competition of water between regions and between sectors (industry, agriculture, energy, households) |
| 5 Low carbon and renewable energy production considering land-use interests  
*Combined effect of public policies and increasing prices of fossil energy, climate mitigation strategies, conflict potential 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 in keeping energy prices stable  
• Green energy is an positive image factor to entire alpine tourism  
• Land-use problems are transalpine comparable |
| 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 private and public water supply, imbalance between financial resources of private investors and public suppliers* | H | • Competition applies to all alpine areas with high water resource potential  
• Potential private/public conflicts have real transnational background  
• Continental and global supply trust has identified the Alps as strategic object of investments |
<table>
<thead>
<tr>
<th>Fields of intervention related issues (italic)</th>
<th>Co-op. Relevance</th>
<th>Justification (why is transalpine cooperation relevant?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Territorial aspects of agriculture and forestry</td>
<td>M</td>
<td>• Increasing income options and adaptation needs by climate change are given transalpine&lt;br&gt;• Funding framework conditions in agriculture and forestry are comparable on a transalpine basis (but for CH)&lt;br&gt;• Problems and solutions in southern Alps are different in northern and central Alps</td>
</tr>
<tr>
<td>Paradigm shifts in agricultural production / forestry: intensive / extensive, other crops (e.g. other foodstuffs, biomass and other non-food products etc.), adaptation to climate change and higher vulnerability; territorial effects of these shifts, landscape economy, need to improve resilience in the face of increasing price of inputs (energy, water, fertilizers...)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Framework conditions for start-ups and entrepreneurship</td>
<td>M</td>
<td>• SME are an important basis for employment and economic success all over the Alps&lt;br&gt;• Start-up conditions in alpine rural areas are mostly weak&lt;br&gt;• No tradition and institutions to acquire risk capital for fast growing or financially intensive companies&lt;br&gt;• Young people have only weak incentives to return to homeland to start a business</td>
</tr>
<tr>
<td>Lack of risk capital / &quot;business angels&quot;, limited culture of entrepreneurship, limited acceptance of innovative economic initiatives, need to stop brain drain to cities and metropolises, weak / missing support to start-ups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 R&amp;D cooperation and clusters of universities and/or private research institutions</td>
<td>H</td>
<td>• R &amp; D cooperation are based on thematic focus – there are many R &amp; D questions with a transalpine background (see e.g. energy, water, innovation in tourism)&lt;br&gt;• Limited resources of SME for R &amp; D are a general problem&lt;br&gt;• Universities and applied research institutions are mostly used to working on an international and transnational level</td>
</tr>
<tr>
<td>Lack of capacity for R&amp;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...)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Sustainability oriented innovation in the tourism sector</td>
<td>M</td>
<td>• Adaptation needs exist all over the Alpine Space&lt;br&gt;• Lack of a tradition of cooperation as regions generally regard themselves as being direct and sole competitors&lt;br&gt;• High demand / easy success in past and SME structure of tourism entrepreneurs lead to low innovation rate in the sector&lt;br&gt;• Sensitivity of consumers towards sustainable and reliable products still increasing</td>
</tr>
<tr>
<td>Limited resilience of tourism facing increasing prices of energy, water, need to adapt tourism sector to changing climate (diversification/reconversion), lack of a tradition of innovation in the tourism sector, possible shift from tourism to residential economy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Immaterial and material heritage as a potential resource</td>
<td>H</td>
<td>• Traditional existence of rich comparable alpine aspects of cultural heritage all over the Alps&lt;br&gt;• Lack of understanding of cultural heritage as a starting point for innovation can be found all over the Alps&lt;br&gt;• Value and potential of immaterial cultural heritage as regional source often underestimated</td>
</tr>
<tr>
<td>On-going &quot;glocalization&quot; enhances social diversity and multi-cultural environments. This creates new opportunities for products and services with authentic background, increased risk of loss of cultural heritage if not used to create local and regional benefit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fields of intervention related issues (italic)</td>
<td>Co-op. Relevance</td>
<td>Justification (why is transalpine cooperation relevant?)</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------------</td>
<td>---------------------------------------------------------</td>
</tr>
</tbody>
</table>
| 12 regional economic cycles and networks | L | • No alpine-specific approach  
| unexploited potentials to generate additional added value based on local resources, local know-how getting lost as an effect of international competition | | • Because of strong regional (and cultural) identification of local population in valleys high potential for realization  
| | | • Especially in the field of using renewable resources alpine-specific opportunities  
| | | • Transalpine benefit potential low |
| 13 social services and their relevance to quality of life | M | • Different patterns of effects of demographic change in the Alpine Space  
| increasingly homogenous and “urban-influenced” norms of quality of life, ageing | | • Comparable regional situations and scenarios all over the Alpine Space with same pattern  
| of rural communities, combined effect of out-migration of young people and reduced fertility, increased demands for cost-efficiency in public service provision | | • Different financial background to keep services in alpine regions |
| 14 innovation and adaptation of infrastructure and services in an ageing society | H | • Same adaptation needs everywhere  
| 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 | | • Due to typical alpine 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 |
| 15 regional intergenerational human resource management | M | • Need to safeguard and develop human resources in rural areas all over the Alpine Space  
| lack of available labour force in some sectors 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 | | • Approaches and solutions are mainly of regional and local character  
| | | • Capacity-building for complex EU and alpine-related topics is a general task |
| 16 alternative lifestyles and models of economic development | L | • Living in isolated alpine communities implies more limited access to public and private services  
| increasing social diversity, increasing role of informal activities and voluntary work, pressure to public finances by growing demand for public services, increasing role of immaterial resources (knowledge, social skills) | | • Economic sustainability in these communities can, to a larger extent than in “mainstream territories”, be based on multi-activity and informal exchanges  
<p>| | | • 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 |</p>
<table>
<thead>
<tr>
<th>Fields of intervention</th>
<th>Co-op. Relevance</th>
<th>Justification (why is transalpine cooperation relevant?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related issues (italic)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **17** governance capacities | M              | • Mismatch is a general issue all over the Alpine Space, but not alpine-specific  
| mismatch between local ambitions and European/national development model, role of NGOs, civil society..., capacity of local/regional protagonists to interact with other players (EU, global economic players...), unclear division of responsibilities, especially for structural changes (challenge of institutional adaptation, changing inadequate instruments) | | • Traditional policy understanding in alpine rural areas is very different from that which prevails in cities and at the pan-alpine level  
| | | • Very high diversity of political structures open up a broad variety of current governance and discussions about future models as test basis to improve systems |
| **18** specific environmental pressure in urban areas | M              | • Problems caused by alpine-specific spatial and territorial structures often comparable  
| 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. | | • Conflicting fields of interest comparable  
| | | • Specific solutions have local or regional character as linked to very specific problem patterns in each territory |
| **19** Maintenance and sustainable development of landscapes | M              | • The connection of habitat systems is a transalpine task – not only cross-border  
| future agricultural policy, ongoing loss of biodiversity, opportunities and threats out of growing demand for renewable energy and natural resources (esp. water, non-food products in agriculture), next generation problem of farms increases already today | | • 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 |
| **20** Alpine biodiversity, habitat loss and fragmentation | H              | • Network of habitats must be spread all over the Alps  
| ongoing loss of biodiversity because of loss and fragmentation of habitats, need for creation of a functioning ecological transalpine network and cooperation, low acceptance of predators such as wolf, bear or lammergeier (bearded vulture) | | • Need to enlarge and mix genetic pool of endangered species  
| | | • Migration of species does not end at borders  
| | | • Conflicting fields of interest especially agriculture, forestry and hunting comparable |
3.5. Conclusion: Strategic implications of the SWOT

Each field of intervention suggests certain types of intervention and therefore implicitly contains parts of an objective system, with strategic objectives on the meta level and specific objectives on the more operative level. A clustering of the fields of intervention that address similar issues and by this are linked to the same strategic objectives helps to provide a picture and starting point for the deduction of the objective system for an Alpine Space Development Strategy. To measure the proximity or distance of the fields of intervention the SWOT assessment criteria introduced in Figure 3 (see p. 44) can be used again as input to create a hierarchical clustering algorithm9.

By this method it was possible to identify seven clusters of fields of intervention as a starting point for a discussion about objectives. These clusters are listed in Table 9 below. Clustering algorithms as tools provide a general picture, not an absolutely perfect result. In reality, multidimensional objects always have overlapping aspects. For example, while cluster 2 and 7 are totally separate, there is an obvious proximity between clusters 4 and 5. For this reason, the seven quantitatively identified clusters have only functioned as a starting point for a more qualitative identification and designation of objectives corresponding to each field of intervention.

As an initial general result, it is quite obvious that alpine rural areas have limited options, and that many tourism areas will need to adapt to changing framework conditions, while peri-alpine metropolitan areas possess major assets that could help address these challenges. By way of a 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 is also a question of balance and equity and new approaches of shared responsibilities and fair co-operation among alpine territories are needed. Such cooperation can take many forms and concerns a wide range of strategic fields of action, e.g. by capitalizing on the R&D activities of metropolises and cities to stimulate innovation in the SME sector and thriving entrepreneurship. But also the endogenous potential of an Alpine space, which is closely linked to Alpine traditions and social diversity, offers many different opportunities for further development.

A range of opportunities were identified to overcome threats relating to energy and water supply. The richness of alpine resources nevertheless demands sustainable management, e.g. when developing new low carbon energy supply or establishing systems for stable water supply. But also the management of biodiversity and landscapes remains a key concern of an Alpine strategy.

It is also notable that all opportunities mentioned might benefit the different types of territories if handled appropriately. Such win-win situations can form the basis for strategic alliances, strengthening cohesion between territorial protagonists of the Alpine Space.

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9 As a distance measure, the normal Euclidean distance was used based on a ranking matrix assessment criteria versus fields of intervention.
### Table 9. Clusters of fields of intervention

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Main focus</th>
<th>No. of related fields of intervention (cluster members) from Table 8 above</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>spatial planning and development</td>
<td>1 spatial organization, transport and mobility management  &lt;br&gt; 2 development models for declining territories  &lt;br&gt; 6 competition for water</td>
</tr>
<tr>
<td>7</td>
<td>innovation: framework conditions and stimulation</td>
<td>3 accessibility: digital gap and physical access  &lt;br&gt; 8 framework conditions for start-ups and entrepreneurship  &lt;br&gt; 9 R &amp; D cooperation and clusters of universities and/or private research institutions</td>
</tr>
<tr>
<td>5</td>
<td>green economy and land use interests</td>
<td>4 low consumption models and innovation in the energy and water sectors  &lt;br&gt; 5 low carbon and renewable energy production considering land-use interests  &lt;br&gt; 7 territorial aspects of agriculture and forestry  &lt;br&gt; 19 maintenance and sustainable development of landscapes</td>
</tr>
<tr>
<td>4</td>
<td>capitalizing on Alpine specific resources and traditions</td>
<td>10 sustainability oriented innovation in the tourism sector  &lt;br&gt; 11 immaterial and material heritage as a potential resource  &lt;br&gt; 12 regional economic cycles and networks</td>
</tr>
<tr>
<td>3</td>
<td>future of Alpine societies</td>
<td>15 regional intergenerational human resource management  &lt;br&gt; 16 alternative lifestyles and modes of economic functioning  &lt;br&gt; 17 governance capacities</td>
</tr>
<tr>
<td>1</td>
<td>services for a high quality of life</td>
<td>13 social services and their relevance to quality of life  &lt;br&gt; 14 innovation and adaptation of infrastructure and services in an ageing society</td>
</tr>
<tr>
<td>2</td>
<td>biodiversity and environment</td>
<td>18 specific environmental pressure in urban areas  &lt;br&gt; 20 alpine biodiversity, habitat loss and fragmentation</td>
</tr>
</tbody>
</table>
4. Strategic and specific objectives for the Alpine Space

The purpose of the strategic objectives is to specify long-term strategic orientations for the Alpine Space. As such, they constitute a potential framework for the selection of thematic objectives for the forthcoming Alpine Space Programme from the list provided by the European Commission (see Text box 1 p. 33). However, the selection of strategic objectives is not constrained by limitations of European territorial cooperation programmes in terms of thematic concentration, time horizon and project-based implementation. The limited capacity of the Alpine Space Programme in terms of addressing some of these strategic objectives illustrates the need for alternative frameworks for transnational cooperation, e.g. in the context of an alpine macro-regional strategy.

The strategy architecture comprises two levels:

- **Strategic objectives**, which provide a generic orientation to the future development of the Alpine Space by indicating a state towards which the Alpine Space should strive;

- **Specific objectives**, which describe actions that could help achieve each strategic orientation and to which the transnational aspect is of particular relevance. As such, the specific objectives also provide indications as to the meaning and implications of each one.

In order to provide concrete ideas as to how the actions within each specific objective might be implemented, e.g. within the framework of the Alpine Space Programme or an alpine macro-regional strategy, text boxes with implementation ideas are inserted under each strategic objective.

