Stimulating Innovation

THEMATIC EVENT ON COMPETITIVENESS IN THE ALPINE SPACE

The forum “Pooling Potentials for Competitiveness”, hosted by the Slovenian Ministry of the Environment and Spatial Planning, was the last transnational event in a series of three on cross-cutting themes affecting the Alpine area. Similar to the events on climate change and on demographic change, it was designed by the Alpine Space Programme to finely tune its own strategic orientation and to advance the ongoing policy debate.

In Ljubljana, 120 participants contributed towards translating the overall objective of the EU 2020 Strategy for “smart, sustainable and inclusive growth” into pragmatic regional strategies and thus pave the way to improved governance. Practitioners, project partners, experts and policy makers reflected on how Alpine endogenous potentials can stimulate innovation and cluster development. Discussions on how to increase the competitiveness of the Alpine Space were organised according to four key fields: tourism, (renewable) energy, local resources and, finally, the interaction between core mountain areas and surrounding urban centres. This report summarises the potentials, opportunities and recommendations brought to the floor in the capital of the Southeastern Alpine State.

These conclusions will be taken note of by the Alpine Space Programme, they will enhance concerted action between players and European funding instruments in the cooperation area and will serve as a signpost for new project ideas in the field of competitiveness.
Due to the geographical specificity of the Alpine Space, communities, regions and initiatives often lack critical mass to get their ideas implemented. This is where the most powerful asset of the Alpine Space Programme lies: it can support them in establishing cooperation, in developing products and services and in implementing pilot activities. In short, the programme provides the foundation for pooling potentials.

A remarkably high number of participants in each of the workshops demonstrated that, despite the constant complaints about bureaucratic obstacles, the programme may still be an attractive and necessary cooperation instrument. Taking this into consideration, we will endeavour to reduce these obstacles as far as the future structural funds regulations will allow.

More than 350 persons took part and we can look back on a vast number of presentations, challenging discussions and interactive workshops. But it is not just about the numbers here: we felt that it was important for three topics relevant to the future of our cooperation area to be discussed by various stakeholders and to shed light on these themes across various sectors and levels of governance. Also, the format of the forums was successful. The idea was to allow space for open discussions. We were therefore able to open up a whole treasure trove of ideas, some of which will ultimately be transformed into projects funded by the Alpine Space Programme and others which will be addressed by other programmes. All in all, we believe that we have successfully brought together ideas and people.

At the moment, the political debate is very much preoccupied with macro-regional strategies. This type of strategy is currently under discussion with regard to the Alpine Space. The programme offers a wealth of experience in terms of establishing cooperation and providing project support. With the portfolio of projects undertaken over the last decade, we can also provide evidence when it comes to discussing thematic issues.

An Alpine Space strategy will have to be closely aligned to the EU 2020 strategy. For this reason, we have recently launched a strategy development process which is to investigate relevant themes. This process will analyse the conditions under which a macro-regional strategy would provide better development options for the co-operation area. Furthermore, it will seek to provide suggestions on how and by whom the implementation of various existing strategies could be facilitated.
STRENGTHENING THE ALPINE SPACE

Framework for a strong Alpine Space

The World Economic Forum has identified “12 pillars” for driving productivity and competitiveness. These include a sound macroeconomic environment, health and education, labour market efficiency, along with technological readiness and - perhaps most notably - innovation. In spring 2010, the European Council adopted the Europe 2020 Strategy for smart, sustainable and inclusive growth as a long-term objective, refining the Lisbon strategy into the “EU 2020”. The five ambitious objectives - on employment, innovation, education, social inclusion and climate/energy - build upon key pillars of competitiveness. Such a strategic and consistent approach to sustainable growth seems all the more challenging, as the current crisis casts a dark cloud over Europe's economy. Even in the Alpine Space, where many strong regions have performed above EU average, and were well on the way to achieving the Lisbon objectives, all stakeholders will have to pull together in order to achieve the targets defined. All their efforts towards durable and sustainable growth must be supported by activities which enhance competitiveness.

The EU 2020 Strategy provides a sound framework for bringing economic growth in line with environmental and social concerns.