By comparison, the Action Plan for the Baltic Sea Region (European Commission, 2013) also uses a two-level system of “Objectives” and “Sub-Objectives”. However, contrary to the present approach, the “Objectives” are described as “actions” (e.g. “Save the Sea”, “Connect the Region”), while the sub-objectives are described as “states” (e.g. “clear water in the sea”, “reliable energy markets”). The Action Plan for the Danube Region (European Commission, 2010b) is based on yet another type of architecture. While its three “Pillars” are described in terms of “actions” (e.g. “connecting the Danube Region”) similarly to the Baltic “Objectives”, each of them is broken down into “priority areas” that describe the concrete changes that would be achieved by pursuing each “Pillar” (e.g. “to improve mobility and multimodality”).

The “strategy architecture” chosen for the present report is based on the conviction that long-term strategic orientations are best described as states towards which the Alpine Space should strive. The analysis of policy documents and stakeholder dialogues organised as part of the present strategy development exercise indicate a large degree of consensus regarding these states, expressed by six strategic objectives. However, each of these issues contains a number of dimensions that can be addressed through relatively distinct actions. Within these actions, one can define targets that would constitute as many milestones on the path towards the achievement of the strategic objectives. Describing the “specific objectives” as “actions” therefore helps chart a course of action within each “strategic objective”.

The following six strategic objectives were identified:

- Objective 1: Balance and equity in access to services of general interest across the Alps
Objective 1: Balance and equity in access to services of general interest across the Alps

**Rationale**

Long term evolution in the Alpine Space lead to contrasting situations in terms of access to services. Services of general interest are dense where populations and demographic growth concentrate (metropolises, Alpine cities, growing rural areas) but get scarcer where population is limited and decreasing. Furthermore, increasing demands for deregulation and cost-efficiency in the supply of services of general interest, combined with more limited public support, affects the scope and quality of service delivery in rural areas. This is especially the case of remote mountainous areas having travel time constraints to the main centres. This can also be the case in tourism areas where seasonal imbalance of services make them scarce in low season for people living all year round in the area. Territorial constraints in the Alps (topography, travel times, meteorological conditions, etc.) make this contrast more acute than in lowlands areas.

Two issues of territorial cohesion are at stake:

- a fair access to services of general interests for the population of all Alpine territories,
- the capacity of these territories to keep attraction / development conditions based on an adequate pattern of service.

Social and demographic trends lead to evolutions in demand for services of general interest: ageing of population, job market evolutions, etc.

Financial constraints in public budgets are becoming more and more important and pressure for cost cuts can affect general-interest services. The issue is then to find ways of optimisation with no or limited loss of service providing more value for money and cost efficiency.

**Description**

Specific alpine actions are needed to address these questions in order to prevent a risk of growing imbalance and inequity in access to general interest services.

The objective is to keep and adapt a framework of general-interest services to match changing needs of the population in contrasting territorial conditions. Its point is to keep an adequate level of
services allowing all Alpine territories to function and develop. This objective is both an objective of territorial cohesion and social inclusion.

This is a challenging objective given the extent of territorial, demographic, social and financial constraints that need to be overcome by providers of services of general interest. New technologies may be part of the solution to address this objective, as new types of services need to be produced and alternative methods of delivering services to the population must be adopted, especially in remote and sparsely populated areas. This is also part of the process of adapting the provision of services of general interest to changing social and demographic conditions.

Addressing this objective may require new answers to be found to basic questions such as: what kinds of services are needed? By whom? Where should the service provision facilities be located?

The core issue is service accessibility, whether physical or digital, rather than geographical density of service providers. A given service does not necessarily need to be next door but needs to be easily accessible. Therefore, issues of digital accessibility, transport infrastructure and sustainable modes of mobility cannot be dissociated from debates on the provision of services of general interest.

Another key issue is the socio-economic benefits of services of general interest, as compared to the economic returns they generate for the organisations that produce them. The discrepancy between these two types of approaches to the opportunity of service provision is particularly obvious in isolated rural areas such as those that can be found in some alpine valleys. In a context where the prevailing focus is on micro-economic profitability and on cost reductions within individual public and private branches of activity through economies of scale, the Alpine Space can be an appropriate geographic context in which to elaborate an alternative discourse and to propose methods for the assessment of socio-economic benefits.

These approaches to services of general interest will not be homogeneous across the Alps, but need to be differentiated according to the needs and constraints of the different types of territories (metropolises, Alpine cities, dynamic/stable or declining rural areas, tourism areas).

Finally, new or different services of general interest may be needed to cater for the needs of increasingly diverse social and cultural profiles in alpine communities. Ultimately, access to services is a prime factor for ensuring a continued human presence in isolated rural areas outside of the main tourism hotspots.
Specific objectives

1.1 Promote innovative solutions to make viable investments in transport and digital infrastructure or services as key factors of accessibility to services. This is especially relevant to remote rural areas but is also an issue in other Alpine areas.

1.2 Strengthen e-services in all fields of general interest (e-administration, e-healthcare services, e-job search services, e-learning, e-commerce for alpine products, etc.)

1.3 Provide a level of service availability adapted to the specific needs of different alpine territories through an appropriate balance between the density and accessibility (digital or physical) of services.

1.4 Provide services adapted for the whole life cycle, with special consideration for a growing population of senior people, and promoting social inclusion.

Objective 2: A dynamic and innovative SME sector and thriving entrepreneurship

Rationale

Strong concentrations of SMEs exist in different parts of the Alpine Space. They constitute the backbone of the alpine economy, especially as many of them are organised in coherent clusters. These networks of SMEs are rooted in different backgrounds of alpine productive cultures and build up a territorial economy where local businesses are well connected together to innovate and to compete at more global levels. Their ability to keep and create jobs is important.

These assets help alpine SMEs adapt to changes in the territorial and sectoral organisation of production induced by global economic processes. Constant efforts are nonetheless needed to adapt to changing framework conditions, maintain innovativeness and preserve their competitive edge. These efforts are primarily made by private economic protagonists. They become an object of public policy insofar as structural obstacles are identified, i.e. forms of market failure preventing identified opportunities to be exploited and challenges to be overcome or limiting the emergence of innovative business ideas and solutions.

Developing new economic sectors, such as those of the green economy, is an important issue that requires a powerful capacity to invest and innovate. The green economy is a sector where the Alps have a distinctive competitive advantage due to their environmental specificities. Transforming these assets into economic development opportunities requires targeted R&D efforts. The range of potential activities is wide (energy production, energy savings, recycling, etc.), creating an important possible future source of growth, innovation and job creation. Promoting activities within this field is also a way of contributing to the achievement of Objective 5 (Sustainable resource management and production)

Territorially balanced economic development is another important issue. Development opportunities must be taken advantage of in alpine territories, even in the most remote and
lagging areas. Metropolises and alpine cities are a key asset to compete and innovate in a global economy but it is important to ensure that all alpine territories benefit from the growth dynamics they generate. Pro-active public policies are required to ensure that these assets are taken advantage of across the Alps.

### Description

Networks and clusters of SMEs are the backbones of a prosperous and resilient alpine economy. The objective is to promote entrepreneurship and innovation processes in the Alps focusing especially on the competitiveness of its SMEs, a strong Alpine asset to be nurtured.

The point is to keep and develop strong alpine capacities to compete in a global economy but also to spread growth more deeply in the various alpine territories in order to achieve a more balanced development.

It is also important to improve the circularity of local economies in order to reinvest as much of the added value generated in alpine territories as possible. Generating internationally competitive activities is an important but not all-encompassing objective.

Different measures can be taken to achieve these aims. Clusters of SMEs can create “networks of excellence” within their respective fields of activity. These networks can stimulate a wider range of development in the territories where they are located. Such productive milieus are nurtured by mobilising local capacities, e.g. through education and training, measures to improve the functioning of the job market and support to economic protagonists in critical phases such as company creations, major investments and adaptation to changing framework conditions. Close interactions between production, education, training and R&D are essential for these clusters and need to be considered in both directions (from education/research to production and vice-versa). These interactions can be considered at local and transnational level to compete at global level. Another aspect might also be the compensation of market failures where and when necessary, e.g. concerning access to capital and ICT for alpine SMEs.

It is also important to approach entrepreneurial initiatives from a wider perspective to improve the perspectives of success, e.g. by taking better account of current factors of imbalance in local communities and of gender and age dimensions.
Specific objectives

2.1 Strengthen the relations between production, research and education and training on a cluster basis in order to reinforce the link between territories and businesses.

2.2 Focus on the development of a green economy taking advantage of alpine environmental specificities and strong productive and innovation capacities.

2.3 Promote the diffusion of growth and employment beyond current centres of economic growth and demographic concentration.

2.4 Strengthen the capacities of research infrastructure and their connections to world-leading institutions.

Objective 3: Enhanced capacities based on alpine traditions and social diversity

Rationale

The notion of “capacities” refers to the ability of alpine communities, regions, transnational cooperation bodies, civil society and other organisations to design and implement sustainable development strategies. Enhanced capacities based on the diversity and abilities of alpine communities constitute a competitive advantage. Capacity building presupposes a combination of solidarity and innovation, cooperation and competition.

The Alpine Space is an area where many different cultures meet in relatively close territories. It is also an attractive place for newcomers, whether from Europe or from broader backgrounds. In this context, different specificities are expressed but also generate important levels of interrelations between territories and communities.

A traditional sense of community prevails in many parts of the Alps. It is an asset in terms of capacities and governance. For instance, economic solidarity has improved the ability of many alpine communities to deal with changing economic conditions. Such promising combinations of entrepreneurship and solidarity can function as a vector of innovation, adaptation and social inclusion. However, these traditions can also be challenged as alpine communities are exposed to stronger in- and outflows of population.

Specific traditional knowhow resulting from alpine particularities or constraints can be found in a wide range of areas, providing an important resource of knowledge that can brought into new production or management processes.

Furthermore, in a globalised world characterised by accelerating economic and social transformation processes and increasing levels of complexity, individuals, communities and companies need to enhance their resilience through networking, solidarity and cooperation across sectors and territories.
The objective is to value, adapt and develop these capacities in the face of the challenges the Alpine Space is confronted with in a changing world. Demographic change, globalised competition, climate change and sustainable development are some of the issues for which enhanced social and cultural capacities are a particularly important asset. The objective is also to capitalise on traditional alpine knowledge and draw fresh competitive and innovative capacities from it.

One of the main issues relating to this objective is enabling alpine communities to transform old forms of solidarity into new ones based on sustainable economic models and including new generations and new populations.

New forms of governance need to be invented to cope with these challenges, thus enabling an increasing number of protagonists (territories, sectors, civil society…) to work efficiently together at the right scale. Transfers of knowledge relating to vertical, horizontal and sectoral forms of governance between different parts of the Alps can contribute to this process of transformation. The transnational level is a natural component of such transfers, but it is also a level of governance in its own right in the defence of alpine traditions and of social diversity in the Alps.

### Specific objectives

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<table>
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<tr>
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<tbody>
<tr>
<td><strong>3.1</strong></td>
<td>Enhance the potential of alpine communities as a framework for adaptation, innovation and social inclusion.</td>
</tr>
<tr>
<td><strong>3.2</strong></td>
<td>Value the capacities of adaptation, production and innovation that can be drawn from traditional alpine knowledge.</td>
</tr>
<tr>
<td><strong>3.3</strong></td>
<td>Enhance governance capacities to deal with new, complex and multilevel issues through adequate procedures and institutions, including at transnational level, (knowledge transfer regarding vertical, horizontal and sectoral governance, different models of governance at local and regional level, etc.).</td>
</tr>
<tr>
<td><strong>3.4</strong></td>
<td>Increase the awareness of the potential of newcomers through the competences, knowledge and relations with their community and region of origin.</td>
</tr>
</tbody>
</table>
3.5 Enhance social and cultural capacity to deal with an ageing society, increasing social diversity and a diversification of family types.

3.6 Offer training and education to improve cooperation and network skills and capacities of alpine stakeholders.

Objective 4: Sustainably managed biodiversity and landscapes

Rationale

Exceptional and specific landscapes and biodiversity are a distinctive feature of the Alps in Europe. However, biodiversity and landscapes are the expression of fragile balances steadily evolving along with climate change and the evolution of human activities. Key factors of change are for instance diminishing traditional agricultural activities making way for forestry and productivist models of agriculture combined with the impact of tourism activities, urban development and energy or transport infrastructures.

More than being simply a feature of alpine identity, landscapes and biodiversity are a resource for Europe and its inhabitants. Alpine agriculture and forestry not only deliver high quality products, they also provide valuable ecosystem services (water, air, soil, cultural landscapes) for millions of people.

Description

The objective is to keep and value the assets of biodiversity and landscapes through wise and sustainable management.

This objective requires striking a balance between conservation and transformation into an economic asset. Strict conservation is needed in some places, whereas sensible utilisation for productive purposes will be necessary to preserve biodiversity and landscapes assets in others. Operational development models taking into account the diverse specificities of alpine territories are to be promoted in order to balance the requirements of economic, environmental and social sustainability.

The involvement of certain key protagonists and sectors is particularly critical in this process, namely those involved in the management and development of different kinds of alpine territories. These protagonists have a particular role to play in the conservation and utilisation of landscapes and biodiversity through their activities in the fields of agriculture, forestry, energy, tourism and transport, for example. They can be collectively designated as the “space keepers” of the Alpine Space.

Agricultural policies have already acknowledged the importance of farming activities in the preservation of landscapes and biodiversity. This type of approach can be further developed...
and extended to other “space keeping” sectors. The Alpine Space can help design ways of taking better account of their positive and negative externalities in terms of biodiversity and landscape. This would be an important step with a view to promoting joint responsibility for landscape and biodiversity among a wide scope of alpine economic protagonists and stakeholders.

### Specific objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Promote viable mountain farming and forestry as “space keeping” activities with regard to their conservation role of landscapes and biodiversity.</td>
</tr>
<tr>
<td>4.2</td>
<td>Overcome conflicts between protection and use of biodiversity and landscapes through fair and viable mechanisms of conservation and wise management involving local communities.</td>
</tr>
<tr>
<td>4.3</td>
<td>Create a pan-alpine network of biodiversity by improving the connectivity of areas of high ecological value.</td>
</tr>
<tr>
<td>4.4</td>
<td>Adapt biodiversity and wise landscape management and conservation measures to the different territories of the Alps, e.g. limiting urban sprawl and controlling the extension of secondary housing.</td>
</tr>
<tr>
<td>4.5</td>
<td>Foster exchanges on the sustainable management of biodiversity and landscapes with stakeholders, institutions and transnational cooperation networks of other mountain ranges in Europe.</td>
</tr>
</tbody>
</table>

### Objective 5: Sustainable resource management and production

#### Rationale

The Alpine Space is rich in natural resources and raw materials. The ways in which these resources have been transformed into economic assets has varied through history and had distinctive effects both on the alpine environment and on the resource itself. The ecosystem services delivered by these types of activities have also been significant: Alpine agriculture and forestry, for example, not only deliver high quality products, they also provide valuable ecosystem services (water, air, soil, cultural landscapes) for millions of people.

The importance of the Alpine Space as Europe’s water tower is often emphasized. Water has played differing roles in the alpine economy: hydroelectricity triggered regional industrial development in the 19th century. It remains an important source of energy that generates significant incomes for some alpine communities, but pipes and reservoirs impact severely on rivers and natural living spaces. Since the second half of the 20th century, snow has become a valued asset for tourism with important effect in terms of infrastructure and urban development. With climate change, the use of artificial snow is increasingly widespread, consuming significant amounts of water. But alpine waters are also a key resource for...
agriculture in and around the Alps, satisfying the demand for water of the Alpine Space population.

As illustrated by this example, there are conflicts of interest between scales and between territories with regards to the economic uses of natural resources. Transnational policies can 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 improving the multi-level governance of resource exploitation, with the objective of ensuring that the interests of different territories and groups are weighed against each other to promote a more balanced distribution of economic returns.

### Description

The objective is to promote sustainable management of alpine resources and sustainable utilisation of these resources in order to limit and compensate for negative impact.

Considering the objective of a green economy, resource use has to be reduced and become more efficient and low-carbon oriented in order to disconnect economic growth from resource consumption.

There are important opportunities to value traditional sustainable cultures in the Alps but also issues to be addressed in order to achieve wiser management of resources and of the impact of their economic use.

There is also a pressing need to develop capacities to adapt to changing levels of availability of resources, notably because of climate change.

A wide range of experience can be valued for different resources (water, snow, mineral resources, vegetal resources, etc.) in different sectors (agriculture, forestry, tourism, energy production, food production, etc.).

The point is to set an alpine rationale that allows the establishment up sustainable models of resource management and production.
### Specific objectives

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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<td>5.2</td>
<td>Adapt resource exploitation in a context of changing climate conditions so as to limit its impacts and mitigate climate change.</td>
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<tr>
<td>5.3</td>
<td>Move towards a green economy by reducing resource use, enhancing efficiency and disconnecting economic growth from resource consumption.</td>
</tr>
<tr>
<td>5.4</td>
<td>Promote the conversion to a post-carbon energy system through energy saving, energy efficiency, decentralised energy grids based on renewable resources, energy saving settlement patterns and public transports, etc.</td>
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<tr>
<td>5.5</td>
<td>Foster instruments and procedures to negotiate and balance the interests of energy production and other land use and protection functions.</td>
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<td>5.6</td>
<td>Develop future perspectives for the Alpine Space as energy storage space for peak load power.</td>
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<td>5.7</td>
<td>Build up models of sustainable management of resources matching alpine opportunities and constraints, e.g. water management taking into account stronger competition between alpine and peri-alpine territories.</td>
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<tr>
<td>5.8</td>
<td>Value traditional alpine knowhow for green building innovation (use of regional building materials, innovative architecture, passive house standards and regional handicrafts, etc.).</td>
</tr>
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<td>5.9</td>
<td>Improve instruments and procedures for transnational risk management (flood management in particular).</td>
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<td>5.10</td>
<td>Promote mobility and settlement strategies and plans to support public transport and the reduction of urban sprawl, travel distance and car dependency.</td>
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<td>5.11</td>
<td>Test and develop and comprehensive mobility concepts based on renewable resources (for example mobility systems based on solar energy).</td>
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<td>5.12</td>
<td>Develop and implement multilateral integrated public transport and information systems at regional level in order to reduce car dependency and car use and support public transportation facilities as services of general interest.</td>
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</table>
Objective 6: Shared responsibilities and fair co-operation among alpine territories

Rationale

The Alpine Space is made up of varied and contrasting territories with complementary assets and well-established traditions of exchange between them. They can be distinguished on the basis of physical characteristics (highlands, lowlands, wide and narrow valleys, different mountain ranges, etc.) and in terms of their socio-economic dynamics (metropolises, Alpine cities, growing or declining rural areas, tourism areas).

Within this variety of territorial contexts, one can identify both a number of shared development issues and a basis for exchange and complementarity at different levels (e.g. interregional, cross-border and transnational interactions). More generally, multilevel governance is a prerequisite to cope with the options and threats described in the SWOT and contribute to the strategic objectives described. Whereas strategic documents and plans show an increasing consensus around the need for vertical and horizontal transnational cooperation, the institutional set-ups and resources that would be needed to breathe life into these concepts and make them work often remain weak. Also the options for participation of civil society organisations and other interest groups in political decision-making at the various levels are often unclear. What is more, a lack of communication leads to conflicts between the different territories and groups.

The Alpine Space includes both prosperous areas that experience intense economic and demographic growth and land-use pressures and territories exposed to the challenges of demographic decline and lack of economic activity. Depending on the groups of stakeholders considered, its natural environments can be considered as biodiversity reserves, leisure areas, living environments or potential economic development areas. Within this complex system of contrasting trends and perspectives, enhanced pan-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!). Ever more complex issues have to be addressed by new models of governance involving protagonists of different kinds (public, private, civil society...) and levels (from local to transnational). At the transnational level, the instruments need to be adapted to the issues at stake.
Description

Fresh exchange and complementarity between reshuffling alpine territories as well as emerging development issues offer a wide-ranging potential basis for cooperation to supplement what is already in place.

The objective is to identify the most relevant fields of cooperation to address future development issues and foster efficient forms of cooperation between relevant stakeholders and territories.

Various framework conditions need to be consolidated in order to achieve successful exchange and cooperation such as infrastructure networks, both physical and digital, but also governance systems enabling the relevant issues to be tackled and potential conflicts of interests to be overcome. Such a governance framework implies that conflicts of interest between alpine and peri-alpine territories - e.g. between uses of the Alpine Space (Alps as "living space" or "commodified space") and of alpine water resources - are addressed on the basis of dialogue and consensual solutions rather than competition.

Specific objectives

6.1 Promote territorial cooperation between different territorial types in the Alps based on shared or complementary characteristics, e.g. partnerships between metropolitan regions and “core alpine areas”, between alpine cities and their surroundings, between municipalities and regions, urban-rural partnerships, etc.

6.2 Strengthen the role of metropolises and alpine cities as growth poles and competence centres in a global market.

6.3 Promote sectoral transnational networks on relevant issues for alpine development (e.g. risk management, tourism, winter sports, forestry, agriculture, energy, e-services) involving all relevant protagonists (economic protagonists, research, public bodies, etc.).

6.4 Improve alpine governance through a more active involvement of non-institutional protagonists and stakeholder dialogue.

6.5 Improve the knowledge base on alpine issues through the provision of data and information harmonised on a pan-alpine basis, e.g. by means of pan-alpine databases.

6.7 Promote integrated transport systems in the Alps supporting exchanges within and between the different alpine territories.

6.8 Improve the territorial insertion of freight traffic in the Alps in order to mitigate its environmental impact and to improve its benefits for local communities.
### 4.4. Overview of strategic and specific objectives

**Objective 1: Balance and equity in access to services of general interest across the Alps**

<p>| | |</p>
<table>
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<tbody>
<tr>
<td><strong>1.1</strong></td>
<td>Promote innovative solutions to make viable investments in transport and digital infrastructure or services as key factors of accessibility to services. This is especially relevant to remote rural areas but is also an issue in other Alpine areas.</td>
</tr>
<tr>
<td><strong>1.2</strong></td>
<td>Strengthen e-services in all fields of general interest (e-administration, e-healthcare services, e-job search services, e-learning, e-commerce for alpine products, etc.)</td>
</tr>
<tr>
<td><strong>1.3</strong></td>
<td>Provide a level of service availability adapted to the specific needs of different alpine territories through an appropriate balance between the density and accessibility (digital or physical) of services.</td>
</tr>
<tr>
<td><strong>1.4</strong></td>
<td>Provide services adapted for the whole life cycle, with special consideration for a growing population of senior people, and promoting social inclusion.</td>
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**Objective 2: A dynamic and innovative SME sector and thriving entrepreneurship**

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<tr>
<td><strong>2.1</strong></td>
<td>Strengthen the relations between production, research and education and training on a cluster basis in order to reinforce the link between territories and businesses.</td>
</tr>
<tr>
<td><strong>2.2</strong></td>
<td>Focus on the development of a green economy taking advantage of alpine environmental specificities and strong productive and innovation capacities.</td>
</tr>
<tr>
<td><strong>2.3</strong></td>
<td>Promote the diffusion of growth and employment beyond current centres of economic growth and demographic concentration.</td>
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<tr>
<td><strong>2.4</strong></td>
<td>Strengthen the capacities of research infrastructure and their connections to world-leading institutions.</td>
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**Objective 3: Enhanced capacities based on alpine traditions and social diversity**

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<tr>
<td><strong>3.1</strong></td>
<td>Enhance the potential of alpine communities as a framework for adaptation, innovation and social inclusion.</td>
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<tr>
<td><strong>3.2</strong></td>
<td>Value the capacities of adaptation, production and innovation that can be drawn from traditional alpine knowledge.</td>
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<tr>
<td><strong>3.3</strong></td>
<td>Enhance governance capacities to deal with new, complex and multilevel issues through adequate procedures and institutions, including at transnational level, (knowledge transfer regarding vertical, horizontal and sectoral governance, different models of governance at local and regional level, etc.).</td>
</tr>
<tr>
<td><strong>3.4</strong></td>
<td>Increase the awareness of the potential of newcomers through the competences, knowledge and relations with their community and region of origin.</td>
</tr>
<tr>
<td><strong>3.5</strong></td>
<td>Enhance social and cultural capacity to deal with an ageing society, increasing social diversity and a diversification of family types.</td>
</tr>
<tr>
<td><strong>3.6</strong></td>
<td>Offer training and education to improve cooperation and network skills and capacities of alpine stakeholders.</td>
</tr>
</tbody>
</table>
### Objective 4: Sustainably managed biodiversity and landscapes

| 4.1 | Promote viable mountain farming and forestry as “space keeping” activities with regard to their conservation role of landscapes and biodiversity. |
| 4.2 | Overcome conflicts between protection and use of biodiversity and landscapes through fair and viable mechanisms of conservation and wise management involving local communities. |
| 4.3 | Create a pan-alpine network of biodiversity by improving the connectivity of areas of high ecological value. |
| 4.4 | Adapt biodiversity and wise landscape management and conservation measures to the different territories of the Alps, e.g. limiting urban sprawl and controlling the extension of secondary housing. |
| 4.5 | Foster exchanges on the sustainable management of biodiversity and landscapes with stakeholders, institutions and transnational cooperation networks of other mountain ranges in Europe. |

### Objective 5: Sustainable resource management and production

| 5.1 | Improve the sustainable utilisation of water, mineral and natural resources, focusing on their transformation into added-value products within the Alpine Space. |
| 5.2 | Adapt resource exploitation in a context of changing climate conditions so as to limit its impacts and mitigate climate change. |
| 5.3 | Move towards a green economy by reducing resource use, enhancing efficiency and disconnecting economic growth from resource consumption. |
| 5.4 | Promote the conversion to a post-carbon energy system through energy saving, energy efficiency, decentralised energy grids based on renewable resources, energy saving settlement patterns and public transports, etc. |
| 5.5 | Foster instruments and procedures to negotiate and balance the interests of energy production and other land use and protection functions. |
| 5.6 | Develop future perspectives for the Alpine Space as energy storage space for peak load power. |
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| 5.8 | Value traditional alpine knowhow for green building innovation (use of regional building materials, innovative architecture, passive house standards and regional handicrafts, etc.). |
| 5.9 | Improve instruments and procedures for transnational risk management (flood management in particular). |
| 5.10 | Promote mobility and settlement strategies and plans to support public transport and the reduction of urban sprawl, travel distance and car dependency. |
| 5.11 | Test and develop comprehensive mobility concepts based on renewable resources (for example mobility systems based on solar energy). |
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5. Strategic perspectives for the future Alpine Space Programme and for an alpine macro-regional strategy

The strategic objectives and specific objectives presented in chapter 4 were selected on the basis of their importance in terms of the balanced development of alpine regions, and by taking into account their relevance at the transnational level. However, strategic perspectives for the future Alpine Space Programme and for an alpine macro-regional strategy must relate to existing policy frameworks and instruments (5.1). Here, a complex situation is revealed. With a view to tracing a path forward, a certain number of guiding principles may be identified (5.2). A stepwise approach to an alpine macro-regional strategy is advocated, to be developed in interaction with initiatives of the Alpine Space Programme (5.3). This implies that the Alpine Space Programme should not only trigger and fund projects but also needs to promote debate and dialogue on alpine strategy as well as encouraging networking among alpine stakeholders (5.4).