Although a vast number of programmes from various sources on European, national and regional level provide the major instruments for funding innovation and competitiveness in Europe, European Territorial Cooperation (ETC) plays a specific role in translating the defined priorities into action on the ground. With a total budget of 8.7 billion euros, the ETC facilitates the exchange between and across regions. Within this framework, the Alpine Space Programme has made competitiveness one of its three main priorities. It allows consortia across all regions, sectors and administrative levels to develop, test and finally implement their ideas in collaboration. With the complementary funding instruments of cohesion policy, and also with those relating to competitiveness and innovation, support is available for promising initiatives in the Alpine Space.

This forum has highlighted challenges and opportunities for enhancing competitiveness in the Alpine Space and identified endogenous potentials. It has also allowed an open dialogue to take place on the complementarity between European programmes and European tools to encourage smart, sustainable and inclusive growth in the Alpine Space.

The Alpine Space has strong assets and endogenous strengths. Its regions are striving to achieve the ambitious objectives set by the EU 2020 Strategy. In consideration of the macroeconomic indicators, a high GDP per head, a well educated labour force and high regional employment rates, the Alpine Space even ranks among the most prosperous parts of Europe. According to ESPON studies, the strong economic performance of the Alpine Space is similar to that of Northern Europe. The positive overall picture of the area from an EU perspective is challenged once we observe the Alpine area on a smaller territorial scale: on a sub-regional level many disparities become evident. Above all, it is the
highly heterogeneous geography, which has a strong bearing on competitiveness-related factors in the mountainous regions, such as the accessibility of regions. The development patterns vary greatly from remote rural areas in the mountainous Alpine core, to sprawling metropolises on its fringe.

However, the wide territorial diversity of the cooperation area is not perceived merely as an obstacle to competitiveness. On the contrary, experts consider its heterogeneity to be a strong asset, offering a highly attractive environment for its inhabitants and for visitors from all over the world. A strategic starting point to turn diversity into an asset is the careful analysis of regional strengths and weaknesses. Pooling the manifold potentials in Alpine regions, regardless of whether this relates to culture, nature or the economy, requires smart, place-based policies which examine the various assets in detail and have a fine grasp of the key drivers of competitiveness.

In 2010, the European Commission launched “Europe 2020: a strategy for smart, sustainable and inclusive growth”, as the EU’s growth strategy for the coming decade. Three mutually reinforcing priorities should help the EU and the Member States deliver high levels of employment, productivity and social cohesion.

Seven flagship initiatives have been developed in order to achieve the following five targets:

1. 75% of the 20-64 year-olds to be employed
2. 3% of the EU’s GDP to be invested in R&D/innovation
3. Greenhouse gas emissions 20% lower than 1990
   / 20% of energy from renewable sources/ 20% increase in energy efficiency
4. Reducing school drop-out rates below 10%; at least 40% of 30-34-year-olds completing third level education
5. At least 20 million fewer people in or at risk of poverty and social exclusion.

Seven flagship initiatives will be the drivers of the process:

Smart growth
- Digital agenda for Europe
- Innovation Union
- Youth on the move

Sustainable growth
- Resource efficient Europe
- An industrial policy for the globalisation era

Inclusive growth
- An agenda for new skills and jobs
- European platform against poverty

The status quo: competitiveness in Alpine regions

The EU Regional Competitiveness Index (RCI), a refined version of the index introduced by the World Economic Forum, incorporates eleven pillars which measure the different dimensions of competitiveness. It is a crucial tool in assisting EU regions to set the right priorities on their path towards smart, sustainable and inclusive growth. ESPON studies highlight key indicators on Lisbon performance and provide an answer to the question: which important assets does the Alpine Space possess that will enable it to compete successfully on global markets?
The unemployment rate in Alpine regions is far below the European average. This asset correlates with the high GDP per capita. Furthermore, medium-high and high-tech manufacturing in the Alpine area is above the EU average, along with knowledge-intensive services. The technologically advanced regions are concentrated around hubs, such as Milan, Munich, Vienna or Lyon. Large Alpine cities are considered to be the breeding ground for innovation and rank among the main players in the European financial services sector. Indeed, these hubs are key players in the development of the financial market: they are central both in terms of their importance in Europe and their close connections with other financial places. In general, Alpine metropolises prove to be key drivers in terms of the Lisbon indicators.