5.1 Overview of instruments in the Alpine Space

An elementary precondition for the achievement of strategic objectives is the availability of the appropriate organisational framework and instruments. For this purpose, one needs to identify the organisations, policy framework and instruments that may contribute to the achievement of the six strategic objectives. On this basis it is possible to identify the specific strategic perspective of the alpine space programme and a possible macro-regional strategy.

The diversity of institutions, organisations, forms of cooperation and understandings of the Alps was presented in chapter 1 (see Table 1 p. 17). Only a few of these transnational organisational frameworks have instruments at hand which go beyond soft policies such as information exchange, networking, knowledge exchange or awareness-raising. The availability of strong and binding instruments tends to be limited to the European and national levels. As a binding international treaty, the Alpine Convention can be considered as an exception to this rule. However, it only exerts an effective influence on policies and measures in the Alpine Space insofar as its clauses go beyond the requirements of national and regional regulations.

Transfers of executive or legislative power to the alpine level are not envisaged. Alpine policies are dependent on a consensus between alpine stakeholders, especially the alpine regions and states. The diversity of institutional settings in the alpine space, with a combination of unitary and federal states, makes the adoption of such consensual positions and the implementation of corresponding measures challenging. Furthermore, alpine policies and instruments need to relate to the executive and legislative powers of the European Union. These constitute a major framework for policy elaboration and implementation throughout the alpine space, including non-EU states such as Switzerland and Liechtenstein, respectively linked to the EU through extensive bilateral agreements and EEA membership. With European integration, instruments and measures at the alpine level need to be justified both in relation to the narrower regional level and the wider European level. They are relevant insofar as one can demonstrate that they allow for improved efficiency in the achievement of alpine strategic objectives compared to these other levels.
At the same time, the limitations of this type of transnational approach need to be acknowledged. There is no taxation or other autonomous sources of funding at the alpine level on which to build a policy. The Alpine Space Programme is the only channel through which European funds are allocated to support transnational alpine actions. National and regional policies, for example within the fields of welfare systems and other schemes for wealth redistribution, economic development incentives and infrastructure investment, will generally have a considerably larger effect on social, economic and environmental trends in the alpine space than transnational alpine strategies and measures as such.

The three central transnational organisational frameworks to promote and support the strategic objectives as presented in this study (the Alpine Space Programme, the Alpine Convention and a possible macro-regional strategy) therefore need to position themselves in relation to a great variety of other stakeholders. Their primary objective is to become a lever by which specific alpine challenges and opportunities are taken into account in the policies of European, national and regional authorities in a coherent and coordinated way. They must ensure that the financial and regulatory instruments that are designed at other geographical levels than that of the Alps contribute to promoting the strategic objectives for the Alps.

There are therefore complex interrelations between executive and legislative authorities at the national/regional and European levels on one hand and alpine organisational frameworks on the other. The elaboration of principles of coordination between these different levels is further complicated by the different ways in which the alpine organisations interact with European, national and regional institutions:

- The various European authorities (European Council, European Commission and European Parliament) provide guidelines and frameworks for the transnational territorial programmes. They have also provided input to the debate on macro-regional strategies and supported the elaboration and implementation of existing strategies. The Alpine Space Programmes are elaborated on the basis of dialogue between the national level and the European Commission, while macro-regional strategies are adopted by the European Council.
- Actions implemented in the context of an MRS are funded by regional or national funds. In theory, no dedicated European funds are allocated for this purpose.
- Some of the protocols of the Alpine Convention have been ratified by the European Commission (mountain farming, tourism, energy, soil conservation), others have been ratified only by the members states (spatial planning and sustainable development, mountain forests, transport, conservation of nature and countryside, composition of controversies), except for Switzerland, which has only ratified the Framework Convention.
Each of these organisational frameworks has specific strengths and weaknesses:

(1) The Alpine Space Programme is the only one which has a relevant budget at its disposal funded by the European Union and available for subsidies to public authorities or public owned applicants. But the results have no binding character, hardly ever cover the whole Alpine Space, and they are limited to territorial policies. On the other hand the subsidies are a relevant incentive to motivate stakeholders to cooperate on a pan-alpine level, to exchange information, generate knowledge or foster networks within Alpine Space Programme projects.

The Alpine Space Programme is in line with European and national objectives, but has the capability to focus on alpine-specific priorities within this framework.

(2) A macro-regional strategy (as conceived up to now) purports to coordinate and orient transnational and national policies on the basis of a political agreement of alpine regions and states. The advantage of a macro-regional strategy is to cover territorial policies as well as sectoral policies and at best to function as a guideline for policies at national, regional and local levels. On the other hand the strategy has no binding character and depends on the goodwill of the relevant protagonists as well as on the personnel and financial resources provided by partner institutions.

(3) Alpine Convention: The Alpine Convention Protocols as treaties ratified by the Member States are the only binding instruments available at a pan-alpine level. The Member States are represented by the ministers of the environment. Although the protocols, declarations and ongoing work deal with different fields of action (spatial planning, transport, tourism, energy, mountain farming, soil conservation, conservation of nature and landscape protection, population and culture, climate change), the emphasis is on the environmental perspective. The strong binding character, the focus on environmental issues and the limited budget have limited the capacity of the Alpine Convention to play a major role at the pan-alpine strategic level up to now. Additionally the link between the Alpine Convention and the European Union is weak, as illustrated by its partial ratification of the Convention’s protocols.

In view of this, none of the alpine organisations meet all the requirements to achieve the strategic objectives presented in this study. Therefore, networking between these organisations is the key to an enhanced alpine policy. Their various instruments need to be better coordinated so as to contribute to the achievement of shared strategic objectives. This implies that alpine multilevel governance needs to be redesigned. Addressing this challenge presupposes a more precise identification of the respective roles of each organisational framework, and more generally one that reflects the involvement of the broad variety of protagonists and processes that have a stake in pan-alpine policies.

This endeavour is particularly challenging, among other things because the improvement of alpine governance is confronted with a "catch 22" situation. On the one hand, the adoption of strategic objectives without having solved the observed organisational challenges is likely to lead to a dead end. On the other hand, it appears difficult to rally alpine organisations and policy frameworks in the absence of a shared project for the Alps. The following sections identify approaches that would help overcome this deadlock.
5.2 Principles of action

The previous section illustrated the relative weakness of the alpine policies in relation to the European, national and regional levels, and the complexity resulting from different organisational frameworks, a large number of stakeholders and the variety of institutional set-ups in alpine states. Within this complexity, a certain number of principles may help achieving the strategic objectives identified in chapter 4.

Firstly, it may be useful to synthesise the overarching principles on the basis of which an alpine cooperation might be developed. This shared value base of alpine stakeholders is progressively broadened and enhanced as the transnational dialogue and cooperation progresses. The stakeholder events organised as part of the Alpine Space programme’s strategy development process demonstrated that there is a broad consensus around these general principles that are further elaborated below.

Secondly, one needs to precisely identify the specific contribution of transnational alpine policies and measures in the broader context of actions undertaken by public authorities within the Alps or that are of direct relevance to the Alps. A greater variety of positions have been voiced during stakeholder events in this respect. Many protagonists tend to argue in favour of measures addressing the most pressing challenges within their respective territory or sector of activity without necessarily reflecting on the relevance of the transnational level within this field.

The prime purpose of the present section is therefore to present principles of action in order to

- describe how strategy design and policy implementation at the alpine level may be of added value, as a component of multi-level governance,
- provide guidelines for how concrete actions and measures might help achieve the strategic objectives that have been identified,
- function as criteria for the selection and evaluation of projects.

While principles of action necessarily build on previous experience, their objective is also to pave the way for new developments and innovative approaches to policy-making and stakeholder involvement. Like all transnational cooperation, alpine initiatives are influenced by European and global discourses on development, policy formulation and strategic action.

Sustainability and resilience – key concerns for the Alps and challenges to alpine cooperation

The long-standing tradition of alpine dialogue and cooperation distinguish the Alps from many other transnational places of cooperation. Dialogue and exchange sponsored by CIPRA since the 1950s played an important role in the adoption of the Alpine Convention. Throughout these processes, environmental concerns have been a key concern. Perspectives on how the human and natural resources of alpine territories should be managed to improve the perspectives of long term sustainability nonetheless vary significantly between territories. For example, some focus more on the Alps as a living environment and on its economic development opportunities, while others
emphasize the importance of preserving its unique natural landscapes or emphasize the recreational, aesthetic and heritage value of its landscapes. The alpine level can play an important role in bringing these different perspectives together through debate, dialogue and collaborative projects.

Sustainability and resilience can function as guiding principles in these processes. Sustainable development is a well-established concept, and most protagonists are aware that the core challenge lies in enabling combined environmental, economic, social sustainability. By comparison, the introduction of resilience in the debate on regional development is quite new. 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. Regional resilience means the capacity of a region to absorb endogenous or exogenous disturbances in such a way that the structures, functions and relationships that are essential for its prosperity and sustainability remain intact (Lukesch et al. 2010).

Resilience can become an operational guiding principle for strategic actions at the alpine level by drawing on the steering model for regional resilience proposed by Lukesch et al (2010). According to this model, regional resilience addresses two domains: that of the region as a socio-economic, cultural-political fabric and that of regional governance, the set of protagonists having the explicit task and legitimacy to shape regional development. The model is based on the assumption that different forms of equity are required when addressing the challenge three-fold sustainability mentioned above. These different forms of equity (social cohesion, territorial cohesion and inter-generational equity) are further described below. In terms of strategic objectives, a resilience-based approach furthermore presupposes the move towards a green economy by reducing resource use, enhancing efficiency and disconnecting economic growth from resource consumption.

At the transnational level, the promotion of resilience needs to be based on the observation of functional and institutional interactions between alpine regions and an assessment of potential for further cooperation and integration. The regional perspective promoted by Lukesch at al. (2010) needs to be adapted so as to envisage resilience based on the co-existence of different types of rural and urban development among alpine regions. Concrete solidarity between alpine regions remains extremely limited compared to national and European mechanisms of redistribution that help reduce the social impact of economic fluctuations and crises. The focus of transnational resilience is therefore rather on promoting different forms of functional integration while encouraging plurality of development models.

Territorial cohesion, equity, cultural diversity and social solidarity
As illustrated by the territorial typology, the Alpine Space is composed of very diverse areas and strong local contrasts. Alpine cooperation needs to draw on the complementarity of its different parts, ranging from isolated and sparsely populated alpine core areas to surrounding metropolitan regions. This promotion of alpine territorial cohesion must be based on the two other principles of economic and social cohesion with a view to ensuring that the inhabitants of all parts of the Alps can contribute to its balanced development.
Territorial cohesion presupposes a shared commitment to balanced development and an equitable division of responsibilities and financial burdens. Considering the difference in demographic weight between the alpine core area and the rest of the Alpine Space (with respective population figures of 14 and 56 million inhabitants), maintaining a focus on issues of relevance to mountainous communities may be challenging. However, this is important to ensure that measures focus on issues to which the alpine level is the most relevant.