With regard to the ratio of employees in the education sector, the trend in Europe starts off at a high level in the North and declines towards the South, with an average level in the Alpine Space. Switzerland proves to be the best performer in this field. In terms of tertiary education, the percentage varies significantly from region to region, whereas scientific funding - measured through the Framework Programme 5 (FP5) per capita – shows strong spatial concentrations and heavy funding in the North, with lower performance in the Southern Alpine regions.

Moreover, some of Europe’s highest performing areas, which spend more than three percent of their GDP on research and development (R&D), are situated in the Alpine area. These regions are engines for competitiveness, but do not reflect the situation of the Alpine territory overall. However, the expenditure on R&D is only one of many indicators of economic fitness and innovative potentials. In spite of the regional differences, the Alpine Space is on its way to attaining the five key targets of the Europe 2020 Strategy.

**Concepts for innovation in the Alpine Space**

Many policy makers are aware of the role of innovation as a crucial ingredient in economic development, and European and national policies are addressing regions as the multipliers for innovation processes. The concept of innovation, a key driver for competitiveness, should be considered in terms of its integrated meaning. The current approach to innovation is open to different sectors and has moved away from its original meaning: “innovation = new products”.

Innovation is strongly linked with research and knowledge activities and their implementation or transformation into a product. Indeed the implementation dimension of innovation is a crucial point on which more emphasis should be placed.

Similarly, innovation is no longer considered to be solely a technological showcase: according to systemic and open approaches, innovation also comprises social processes. These include a wide range of activities, such as new organisational forms of public administration, the promotion of public-private partnerships or interface management.

In territorial development as well, innovation is not limited to the development of new products or services. It is also an open concept that includes new implementation methods for existing products or a combination of the two. Experience shows that innovation processes in regions often lack systematic analysis. There is an urgent need to ask the question: how effective are existing innovation policies by, for or in regions? In order to manage them effectively, discrepancies between the objectives and the instruments should be identified and shortcomings eliminated. A smart policy mix (harmonisation, integration and coordination of national and regional innovation policies) should be adapted to the regional needs in consideration of the development levels and social structures in the region. The cross-sectoral approach of transnational projects in the frame of the ETC, involving public administrations of all levels and many other organisations, can contribute to this policy mix.

Adopting smart specialisation strategies can be one method of setting the policies and mixing the instruments at local and regional level. These strategies require initial, careful analysis of regional particularities to build on and the setting of clear priorities.

**European Regional Innovation Scoreboard**

For an overview on innovation performance, regional policy-makers can refer to the European Regional Innovation Scoreboard (RIS). This platform provides a comparative assessment across the NUTS 2 regions of the European Union.
It must be emphasised that innovation does not only lie in explicit knowledge methods or approaches which can simply be replicated. It is often transversal and "hidden" in non-explicit skills and tacit knowledge. The latter is a dimension of knowledge, which is not transmitted easily and is based on practical experience. Its transmission is best achieved through face-to-face interaction between partners who share the same language, culture and communication codes or even know each other personally. Transnational projects contribute added value here: within their framework, tacit knowledge can be transferred particularly well and have a strong impact, as they involve different categories of partners, researchers and practitioners.

**Innovation is more than R&D**

New-to-market product innovators with and without R&D, 2004-06
As a percentage of innovative firms by R&D status

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Fostering innovation in Alpine regions also calls for new policy instruments which work as bridging initiatives, rather than supporting individual players. Many regional administrations have already acknowledged their new role as facilitator and have launched clustering programmes or regional growth initiatives. Others have transformed Science Parks into “clusters of competence”, which serve as a clearing house for the regional economy, creating dialogue and multilateral exchanges and supporting learning. All in all, there is a move towards more demand-oriented approaches to promoting technological readiness, business sophistication and innovation per se.

Finally, political decision makers should think out of the box and open borders when designing innovation policies and funding instruments. They should foster and exploit synergies between the European, the national and the regional levels through harmonisation, coordination and integration of regional and national innovation plans.

**A toolbox for practitioners**

Stakeholders who strive to boost competitiveness in the Alps can choose to make the best use of a set of several European programmes. The box on page 11 gives an overview of the most important European funding instruments for competitiveness which are also relevant in the Alpine Space. Their common target is to provide support to regional initiatives in line with the EU 2020 objectives and to make the most of every euro of public expenses. In order to create more transparency, the new “KEEP” online tool shows all projects funded by ETC. Furthermore, the relaunched webpage www.interreg4c.eu presents a good practice database of evaluated projects. Primarily as a gateway to research and development projects, CORDIS helps to facilitate participation in European research, to improve exploitation of research results and to promote the diffusion of knowledge.
Practitioners and policy makers at regional level should make use of these instruments which make it possible to enhance competitiveness in their region, as can be shown by the following examples.

The Italian company Finlombarda, for instance, supports small and medium-sized regional businesses (SMEs). This company from the Lombardy Region has invested European Regional Development Fund (ERDF) funds in tourism, the environmental sector and water management, embedding all investments in an integrated plan. The approach was demand-oriented and broke new ground by awarding not only grants, but also loans for stimulating competitiveness in Northern Italy. “For the first time, we promoted a new mechanism of responsibility for the territory. And we realised that co-funding entails co-responsibility”, says Paolo Zaggia from the Lombardy Region. In his opinion, this approach made investors get more involved in the programme. In this example, a flexible way of implementing this funding instrument was one of the keys to success.

Clusters and regional networks are widely applied methods for sustainably enhancing innovation in regions. The example of the Plastics Processing Cluster Switzerland illustrates another positive territorial development which unites local funds and EU programmes: in a first step, several regional clusters emerged according to specific themes. Then, a regional network was created: the Science and Technology Centre of the Canton of Fribourg in Switzerland has taken charge of three innovative clusters, allowing a fruitful exchange of expertise and tacit knowledge to boost the development of new products. In one of the clusters - the Plastics Processing Cluster Switzerland - four companies and a couple of universities were involved in its creation in 2005 and, within six years, 80 companies had already joined in. Building on this project experience and the effective networks, two transnational projects within the Alpine Space Programme will enable these good practice initiatives to take a further step forwards and widen their scope into a European innovation platform. One of them, ALPlastics is designed to benchmark similar clusters and regional innovation policies.

In Baden-Württemberg, one of the most competitive EU regions, innovation centres have proved to be a very useful tool for keeping the German federal state as competitive as possible. Commissions were set up as part of ministries for building bridges between administration, SMEs and universities. They encourage entrepreneurs to efficiently communicate, create new products and thus keep the innovation circle active. “Everything we do is driven by the needs of the companies”, explains Norbert Höptner of the Steinbeis-Europa-Zentrum. In addition, the 30 or so universities of applied sciences in Baden-Württemberg rank among the key drivers of innovation in the country. The region is the primary institutional partner for universities, other research and education institutes, as well as SMEs.

Slovenia is facing rather different pre-conditions than Southwest Germany for instance. Having been an EU member state only since 2004, it is a “convergence region” and therefore has access to more funds. Its capital Ljubljana is located on two important corridors, including Number V which connects the Mediterranean with the mid-Danube capitals. Due to its geographical position, it also cooperates in four transnational programmes: the Alpine Space, Central Europe, South-East Europe and the Mediterranean.

In view of this variety, the Slovenian experts favour a place-based, demand-oriented strategy: they analyse the needs of their companies, closely cooperate with chambers of industry and commerce, and continuously improve the use of all tools. In terms of financial instruments, stakeholders benefit from grants, loans or even private equity, such as venture capital.

In order to be more competitive, all Alpine countries require more platforms where entrepreneurs can meet researchers and scientists, regardless of whether these are for tackling general targets, such as an exchange of knowledge, or for very specific purposes, such as the launching of a new product. Fortunately, almost all funding instruments relevant to Alpine Space countries support cross-sectoral or interdisciplinary networks involving partners from different European countries.
ETC initiatives, such as the Alpine Space Programme, can encourage the development of smart policy tools and networks which support innovation. In parallel, EU-wide instruments, such as CIP and FP 7, focus on excellence, involving top researchers and organisations across Europe. As an added value for the regions, they train a large number of scientists and provide numerous technological outputs and innovations, for example, prototypes, demonstrators, patents or technical standards, and therefore often create the critical mass for breakthroughs. The outcomes of the EU research projects can be developed and implemented within the framework of territorial initiatives.