Numerous studies have stressed a polarisation and internal differentiation process between prosperous and peripheral areas in the Alpine Space over the last decades. This trend towards, polarisation, being the outcome of parallel growth and decline processes, is considered to be one of the major threats to the Alpine Space. The interconnections between the peri-alpine metropolises and the core alpine area are of specific concern (Price et al 2011).

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

Alpine society will also become more and more multi-faceted with an increasing variety of lifestyles and personal philosophies as well as cultural and social identities. Being aware of and respecting the old and welcoming the new can be a promising concept with considerable potential for success in relation to the Alpine Space as a whole as well as for different types of regions in particular.

Implementation of principles for alpine actions

Based on the overarching principles described above, and considering the already extensive experience with transnational programmes in the Alpine Space, some implementation principles can be proposed. The scope of these principles is to provide concrete indications as to how actions should be conceptualised and prioritised, also considering that they concern three kinds of operational aspects: (1) the object of these decisions, or actions (WHAT) (2) the decision-makers and protagonists (WHO) and (3) the way decisions are taken and actions are made (HOW).

These operational aspects can be further described by means of a series of types of action that would be particularly profitable in the context of alpine cooperation. As described in Table 10, these general principles have specific implications at the transnational level, and more particularly in the alpine context. Some raise questions that need to be addressed, e.g. the democratic legitimacy of groups of alpine stakeholders, or the transposition of a “triple helix” model of university-industry-government alliance (Leydesdorff, 2012) from the regional to the transnational levels.
<table>
<thead>
<tr>
<th>Category</th>
<th>Principle</th>
<th>Transnational dimension</th>
<th>Alpine application</th>
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<tbody>
<tr>
<td>1) WHAT-principles</td>
<td>Actions which address market failures, i.e.</td>
<td>Market failures do not usually occur at the transnational level. They rather result from the functioning of market forces at the national, regional or global scales. However, a transnational space may be composed of regions facing similar challenges in terms of market forces.</td>
<td>Sharing experience and elaboration of a joint discourse on the need for public interventions in certain types of situations, typically occurring in small and isolated alpine communities.</td>
</tr>
<tr>
<td></td>
<td>situations where the private sector fails to exploit identified opportunities, does not deliver services with significant positive externalities or generates imbalances that require public intervention.</td>
<td></td>
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<tr>
<td></td>
<td>Actions which require public “pump priming”, i.e.</td>
<td>“Pump priming” and “support for innovative ideas” are interconnected notions. This is often about creating opportunities within fields of action where local and regional stakeholders mainly see obstacles. The transnational level can help provide a “view from the outside”. Transnational support can be capitalised upon by local entrepreneurs to rally local support for their project.</td>
<td>Alpine communities are often close-knit and have strong traditions. These assets may in some situations create challenges when one needs to adapt to new framework conditions, e.g. with respect to economic activities or climate change. Cultural and social diversity is an important lever in this respect.</td>
</tr>
<tr>
<td></td>
<td>where limited public support can allow sustainable new economic activities to emerge and encourage entrepreneurship.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Actions which support alternative, innovative ideas and development models, with a view to strengthening resilience.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) WHO-principles</td>
<td>Actions which put a premium on multi-competence merging the skill sets of public, private and research protagonists, based on the triple-helix model of university-industry-government alliance for regional development.</td>
<td>The triple-helix model is usually associated with regional development. However, the most promising perspectives of cooperation between industry and R&amp;D milieus may in many cases be inter-regional. The transnational level may help implement such a geographically widened triple-helix model.</td>
<td>The application of a triple helix model beyond regional and national boundaries raises questions concerning the involvement of public authorities: what organisations are in the best position to embody the “government” component of the helix? An alpine macro-regional strategy could help answering this question.</td>
</tr>
<tr>
<td></td>
<td>Actions which foster knowledge exchange and new links between sectors of activity, territories and social groups. These bridging actions can be based on the steering models for regional resilience described above.</td>
<td>Transnational initiatives are confronted with the issue of democratic legitimacy when bringing together protagonists from different parts of the Alps, sectors and social groups that together elaborate a strategy or vision of alpine development. How representative are they? Is balanced democratic control sufficiently catered for by the procedures leading from knowledge exchange to strategic choices and the implementation of measures?</td>
<td>The Alpine Space is composed of territories with contrasting demographic, social and economic trends as well as great cultural and linguistic diversity. Positions in key policy fields such as environmental protection, economic development, infrastructure development, are correspondingly diverse. Balanced representation and long-term strategies to establish trust and a progressive emergence of consensual positions is all the more important.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Principle</th>
<th>Transnational dimension</th>
<th>Alpine application</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) HOW-principles (i.e. which modus operandi to incentivize)</td>
<td>Actions which are proactively proposed, i.e. not relying on a “market” of protagonists to propose projects that feed into the strategic priorities of the Alpine Space, but actively encouraging the emergence of such projects through prior dialogue, open consultation, briefing sessions and a wide dissemination of the strategic objectives pursued at the alpine level.</td>
<td>The implication of project partners from different countries is one of the key principles of transnational cooperation programmes. Establishing these transnational project groups is a challenge in itself. Proactive policies are needed to ensure that their actions meet the strategic priorities for alpine cooperation.</td>
<td>Pro-active project generation can help adjust the focus of the Alpine Space Programme within the selection of thematic objectives drawn from the European Commission's list. The programme's thematic concentration might in this way be better adapted to specifically alpine opportunities and challenges.</td>
</tr>
<tr>
<td></td>
<td>Actions which address topics for which the lack of broad public awareness is an obstacle to further alpine cooperation. This principle is particularly important not only to pursue accountability and transparency towards alpine stakeholders and the public at large but also to sow the seeds of new ideas and alliances.</td>
<td>Many transnational initiatives have a predominantly technical or institutional function; public awareness is then not a key priority, and is de facto quite low. However, whenever they lead to concrete effects on living conditions, economic activities or environmental qualities, it is essential that the modes of communication target a wide audience.</td>
<td>The Alpine Convention has been criticised for the insufficient bottom-up involvement of alpine communities and regions. Awareness of the Alpine Space Programme is generally low beyond the circles of potential beneficiaries. An alpine macro-region could help improve public involvement if it focuses on creating a concrete impact within certain well-defined, targeted fields.</td>
</tr>
<tr>
<td></td>
<td>Actions which leverage expert support at all levels, i.e. which are not left to their own devices but seek expert facilitation and progress assessment. The Alpine Space Programme could be more pro-active in establishing links between alpine economic clusters, communities and organisations and relevant networks of expertise within and outside the Alps that might support them in the achievement of their objectives.</td>
<td>Individual alpine local authorities, economic protagonists and transnational project groups can be confronted with situations where they lack expert competence within specific fields. Meeting these needs at the level of individual regions can be difficult. However, transnational cooperation can help reach a critical mass.</td>
<td>Transnational cooperation programmes can help establish networks of experts and process facilitators that can be drawn on by alpine protagonists when needed. However, a more established and permanent cooperative milieu is often needed. Establishing jointly funded resource centres within specific fields might be one of the functions of an alpine macro-regional strategy.</td>
</tr>
</tbody>
</table>
5.3 Strategic perspectives for the future Alpine Space Programme and for an alpine macro-regional strategy

As was illustrated in Section 1.1 (see Table 1), there is a wide range of interpretations of the Alps and ideas as to why alpine cooperation is needed. This diversity of perspectives needs to be taken into account so as to efficiently contribute to the achievement of the strategic objectives listed in chapter 4, within the framework of the principles of action described in the previous section. This concerns both the Alpine Space Programme and a possible future macro-regional strategy.

Governance of the Alpine Space: restoring dialogue before seeking to agree on a “vision”

The absence of a commonly accepted vision for the Alpine Space can be considered as a weakness in terms of the formulation of strategic priorities. However, as previously noted, a visioning exercise presupposes consensus-building processes involving a wide range of alpine stakeholders (see section 1.2). The existing attempts at elaborating an alpine macro-regional strategy described in section 2.2 have shown the complexity of organising such processes in the Alpine Space. Approaching visions as a prerequisite for strategic action therefore risks leading alpine policies into a deadlock. Visions should rather be created as the outcome of a process leading to increased convergence among alpine stakeholders.

The focus first needs to be on improving the governance of the Alpine Space and on facilitating exchanges between alpine-related stakeholders. The Alpine Space Programme is only one protagonist 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 shows an accumulation of networks with different understandings of the Alps, diverging political agendas and varying approaches to the elaboration of democratically legitimate pan-alpine strategies. There are significant differences between “peri-alpine” and “core-alpine” stakeholders as far as the expectations and perspectives on alpine cooperation are concerned. Strategic objective 6 entitled “Shared responsibilities and fair co-operation among alpine territories” refers to the need to organise a convergence between these different approaches. The strengthening of transalpine network and governance capacities is a component of this endeavour. The underlying idea is that the Alpine Space not only needs dedicated projects dealing with governance, e.g. an exchange of experience relating to participative processes and initiatives to promote a better mutual understanding of institutional set-ups across regional and national boundaries. More explicitly acknowledging the variety of prevailing approaches of alpine cooperation and integration is also required in order to ensure that the programme’s projects and initiatives contribute to a convergence of views and practices among alpine stakeholders. A promotion of the notion of “plural Alps” is needed for this purpose.
<table>
<thead>
<tr>
<th>Function of the alpine level</th>
<th>Description</th>
<th>Principle</th>
<th>Main challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Political lobbying</strong></td>
<td>Identify shared alpine issues and put them on the agenda at the national and European levels through joint awareness raising efforts</td>
<td>Protagonists faced with similar issues reach the critical mass needed to impact on policy-making processes</td>
<td>A shared understanding of issues, instruments and objectives is required</td>
</tr>
<tr>
<td><strong>Horizontal Coordination</strong></td>
<td>When measures adopted in one part of the Alps affect other alpine areas, efforts are made to ensure these effects are taken into account.</td>
<td>Local and regional protagonists become aware of the long-term added value of dialogue with other localities/regions when designing certain types of measures</td>
<td>Selecting fields where coordination is needed and would be cost-efficient; avoid creating complex systems with limited output (“Rube Goldberg machines”)</td>
</tr>
<tr>
<td><strong>Harmonisation</strong></td>
<td>Develop harmonised regulations and technical solution to facilitate exchanges and flows.</td>
<td>Unnecessary obstacles to cross-border flows and exchanges are eliminated</td>
<td>National regulatory frameworks and administrative cultures may be difficult to overcome.</td>
</tr>
<tr>
<td><strong>Transfer of good practices, learning</strong></td>
<td>Draw inspiration from the ways in which public and private protagonists in other parts of the Alps deal with specific types of situations</td>
<td>Areas within the Alps face similar or parallel types of opportunities or challenges, making transfers in this context worthwhile.</td>
<td>It may be difficult to take proper account of the framework conditions and unique local characteristics leading to a “success story”</td>
</tr>
<tr>
<td><strong>Contribution to European integration</strong></td>
<td>As a transnational grouping of 33 European regions, the Alpine Space Programme contributes to European integration</td>
<td>Regions of the Alpine Space function as one group in certain key respects at the European level</td>
<td>Alpine regions share some issues, but not all; the thematic focus of the “alpine group” needs to be clearly identified and communicated</td>
</tr>
<tr>
<td><strong>Management of pan-alpine challenges and opportunities</strong></td>
<td>The Alps may be a single “functional region” for some challenges or opportunities calling for public intervention</td>
<td>Public policies are implemented at the transnational level where the challenge or opportunity occurs</td>
<td>Some parts of the Alps may be more concerned than others, e.g. in terms of management of freight flows transiting through the Alps</td>
</tr>
</tbody>
</table>
Secondly, different “functional regions” need to be considered depending on the issue at stake: the geography of alpine ecosystems does not follow that of alpine labour markets, which is again different from alpine cultural regions. The notion of “the 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.

Thirdly, 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 in combination with any top-down approaches that may emerge. A shared sense of ownership of new measures and regulatory frameworks is a prerequisite for their successful implementation in the long term. At the same time, addressing alpine issues presupposes that one involves a series of protagonists 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.

The following sections describe how the Alpine Space Programme and the macro-regional strategy could develop in parallel, mutually reinforcing each other. This implies that their respective roles would change over time.

5.3.1 Alpine Space Programme

The Alpine Space Programme has the ambition of strengthening its strategic perspective and of focusing on long-term impact. While the Alpine Space Programme is considered to be one of the most successful transnational programmes in Europe, it remains a funding-driven programme (see section 1.2). This implies that the development of projects is left to a “market” that is hardly influenced by strategic considerations on programme level. Furthermore, the link between the ambitions of projects funded by the Alpine Space Programme 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 impact (Schneidewind et al., 2010). However, as part of the ongoing programme a number of actions have been undertaken to improve this situation. These initiatives constitute a platform on which strategic considerations for the Alpine Space Programme in the forthcoming programming period may be built (section 1.2).