The three main EU funding instruments to support research and innovation –
keys to competitiveness in the period 2007 – 2013


**Mission:** To encourage the competitiveness of European enterprises / SMEs. Cross-border projects are financed.

**3 pillars:** EIP (Entrepreneurship and Innovation Programme), ICT (Information and Communication Technologies), IEE (Intelligent Energy Europe)

**Budget:** 3.6 billion EUR

**Website:** http://ec.europa.eu/cip/

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**Structural Funds, consisting of ERDF, European Social Fund (ESF), Cohesion Fund**

**Mission:** To reinforce economic and social cohesion by redressing the main regional imbalances and focus on investment and policy making.

**3 objectives:** Convergence, Regional Competitiveness and Employment and the European Territorial Cooperation. Objective 3 covers cross-border, interregional and transnational cooperation, like the Alpine Space Programme and ESPON.

**Budget:** 437.8 billion EUR in total, 8.7 billion EUR for ETC

**Website:** http://ec.europa.eu/regional_policy

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**Mission:** Funding research in Europe, but also to respond to Europe’s employment needs, competitiveness and quality of life.

**Partners:** Research consortia with participants from different European countries.

**Specific Programmes:** Cooperation, Ideas, People, Capacities and Euratom

**Budget:** 54 billion in total, 7 billion EUR for 2012

**Website:** http://ec.europa.eu/research/fp7/
In Ljubljana, the Alpine stakeholders discussed development options on the basis of four key fields that are central to enhancing competitiveness in the Alps. Experts offered stimulating introductions to each theme and these were illustrated by practical examples from partners who are involved in projects that strengthen competitiveness in the Alps. The participants were invited to:

- Identify local potentials and initiatives that could increase the competitiveness of the Alpine territories through transnational action.
- Provide input on how the Alpine Space Programme could reinforce its contribution towards stimulating competitiveness.
- Contribute to building synergies between programmes and reinforce coordination and cooperation in the programme area.
- Draw up recommendations for the policy makers.

Here are the main findings of the 120 participants, focusing on three cross-cutting themes which emerged during the workshop discussions.

**Towards a sustainable energy mix for the Alpine Space**

Energy markets are undergoing radical transformation. Both the supply and consumption sides are subject to severe changes. In order to cope with climate change and ensure sustainability in the production and use of energies, the winning formula is based on three key concepts: “energy saving, efficiency and renewables”. In line with this approach, the main targets of the EU 2020 Strategy include reducing greenhouse gas emissions by 20 percent compared to 1990, obtaining 20 percent of total energy consumption from renewable sources and increasing energy efficiency by 20%. In addition to the European strategy, there are various approaches to reducing greenhouse gas emissions or energy consumption on national, regional and local levels (e.g. Trentino 2020). However, according to the International Energy Agency (IEA), the demand for energy will increase on a global scale despite ambitious reduction and efficiency targets. Alpine regions will therefore need to redefine their exact energy demand, basing their needs on reliable data relating to quantity and time of consumption.

Alpine regions need to carry out a careful assessment of the energy supply side. The prospect of solely or mainly using renewable energies is viewed in a very favourable light and the Alps offer a high potential in this field – particularly in view of important hydro power resources. However, the use of water, wind, biomass, geothermal or solar energy can be a very delicate issue at local level. The crucial question is: how can local players sustainably exploit the energy potentials that can be found in
their territory? To achieve this, regions and communities assess their territorial potentials and devise energy supply plans which combine the different sources. At Alpine level, sharing tasks amongst regions or even countries, depending on the sources and technology available, could be a first step towards a smart specialisation in energy supply. In order to meet this objective, an energy road map for the Alpine Space should be developed, integrating an assessment of data on environmental and social impacts of the energy change.

Transnational projects can explore coordination and governance models for avoiding imbalances or unexpected drawbacks that can arise when implementing the energy transformation. In consideration of the EU objectives for energy production and consumption, and the adaptation and mitigation of the impacts of climate change on the one hand, and protection of the rich biodiversity and landscape in the Alps on the other, development strategies should balance the enhancement of renewable energies with the requirements of nature protection. In view of this, the SHARE project tests and promotes a decision support system to merge both river ecosystems and hydropower requirements.

According to the fact that changing dynamics in the energy markets are affecting the whole of society, all efforts need to be supported by strategies for social consent. Indeed, the use of renewable sources available in Alpine regions can have enormous potential for conflict. Ideally, every person and each household can be a committed player in the energy supply and consumption changes. The role of consumers has changed significantly. Mainly owing to the decentralised organisation of renewable sources, so-called “prosumers” have emerged in the power market: by using photovoltaic cells on their roofs, or biomass in rural areas, consumers are evolving into producers. In this context, regional policy makers should take a leading role in supporting new business models. They should also provide conflict management tools, based on strategies for initiating and managing a target-oriented dialogue between suppliers, consumers, educational institutions, NGOs and public administration.

Before implementing a wide change in the Alpine area, the question of energy storage and supply in peak times – an area of weakness when it comes to renewable sources – needs to be addressed. In order to better manage energy supply and production bottlenecks, virtual energy platforms should be developed with the help of information and communication technology (ICT). In this context, the creation of a smart grid which is tuned to the Alpine regions has been suggested. The AlpEnergy project, for instance, has focused on Virtual Power Systems (VPS), which integrate, manage and control distributed energy generators and storage capacities, and link their technical operation to the demands of the consumers and the energy market. In practical terms, smart metering was implemented, for example, in Gorenjska, Slovenia. In Rhônes-Alpes, France, where electrical heating is highly developed, analysis has shown how peaks in energy consumption for electrical heating can be “shaved”. All VPS were developed, tested and evaluated, resulting in the creation of six master plans for different areas within the Alpine Space. These transferable models should be developed to help regions define their individual and adapted energy mix.

In order to make the most efficient use of the natural resources, a careful evaluation of investments and subsidies is needed. This means questioning existing choices. For instance, does it make sense to offer private households financial incentives for photovoltaic electricity, when much more cost-effective measures such as insulation do not receive anything like the comparable support? Such critical analyses should be carried out in line with the approval of new tools for investment, such as contracting, regional funds or ecopower stock exchanges. Furthermore, regions should establish framework conditions that free up additional private investment flows.

The search for and efficient use of natural resources has been essential for Alpine populations throughout their history, with sustainable living being a deep-seated tradition of the Alpine culture. It is possible to make the development of renewable energies and the enhancement of energy efficiency become a local development opportunity by focusing on new products and services associated with these assets. So far, such initiatives often lack critical mass for succeeding in the energy market. In this
respect, **energy-efficient building** is an interesting showcase for improving regional competencies in the Alps. The transnational project ENERBUILD (Energy Efficiency and Renewable Energies in the Building Sector), for instance, promotes **common standards and offers financing models and decision-making tools for policy makers**. In combination with the offer of learning modules, the initiatives of this project can increase competitiveness in an ever-growing niche.

Finally, other fields, such as **mobility, spatial planning or housing** can have a critical bearing on the energy consumption and greenhouse gas emissions of a region. Insufficient accessibility of remote areas by public transport, along with the negative impacts of urban sprawl, for instance, frequently force people to use motorised private transport in the Alps. More **sustainable mobility concepts or zero emission** approaches could provide relief in this area. They should preferably be combined with locally produced renewable energy and be based on **indicators that measure the success of e-mobility technologies**.

### Towards the smart use of the endogenous potentials of the Alpine Space

The experts coming from in and outside the Alps, who contributed to the Ljubljana forum, consider the diversity of the Alpine region to be an advantage: from the small villages surrounded by high mountains through to the flourishing metropolises in perialpine plains, which are among the best economic performers in the EU. The region offers a high quality of life, a diverse landscape featuring an abundant biodiversity and a culture rich in contrasts. The Alps - also regarded as the “water tower”of Europe - attract millions of tourists every year. Hence the key question is: **how can we seize the opportunities offered by the Alps’ potentials to boost competitiveness?**

In order to compete on a European or even global market, **regional profiles have to be refined into smart specialisation strategies**. The first step on the path towards a “regional unique selling proposition (USP)” requires the analysis of potentials and the pinpointing of assets in detail.