As a component of European Territorial Cooperation, the Alpine Space Programme 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 Alpine Space Programme. However, at the time of writing, the proposals remain under final negotiation with Member States which usually means that the general framework has already been set and only details may be changed. As part of the elaboration and discussion of EC’s proposals, the need for a results-oriented, effective and efficient Cohesion Policy has been emphasized. The new Alpine Space Programme will be embedded in the new regulatory framework and therefore follow the guiding objectives of the Europe 2020 strategy. It is intended to contribute to the implementation of the strategy (European Commission, 2011b) and therefore also
to developments in European debates on the meaning and implications of the approach of combined social, economic and territorial cohesion.

Regulatory context

The European Commission’s legislative proposals for Cohesion Policy focus on thematic concentration. This implies that the Alpine Space Programme would need to focus on a limited number of themes and issues. However, some of the key challenges and opportunities of alpine cooperation can only be addressed through dialogue and cooperation covering a wide range of themes and sectors, e.g. when dealing with water management, sustainable resource exploitation and access to services of general interest. The question is therefore whether a new Alpine Space Programme can cover these intersectoral challenges and opportunities within the framework of a limited selection of thematic objectives chosen from the list the Commission proposes. The formulation of the new programme priorities thus has to fulfil the balancing act of each being linked clearly enough to one of the eleven thematic objectives while still leaving as much space as possible to deal with intersectoral strategic fields of intervention.

The European Commission suggests 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”. The relevance of these objectives to the Alps may seem obvious. However, one has to bear in mind that the Alpine Space Programme not only includes the mountainous core area of the Alps but also surrounding, largely urbanised lowland areas. The issues relating to climate change and resource efficiency are quite different in the two types of space. Secondly, with respect to climate change, the SWOT analysis in chapter 2 and the evaluation of current and previous Alpine Space Programme activities have shown that extensive recommendations have already been made for adaptation and mitigation measures to be implemented in the Alps. However, the current C3-Alps project, which is a capitalization project based on a series of finalised climate change adaptation and risk prevention projects, has shown insufficient awareness of these issues among local and regional stakeholders and within key sectors, e.g. forestry. These preliminary results therefore suggest that awareness-raising should be the key focus in the field of climate change adaptation and at the transnational level, while the implementation of concrete adaptation and mitigation measures is primarily of national, regional and local concern.

The range of potential fields of cooperation within the thematic objective of “protecting the environment and promoting resource efficiency” is much broader. Therefore, this suggestion is an interesting option for the new programme. It is closely related to the strategic objectives “sustainably managed biodiversity and landscapes” and “sustainable resource management and production” that were proposed in chapter 3 on the basis of the SWOT analysis.

One problem with the thematic concentration principles proposed by the European Commission is that capitalising on cultural potential is not among the proposed options. This is identified as an important strategic objective by the team of experts. The principles of action for the Alpine Space describe 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 that target alpine culture can help reverse 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. One option could be to focus on the thematic objective “competitiveness of small and medium-sized enterprises (SMEs)”. Many globally competitive economic activities in the Alpine Space are grounded in traditional know-how that is considered part of the local and regional cultural heritage. SMEs are already the most important drivers of employment and innovation in the Alpine Space, and strengthening their ties with regional resources and manufacturing traditions could strengthen them further in this role.

Another approach could be to assess the potential contribution of each thematic objective to each of the six strategic objectives (see Table 12 below). The scores in each line are totalled, leading to a ranking of Thematic Objectives (TOs). However, this ranking is purely indicative, as one may for example prefer a Thematic Objective with a strong potential impact on several Strategic Objectives (e.g. TO 6: protecting the environment and promoting resource efficiency) over one with limited impact on all Strategic Objectives (e.g. TO 1: strengthening research, technological development and innovation).

Furthermore, the difference in scores between the first Thematic Objective (TO 4: supporting the shift towards a low-carbon economy in all sectors) and the subsequent ones (TO 6: protecting the environment and promoting resource efficiency, TO 2: enhancing access to, and use and quality of, information and communication technologies, TO 1: strengthening research, technological development and innovation, TO 7: promoting sustainable transport and removing bottlenecks in key network infrastructures and TO 11: enhancing institutional capacity and an efficient public administration) is not necessarily significant. The high scores of TO 2, TO 1, TO 7 and TO 11 are partly explained by the fact that such a transversal cross-analysis favours thematic objectives linked to coordination, provision of infrastructure and background knowledge. These might therefore be held to reflect a methodological bias, even if it does not in any way rule out their potential added value for the Alps. The high scores of TO 4 (supporting the shift towards a low-carbon economy in all sectors) and TO 6 (protecting the environment and promoting resource efficiency) may therefore be considered the most significant. Generally, such an assessment can only be one source of input among many in a discussion leading to a selection of thematic objectives for the forthcoming Alpine Space Programme.
Table 12. Cross-analysis of European Commission objectives and Alpine Space strategic objectives

<table>
<thead>
<tr>
<th>EC Thematic Objectives TO1-TO11</th>
<th>Alpine Space strategic objectives</th>
<th>total by row (TO1 - TO11)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO 1: strengthening research, technological development and innovation</td>
<td>O1: Balance and equity in access to services of general interest across the Alps</td>
<td>2 3 2 2 3 2</td>
<td>14 4</td>
</tr>
<tr>
<td>TO 2: enhancing access to, and use and quality of, information and communication technologies</td>
<td>O2: A dynamic and innovative SME sector and thriving entrepreneurship</td>
<td>4 3 2 1 1 4</td>
<td>15 2</td>
</tr>
<tr>
<td>TO 3: enhancing the competitiveness of small and medium-sized enterprises (SMEs)</td>
<td>O3: Enhanced capacities based on alpine traditions and social diversity</td>
<td>2 5 3 0 2 1</td>
<td>13 7</td>
</tr>
<tr>
<td>TO 4: supporting the shift towards a low-carbon economy in all sectors</td>
<td>O4: Sustainably managed biodiversity and landscapes</td>
<td>0 4 3 3 5 1</td>
<td>16 1</td>
</tr>
<tr>
<td>TO 5: promoting climate change adaptation, risk prevention and management</td>
<td>O5: Sustainable resource management and production</td>
<td>0 1 1 5 3 3</td>
<td>13 7</td>
</tr>
<tr>
<td>TO 6: protecting the environment and promoting resource efficiency</td>
<td>O6: Shared responsibilities and fair cooperation among alpine territories</td>
<td>0 2 2 5 5 1</td>
<td>15 2</td>
</tr>
<tr>
<td>TO 7: promoting sustainable transport and removing bottlenecks in key network infrastructures</td>
<td></td>
<td>4 2 1 1 3 3</td>
<td>14 4</td>
</tr>
<tr>
<td>TO 8: promoting employment and supporting labour mobility</td>
<td></td>
<td>2 3 2 2 1 3</td>
<td>13 7</td>
</tr>
<tr>
<td>TO 9: promoting social inclusion and combating poverty</td>
<td></td>
<td>3 1 5 1 0 2</td>
<td>12 10</td>
</tr>
<tr>
<td>TO 10: investing in education, skills and lifelong learning</td>
<td></td>
<td>1 2 4 1 1 1</td>
<td>10 11</td>
</tr>
<tr>
<td>TO 11: enhancing institutional capacity and an efficient public administration</td>
<td></td>
<td>3 1 3 3 1 3</td>
<td>14 4</td>
</tr>
</tbody>
</table>

0 points: no clear link
1 point: some aspects visible on low level
2 points: intermediate situation
3 points: clear connection but not a core element
4 points: intermediate situation
5 points: core element

Scores based on a synthesis of positions within the group of experts
New options for the Alpine Space Programme

As mentioned above, the selection of thematic objectives needs to take into account the different expectations of “peri-alpine” and “core-alpine” stakeholders. Pursuing strategic objective 6 (“shared responsibilities and fair co-operation among alpine territories”) will help strengthen the already significant “intangible impact” of Alpine Space Programme projects in terms of bringing together protagonists from different horizons and could be reinforced with different perspectives on alpine governance.

This could contribute to reducing the gap between the Alpine Space Programme and Alpine stakeholders at large. Playing a more visible role as a facilitator of debate on alpine governance and on the strategic objectives to be pursued at the alpine level could help change the perception of Alpine Space Programme. It would not only be considered a funding stream, but also an organisation with a distinct agenda. This would also help reduce dependence of the programme on a “market of project initiators”, since broader interaction with stakeholders would make it easier to proactively generate projects in line with the strategic priorities of the programme. Mapping key protagonists belonging to the respective action fields of each of the strategic objectives that will have been chosen might be a first step in this process.

Establishing the Alpine Space Programme’s role as a mediator or facilitator of alpine exchange and debates presupposes a more systematic understanding of the different ways in which the Alps are understood, and of the functions of the alpine level of policy-making:

- as noted above (see section 1.1), 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 Alps also play a wide range of roles in policy-making processes, from coordination, harmonisation and transfer of good practices to building critical mass in the European context and contributing to European integration (see Table 11 p. 104).

5.3.2 Macro-regional strategy for the Alpine Space

Irrespective of uncertainties as to whether a macro-regional strategy will ultimately be submitted to the European Council, the form it may take and whether it will be accepted, it will be important for the Alpine Space Programme to contribute to building a solid foundation for pan-alpine governance. The main recommendation of the team of experts is therefore for the programme to use actions implemented within the framework of its future “thematic objectives” to overcome identified obstacles to the emergence of an effective alpine level of governance and to promote projects designed to overcome them. In other words, the programme should help construct the Alpine Space as a meaningful space for policy making. Basing measures on the strategic and specific objectives described in chapter 4 would contribute to this objective. Establishing links and alliances between the different types of alpine territories for each of the programme priorities is, in this respect, a key objective.

A good way of achieving this key objective is to identify shared challenges among alpine regions that can only be addressed through joint strategies and measures. This would lead to a dialogue between...
national and regional level alpine stakeholders on concrete joint actions to be undertaken and targets to be reached. Existing European macro-regional strategies were initially based on this idea, e.g. in the Baltic Sea where such a strategy has been implemented to solve the problem of eutrophication. A focus on concrete opportunities and challenges rather than on overall development strategies contributes to taking the focus away from institutional issues while creating a sense of collective achievement on which one may later capitalise for other transnational actions.

Limitations of present proposals for an alpine macro-regional strategy

The added value of macro-regional strategies lies in providing a framework for such joint targeted actions. The central challenge is to construct a macro-regional governance model that make it possible to efficiently address concrete opportunities and challenges, while at the same time allowing for the progressive elaboration and implementation of a more holistic strategy when the debate between stakeholders is ripe for such a development. 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 starting off with a thematically broad approach to macro-regional strategies, 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 protagonists from the very beginning and creating a dynamic of discussion and exchange between them as they position themselves in relation to alternative macro-regional strategies. Since there is no distinct sectoral focus, the highest level of political leadership of the regions and countries concerned occupies a prominent position, as illustrated by the active involvement of national ministries of foreign affairs in the Baltic and Danube strategies. However, as has been emphasized by the Association of European Border Areas (see section 1.5), the respective roles of the macro-regional strategy and the Alpine Space Programme remain largely unsettled when macro-regional strategies are approached in this broad way, without a distinct thematic focus. The “alignment of funding” around the macro-regional strategies would presuppose that the strategy of the Alpine Space Programme follows the same principles and objectives as that of the alpine MRS. This would imply that the Alpine Space Programme would primarily function as a funding stream for the macro-regional strategy.

As has been noted in the report, it appears unrealistic to achieve adoption of a targeted macro-regional strategy that is well-embedded among alpine stakeholders before the end of 2013. An alpine macro-regional strategy that would be approved by the Member States concerned and submitted to the European Council in mid-2013 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 developing 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 an alignment of the strategic perspective of the Alpine Space Programme and of the macro-regional strategy that does not seem feasible given the current timetable for the adoption of these instruments. Given the profound differences between the regulatory frameworks for macro-regions and transnational territorial cooperation programmes, it remains unclear as to how the programme document of the future Alpine Space Programme might 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, rather than a Programme and a macro-regional strategy fulfilling complementary roles and feeding into each other. 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. For this reason, a broad macro-regional strategy, adopted without a clear focus on a limited number of key issues and some well-identified, time-bound targets should be avoided.

For this reason, it is proposed that the alpine macro-region start as an initiative seeking to jointly address some key pan-alpine issues and that this may grow into becoming a fully-fledged strategy if the results of the first initiatives are conclusive. The risks described above would indeed be much reduced if the initial focus is on a limited number of “very specific and visible opportunities or problems” (Samecki, 2009). The division of roles between the Alpine Space Programme and the macro-regional initiative would be more clearly established: the macro-regional initiative would focus on a limited number of specific issues for which a joint direct involvement of regional and national authorities across the alpine states is required; the Alpine Space Programme would continue to initiate and fund exploratory and networking projects, while also actively contributing to the development of a more holistic long-term alpine strategy. In parallel, the macro-regional initiative would progressively strengthen alpine governance, using cooperation on specific challenges and opportunities to bring protagonists together and to progressively put them in a position to jointly commit to a broad alpine strategy. The macro-regional initiative and the Alpine Space Programme would therefore jointly contribute to the advancement of alpine policies, with complementary and closely intertwined roles.

Alternative perspectives for an alpine macro-regional initiative, progressively leading to the adoption of a macro-regional strategy

A macro-regional initiative, based on a joint commitment of the alpine states and regions to the achievement of concrete objectives and reinforced alpine governance, would significantly improve the perspectives of achieving the strategic objectives described in chapter 4.

This first presupposes that the macro-regional initiative is designed in relation to existing alpine instruments:

- complementing the Alpine Convention’s focus on conservation and regulation by strengthening the “development” perspective of alpine cooperation, while functioning as an arena for dialogue and exchange on the further improvement of environmental policies in the Alps;

- assuming roles and functions that cannot be undertaken in the context of the Alpine Space Programme, because they require other forms of commitment of alpine stakeholders than those that can be envisaged in the context of project-based European territorial cooperation or because they are difficult to reconcile with the pan-European principles of thematic concentration promoted by the European Commission.

The limitations of the Alpine Space Programme become increasingly obvious as projects produce ideas and pilot actions that demonstrate the need for coordinated transnational actions but have an
only a modest impact on social, economic and environmental trends. The Alpine Space Programme has shown the potential usefulness of transnational cooperation and provided a number of examples of measures to be implemented. However, it is limited by a number of factors, e.g. its dependence on a “market” of project initiatives developed in response to call for tenders, the timeframe of programming periods and the administrative and financial procedures of Cohesion Policy. Furthermore, projects funded as part of the Programme have seldom become a part of everyday operations in regional, local and national alpine authorities. They appear as an instrument of European policy, rather than a component of the policies of alpine regions and states.

By comparison, a macro-regional strategy would not be based on calls for projects, would be politically driven by the alpine regions and states and would have more limited administrative and financial constraints. Its activities would be developed more naturally as an extension of existing initiatives of alpine regional, local and national authorities.

For these reasons, a macro-regional strategy could address components of the Strategic Objectives of the present report for which the Alpine Space Programme is not a well-adapted instrument. Most of these opportunities and challenges have already been analysed as part of Alpine Space Programme projects. The starting point for a macro-regional process would be to organise an action-oriented process of consultation and dialogue among alpine stakeholders to address a few of the corresponding issues. As such, the objective of improved results orientation in the Alpine Space Programme could be realised through the macro-regional strategy, which would transform selected ideas and pilot actions into full-scale implementation measures.

However, the Alpine Space Programme and macro-regional initiative would continue to function as parallel processes. Pilot actions and projects would continue to be developed within the Alpine Space Programme, which could also pursue its efforts to organise dialogue and exchange among alpine protagonists on strategic efforts. The macro-region would function as a framework for the progressive improvement of alpine governance based on the involvement of alpine stakeholders in macro-regional initiatives, based on a political agreement on the key issues to be addressed.

The parallel and coordinated operation of the two instruments has implications for the Alpine Space Programme. One of the justifications of a macro-regional strategy is the recognition that some opportunities and challenges cannot be addressed or further developed by the Alpine Space Programme but require other types of instruments at the alpine level. This encourages a positive focus on the limitations of the programme and on how it could be better coordinated with other types of instruments. The Alpine Space Programme’s programme committee could address this aspect.

Concrete proposals for the elaboration and implementation of an alpine macro-regional initiative

Concretely, the stepwise approach to an alpine macro-region implies that it should take the form of an “initiative” rather than a “strategy” in its first phase. Insofar as the political impulse to draw up an alpine macro-regional strategy will have to come from the alpine states and regions, the role of the Alpine Space Programme would merely be to suggest this type of approach.
The alpine regions and states may then take the initiative to organise a process with a view to reaching a political agreement on the issues that would be most relevant as test cases for a macro-regional initiative, in interaction with the Alpine Convention. In this process the Strategic Objectives identified in the present report may be used as a starting point for discussion.

This initiative would lead to the organisation of exchange and negotiation, with a view to arriving at one or two issues for which there is a shared interest and a commitment to common action. A key criterion for such a commitment is the clear identification of a direct, ideally measurable added value for each of the involved parties. A thematic focus on specific issues and targets implies that relevant sectoral authorities and protagonists within this field should be actively involved in the macro-regional process at an early stage, defining the objectives and targets.

As a second step, proposals need to be made for an action plan, steering mechanisms, funding principles, management, implementation and control procedures. When envisaging these aspects, one should take into account the fact that the macro-regional initiative is intended to lead to a wider, more ambitious strategy if it proves successful. An evolution in the organisational framework should therefore be foreseen.

The resulting macro-regional initiative would be submitted to the alpine states with a view to its approval by the European Council. This would be facilitated by the involvement of representatives of national and European authorities in the earlier steps of the process.
Figure 6. Process leading to the implementation of a macro-regional initiative with an indication of central protagonists at each stage
In the implementation phase, the organisation of the Managing Unit, Steering Committee and Executive Body will be of critical importance to the success of the initiative (see Figure 7). The leading role in the Steering Committee will naturally be ensured by the authorities that played the most central role in establishing a proposal to be submitted to the European Council. The balance between alpine regions, states and organisations in this Committee will be determined as part of dialogue and negotiations process.

The success of an alpine macro-region presupposes an agreement of alpine stakeholders around a few selected targeted measures with corresponding funding either from regional, national or European sources. Considering the difficulty of reaching such a consensus and of maintaining the momentum over time, its success cannot be guaranteed. It therefore appears important to avoid creating a dedicated body for the management of a macro-regional initiative that would have an inherent interest in its perpetuation irrespective of initial experience and results. Implementation of the macro-regional initiative would be facilitated if the groups that currently assume the roles of Managing Authority and Joint Technical Secretariat for the Alpine Space could play an active role. These persons possess unique experience and competencies with respect to transnational cooperation in the Alpine Space and have in-depth knowledge of the ideas and pilot actions developed in the Alpine Space Programme on the basis of which macro-regional initiatives may be implemented.

Obviously, their roles within the framework of the Alpine Space Programme and the macro-regional strategy would be carried out in the context of different institutional settings with distinct funding. The creation of a European Grouping of Territorial Cooperation (EGTC) would appear to be a possible way of achieving this.

![Figure 7. Organisational framework for an alpine macro-regional initiative and strategy](image)

Dedicated working groups would support the Steering Committee, Executive Body and Managing Unit in monitoring results and adjusting actions. These groups would comprise relevant sectoral...
authorities and protagonists within the fields on which the macro-regional initiative has chosen to focus.

In this organisational setting, and based on the principles of stepwise thematic broadening, the objectives of the macro-regional initiative are:

- To demonstrate the shared political commitment of alpine regions to jointly pursue certain shared objectives and targets at the alpine level;
- To coordinate European, national and regional funding sources in the pursuit of these objectives and targets;
- To create a sense of common achievement among the alpine protagonists involved;
- To bring together alpine organisations, local, regional and national authorities around some key opportunities and challenges for which an clear added value can be identified;
- To progressively pave the way for a broader and more ambitious alpine strategy, solidly based on the commitment of the alpine regions and other relevant protagonists.

5.4 Multiple functions for the Alpine Space Programme

One of the advantages of the stepwise approach advocated above is that it makes it possible to build more extensively on the experience and competencies accumulated over the last decade in the elaboration of an alpine macro-regional strategy. For the Alpine Space Programme, contributing to this process would be a natural continuation of efforts undertaken to strengthen its role as a policy promoter since the strategy revision process started in 2009 (see section 1.2). This implies that the Alpine Space Programme must be thought of as a component of alpine governance. It will only have an impact on social, economic, environmental and institutional trends in the Alps in interaction with other protagonists.

Based on this logic, the programme’s “policy cycle” that was initially proposed in the Alpine Space Programme Impact Assessment (Schneidewind et al., 2010) and that was presented above (see Figure 2 p. 28) can be extended to reflect how the programme might be used as a lever to elaborate a macro-regional strategy (see Figure 8 below). The programme is seen as a self-reinforcing cycle; at each step of the process, different types of effects on other alpine-related protagonists are identified and represented within the red zone of the figure. These effects can in turn contribute to establish the basis for an Alpine macro-regional strategy. A virtuous cycle could be established that would progressively make it possible to develop the macro-regional initiative into a fully-fledged macro-regional strategy. The Alpine Space Programme could accompany this process and help ensure that the momentum is not lost by means of targeted strategic policy development efforts, pilot actions and calls for projects.
In the context of the possible adoption of a macro-regional initiative, it therefore appears all the more important for the Alpine Space Programme to combine three types of functions:

- Trigger and fund actions within a limited number of fields, bearing in mind the regulatory framework to be adopted for European Territorial Cooperation;
- Provide input for debate on the long-term strategy for the Alpine Space that is necessarily based on a comprehensive approach to alpine development;
- Be a catalyst of improved cooperation and coordination among alpine-related protagonists, bridging policy sectors, stakeholders and territories both inside and outside the Alpine Space.

Examples of actions falling under each of these three functions are presented in Table 13 below, as illustrations of the types of initiatives that could be initiated by the Alpine Space Programme under each of the six strategic objectives. In an additional column, the table also presents actions that are more difficult to envisage within the framework of a European Territorial Cooperation programme such as the Alpine Space Programme. This latter group of actions could be the object of a macro-regional initiative or strategy. A number of themes can be addressed in different ways within all three functions of the Alpine Space Programme and outside the programme.

This illustrates how these three functions feed into each other: being active within networks of alpine protagonists will help generate projects that contribute to the achievement of the strategic objectives; long-term strategy development presupposes a broad dialogue with alpine protagonists and stakeholders; actions to be supported are selected on the basis of a comprehensive strategy for the Alpine Space. However, they presuppose different modes of interaction with external stakeholders and geographical scopes of action. To preserve the coherence of the programme and strengthen its external visibility, a clear rationale is required as to how these different functions would co-exist and interact.
Figure 8. The extended policy cycle: The Alpine Space Programme as a lever for a macro-regional strategy

The figure illustrates how the macro-regional strategy can build on input from the Alpine Space Programme and progressively gain in momentum. The concentric circles reflect the multiple ways in which the “macro-regional” cycle can benefit from the effects of the Alpine Space Programme policy cycle.
Table 13. Examples of actions by strategic objective, within and outside the Alpine Space Programme

<table>
<thead>
<tr>
<th>Objective 1: Balance and equity in access to services of general interest across the Alps</th>
<th>(1) Initiate and fund projects</th>
<th>(2) Contribute to an overall alpine strategy</th>
<th>(3) Promote alpine networks and dialogue</th>
<th>Initiatives beyond the scope of ETC</th>
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<td></td>
<td>• Share experience and good practice on existing integrated regional public transport systems</td>
<td>• Development of pan-alpine traffic forecasts as a basis for transnational transport planning and decision-making</td>
<td>• Creating a network of regions confronted with multilateral deficiencies in cross-border public transport supply (e.g. in the regions Bavaria, Vorarlberg, Liechtenstein, Graubünden or Austria, Italy, Slovenia)</td>
<td>• Development of solutions to reduce the digital gap in remote areas</td>
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<td>• Share experience and good practice on traffic information systems</td>
<td>• Development of transnational traffic models</td>
<td>• Setting up thematic and interdisciplinary pan-alpine R&amp;D-networks with a focus on Alpine specific issues: water management, tourism, natural hazards, wood industry, renewable energy etc.</td>
<td>• Development and implementation of a pan-alpine multimodal Advanced Traffic Information System</td>
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<td>• Development of specific tools and instruments to better implement different elements of digital economy: e-services in peripheral areas, e-commerce for agricultural products, e-learning etc.</td>
<td>• Proposals for an alpine strategy for broadband access and for the creation, implementation and use of e-services adapted to the alpine context</td>
<td>• Establishing a network of regions confronted with multilateral deficiencies in cross-border public transport supply (e.g. in the regions Bavaria, Vorarlberg, Liechtenstein, Graubünden or Austria, Italy, Slovenia)</td>
<td>• Creating a pan-alpine R&amp;D framework programme focussing on Alpine specific applied research activities</td>
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<td></td>
<td>• Harmonisation and standardisation of digital traffic infrastructure databases</td>
<td>• Proposal for an alpine strategy for broadband access and for the creation, implementation and use of e-services adapted to the alpine context</td>
<td>• Development of transnational traffic models</td>
<td>• Creating a transnational supporting body encouraging emergence of transnational clusters of SMEs in growing economic fields, e.g. in the green economy and building on traditional alpine knowhow</td>
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<td>Objective 2: A dynamic and innovative SME sector and thriving entrepreneurship</td>
<td>(1) Initiate and fund projects</td>
<td>(2) Contribute to an overall alpine strategy</td>
<td>(3) Promote alpine networks and dialogue</td>
<td>Initiatives beyond the scope of ETC</td>
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<td>• Elaboration of handbooks and guidelines for the implementation and management of start-up centres based on the exchange of experiences and good practice examples</td>
<td>• Identification of structural obstacles to entrepreneurship and to the exploitation of economic opportunities in the Alps</td>
<td>• Establishing a network of institutions (such as chambers of commerce, tourism organisations, learning regions etc.) focusing on qualification, training and knowledge transfer linked to alpine-specific issues</td>
<td>• Creating an alpine organisation providing technical, financial and organisational support to start-ups of highly educated experts and providing start-up centres</td>
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<td>• Collection, analysis and dissemination Alpine success stories of atypical and innovative entrepreneurial initiatives</td>
<td>• Development of pan-alpine networks and clusters for value added chains of Alpine specific products and services in fields such as renewable energy, water management, wood, tourism and others</td>
<td>• Development of pan-alpine networks and clusters for value added chains of Alpine specific products and services in fields such as renewable energy, water management, wood, tourism and others</td>
<td>• Establishing a body promoting alpine brands and labels of quality, and helping companies use these brands and labels when marketing their products</td>
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<td></td>
<td>• Development of disseminations methods and tools for an efficient transfer of recent research results to Alpine stakeholders</td>
<td>• Establishing a network of institutions (such as chambers of commerce, tourism organisations, learning regions etc.) focusing on qualification, training and knowledge transfer linked to alpine-specific issues</td>
<td>• Creating a transnational supporting body encouraging emergence of transnational clusters of SMEs in growing economic fields, e.g. in the green economy and building on traditional alpine knowhow</td>
<td>• Creating an alpine organisation providing technical, financial and organisational support to start-ups of highly educated experts and providing start-up centres</td>
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<td></td>
<td>• Development of models for a better branding of alpine agricultural products on a global market</td>
<td>• Establishing a network of institutions (such as chambers of commerce, tourism organisations, learning regions etc.) focusing on qualification, training and knowledge transfer linked to alpine-specific issues</td>
<td>• Creating a transnational supporting body encouraging emergence of transnational clusters of SMEs in growing economic fields, e.g. in the green economy and building on traditional alpine knowhow</td>
<td>• Creating an alpine organisation providing technical, financial and organisational support to start-ups of highly educated experts and providing start-up centres</td>
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<th>Objective 3: Enhanced capacities based on alpine traditions and social diversity</th>
<th>Objective 4: Sustainably managed biodiversity and landscapes</th>
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</table>
| **(1) Initiate and fund projects** | **(1) Revitalise alpine rivers as a backbone of alpine biodiversity. Share good practice.**  
- Maintenance and rewetting of degraded fens wetlands. Share good practice  
- Enhance biodiversity in alpine cities and urban regions. Share good practice |
| **(2) Contribute to an overall alpine strategy** | **(2) Refine and implement concepts for transnational wildlife corridors and linkages between areas of high ecological value.**  
- Analyse the future interrelation of social changes and their impact on biodiversity in the Alpine Space  
- Develop strategies and concepts to adapt protected areas and protection strategies to climate change  
- Develop strategies and concepts related to diminishing and wilderness processes as a concrete approach to dealing with a taboo in many alpine regions |
| **(3) Promote alpine networks and dialogue** | **(3) Share knowledge and good practice concerning stakeholder involvement in protected areas.**  
- Strengthen trans-alpine networks and platforms supporting sustainable management of biodiversity and landscapes |
| **Initiatives beyond the scope of ETC** | **Initiatives beyond the scope of ETC** |
| • Collecting and exchanging good practice examples on the valorisation of social capital with a focus on young people, elderly, women and immigrants – development of handbooks or guidelines for municipalities and regions  
- Development of action programmes to make rural areas attractive for young families with highly qualified parents as well as for high qualified digital nomads and tele-commuters  
- Exchange of good practice and experiences concerning models of voluntary work of “young elderly” people for example in the social sector, in neighbourhood activities etc. | • Alpine participation in the creation of an European observatory and resource-centre for declining rural areas |
| • Increasing the knowledge base on transnational migration flow within the Alpine Space and between the Alpine Space and other regions, with a view to preparing the elaboration of an alpine strategy for migratory flow  
- Deepening the understanding about the motivation of people to out-migrate, immigrate or stay in peripheral rural Alpine areas, as a basis for the formulation of shared strategies for areas experiencing demographic decline  
- Create a pan-alpine UNESCO heritage inventory and share experience with regard to the capitalisation for regional economy  
- Joint development and implementation of a pan-alpine strategy to better valorise cultural heritage | • Share experience and good practice examples concerning the integration of immigrants from non-alpine regions and how to deal with increasing social diversity in rural areas  
- Create new networks and strengthen of existing ones linking local and regional authorities working in the field of adapting their social services and infrastructures to future needs and a changing population structure |
| • Increasing the knowledge base on transnational migration flow within the Alpine Space and between the Alpine Space and other regions, with a view to preparing the elaboration of an alpine strategy for migratory flow  
- Deepening the understanding about the motivation of people to out-migrate, immigrate or stay in peripheral rural Alpine areas, as a basis for the formulation of shared strategies for areas experiencing demographic decline  
- Create a pan-alpine UNESCO heritage inventory and share experience with regard to the capitalisation for regional economy  
- Joint development and implementation of a pan-alpine strategy to better valorise cultural heritage | • Increasing the knowledge base on transnational migration flow within the Alpine Space and between the Alpine Space and other regions, with a view to preparing the elaboration of an alpine strategy for migratory flow  
- Deepening the understanding about the motivation of people to out-migrate, immigrate or stay in peripheral rural Alpine areas, as a basis for the formulation of shared strategies for areas experiencing demographic decline  
- Create a pan-alpine UNESCO heritage inventory and share experience with regard to the capitalisation for regional economy  
- Joint development and implementation of a pan-alpine strategy to better valorise cultural heritage |
| • Share experience and good practice examples concerning the integration of immigrants from non-alpine regions and how to deal with increasing social diversity in rural areas  
- Create new networks and strengthen of existing ones linking local and regional authorities working in the field of adapting their social services and infrastructures to future needs and a changing population structure | • Alpine participation in the creation of an European observatory and resource-centre for declining rural areas |
| • Create a pan-alpine UNESCO heritage inventory and share experience with regard to the capitalisation for regional economy  
- Joint development and implementation of a pan-alpine strategy to better valorise cultural heritage | • Share knowledge and good practice concerning stakeholder involvement in protected areas. **(3) Promote alpine networks and dialogue** |
| • Deepening the understanding about the motivation of people to out-migrate, immigrate or stay in peripheral rural Alpine areas, as a basis for the formulation of shared strategies for areas experiencing demographic decline  
- Create a pan-alpine UNESCO heritage inventory and share experience with regard to the capitalisation for regional economy  
- Joint development and implementation of a pan-alpine strategy to better valorise cultural heritage | • Share knowledge and good practice concerning stakeholder involvement in protected areas. **(3) Promote alpine networks and dialogue** |
| • Sharing experience and good practice examples concerning the integration of immigrants from non-alpine regions and how to deal with increasing social diversity in rural areas  
- Create new networks and strengthen of existing ones linking local and regional authorities working in the field of adapting their social services and infrastructures to future needs and a changing population structure | • Establishing a permanent observatory of landscapes and natural habitats in the Alps, with a particular focus on ecological corridors and fragmentation and anthropic impact. |
<table>
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<tr>
<th>(1) Initiate and fund projects</th>
<th>(2) Contribute to an overall alpine strategy</th>
<th>(3) Promote alpine networks and dialogue</th>
<th>Initiatives beyond the scope of ETC</th>
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| • Development of regional footprint systems based on the exchange of successful models  
• Development of an analysis tool applicable by farmers and forest owners showing options and scenarios for handling climate change adaptation efficiently  
• Development of a toolbox for setting up local / regional production and distribution of renewable energy considering conflicts with other land use interests (nature protection, leisure etc.)  
• Development of an assessment tool linked to efficient pan-alpine climate adaptation measures for all sectors | • Development of an energy strategy for the Alpine Space  
• Development of a “Masterplan for Energy Power Lines” in the Alpine Space  
• Develop a joint strategy for transforming the Alpine Space into the world's leading destination for sustainable tourism, incorporating natural, cultural and historical assets  
• Elaboration of guidelines and handbooks to develop energy self-sufficient regions based on exchange of knowhow and good practice | • Share knowledge and good practice on local and regional strategies to negotiate interests in the competition for water  
• Share experience and good practices on policies and instruments relating to energy saving and energy efficiency  
• Share knowhow and good practice on the regional implementation of wind and solar power production  
• Share knowledge and good practice on low consumption models and efficient resource use in different sectors (energy, water, soil ...)  
• Share knowledge and good practice on how to manage drought in different alpine regions  
• Share experience and good practice on the preparation and implementation of regional climate change adaptation strategies | • Create a transnational centre of expertise for alpine building techniques and architectural innovative, promoting small-scale, adaptive and sustainable building cultures  
• Elaborating and implementing an alpine strategy for energy self-sufficiency, with a focus on reducing consumption, increasing energy efficiency, replacing fossil fuels with renewables while preserving the environment of the alpine regions and encouraging small-scale energy production for local consumption |
<table>
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<tr>
<th>Objective 6: Shared responsibilities and fair cooperation among alpine territories</th>
<th>(1) Initiate and fund projects</th>
<th>(2) Contribute to an overall alpine strategy</th>
<th>(3) Promote alpine networks and dialogue</th>
<th>Initiatives beyond the scope of ETC</th>
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<tr>
<td>• Pilot study for setting up an alpine territorial monitoring system, providing regularly updated maps and figures and publishing reports on the state of territorial cohesion in the Alps • Identification of potential &quot;win-win&quot; situations that would justify partnerships between different types of territories in the Alps</td>
<td>• Development of a pan-alpine strategy “Securing and capitalizing the Alps as European water tower” • Elaboration of development models for declining areas in the Alps • Proposals for improved intersectoral cooperations in the Alps</td>
<td>• Developing, testing and introducing a label for barrier-free infrastructure in various sectors (public buildings, tourism etc.). Slogan: the Alps don’t have barriers! • Share experience and good practice examples (policies, actions) with a view to elaborating appropriate solutions for declining areas • Share experiences and good practice relating to successful governance models and structures in the different sectors • Development of training programs for soft skills required with regard to the practice of multilevel governance with a focus on public administration. Sharing programmes to improve mutual understanding might form part of this.</td>
<td>• Establishing organisations and procedures for the elaboration, management, operation and monitoring of an alpine macro-regional strategy</td>
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References


Agrawala, S. (Ed.): *Climate Change in the European Alps: Adapting Winter Tourism and Natural Hazards Management*; OECD 2007


Alpine Space Programme (2005) *MARS Monitoring the Alpine Regions’ Sustainability*, BAK Basel Economics


http://www.alpine-space.org/uploads/media/ASPS_Executive_Summary_nov05_01.pdf


Bazin, Gilles (1999) La politique de la montagne, Rapport d’évaluation, La documentation Française


Brunet, Roger (1996) *Géographie universelle - Europe du Nord, Europe médiane (vol.9) France et Europe du Sud (vol.2)* Belin - Reclus

http://www.zentrum-transformation.bundeswehr.de/resource/resource/MzEzNTM4MmUzMzMyMmUzMTM1MzMyZTM2MzEzMjDMwMzAzMDMwMzAzMDY3NzI2ZjNiNjk2ODc5NzQyMDIwMjAyMDIw/Pek%20Oil_Study%20EN.pdf

Cernic-Mali, B., Martot, N. (Eds.): DEMOGRAPHIC CHANGE IN THE ALPINE SPACE short regional reports with summary (work package 4 project report DEMOCHANGE); Urban Planning Institute of the Republic of Slovenia, Ljubljana (2011)


European Commission (2011d): Roadmap to a resource efficient Europe. Communication from the Commission to European Parliament, the Council, the European Social and Economic Committee and the Committee of the Regions, Brussels.


European Commission (2012b): Proposal for a Regulation of the European Parliament and of the Council laying down common provisions on the ERDF, the ESF, the CF, the EAFRD and the EMFF covered by the Common Strategic Framework and laying down general provisions on the ERDF, the ESF, the CF and repealing Council Regulation (EC) No 1083/2006.


http://ec.europa.eu/regional_policy/what/future/index_en.cfm#1


http://www.interact-eu.net/downloads/1682/Macro-regional_strategies_in_the_European_Union.pdf


UN DESA (United Nations Department of Economic and Social Affairs) (2011): The great green technological transformation. World economic and social surveys, New York.

UN Secretary-General (2010): Progress to date and remaining gaps in the implementation of the outcomes of the major summits in the area of sustainable development, as well as an analysis of the themes of the conference. Report for the Preparatory Committee for the United Nations Conference on Sustainable Development, New York.