**Forestry**, for instance, is a highly developed sector in the Alps and a good example of a natural resource basis for **local value chains**. Various sectors, such as design, (green) building or energy production rely on wood which is a **multifunctional raw material**. However, the Alpine topography makes managing mountain forests more cost-intensive than in the areas of the plains. In order to increase the competitiveness of this sector, there is firstly a need to improve the development of a **sustainable timber supply chain in mountain areas** - a target pursued by the transnational project NEWFOR (New technologies for a better mountain forest timber mobilisation).

The attractiveness to tourists is another key characteristic of the Alps. But the **profile of tourist destinations needs to be heightened**. The majority of tourist regions still lack a genuine USP, whilst customers long for authenticity and unique offers and products. Marketing strategies for sustainable products which are based on **typical local resources and distinctive offers** should therefore be fostered. The approach in the Dolomites UNESCO world heritage site is a good practice example of how cooperation within a board of local authorities enables such a strategy to be implemented. Outdoor activities in the mountains are offered in close connection with spa and health activities, as well as typical cuisine and natural cosmetics. The local tourism focuses on well-being activities, combines natural and cultural products, and provides the area **with a clear profile and customer value**.

Apart from the endogenous assets of the territories and regions, diagnosis of Alpine potentials should also **focus on up-and-coming sectors**. This has been the scope of the Alpine Space project entitled Alps Bio Cluster. This project supported transalpine cooperation between R&D centres, universities, start-ups and SMEs, by creating thematic networks uniting resources from academic, industrial and training environments. The partnership set up a transnational cluster with two main themes: **“New
diagnosis and therapies” in the biotechnology sector, along with “Autonomy and Healthcare” in the medical technology sector. When taking stock of the potentials in the Alpine Space, the project team identified, amongst other things, 750 biotech companies, 550 medtech companies, 1,200 SMEs, 100 universities and research centres, 29 incubators and science parks, and 27 venture capital companies.

In addition to exploiting natural resources, building on endogenous potentials or focusing on new technologies, the Alps also have strong potential to become a high-end healthcare destination in Europe. Currently, only few destinations, such as Davos or Bad Hofgastein, seem sufficiently qualified or have a high enough profile in this field. But in view of an ageing and extremely health conscious society, medical wellbeing offers interesting development options, provided that a clear USP is developed.

Managing territorial and economic development in accordance with local goals is one of the main tasks of local communities and development agencies. Commercial location development (CLD) is a strategy adopted to increase the attractiveness of a location. The transnational project COMUNIS has produced an integrated CLD strategy, including broadly adaptable guidelines and model structures in selected Alpine regions. The idea is to enhance inter-municipal and intra-territorial cooperation and to allow the concerted steering of commercial development. Building on the specificities, strengths and weaknesses of a location, local authorities collaboratively design a marketing strategy – targeting the type of enterprises they wish to develop or attract – based on a detailed examination of the territory and followed by a benchmarking analysis.

Local governments should adopt a future-oriented approach and they should develop and promote a clear place-based and innovative development vision. For example, the Manifattura project – the “Green Innovation Factory” – run by the autonomous Province of Trento, shows how a local government can take the lead in creating and managing a unique selling proposition. The objective of the project is to transform a nine-hectare historic tobacco factory into an innovation hub for green building, renewable energy, and environmental technology. Manifattura is the first green technology partner in Italy. This has been possible thanks to a strong political commitment. Indeed, the autonomous Province of Trento has made “sustainability” a priority in all of its policies since 2005 and has implemented it by means of many different measures (management of its own estate, procurement processes, incentives) mainly relating to green technologies in the building sector. In order to develop its specific strategy, the local government has made targeted use of European, national and local funds, devoting research funds to green technologies and using the ERDF as a supporting tool. Here, transnational cooperation is also a key element for competitiveness: cooperation in the framework of the European Grouping of Territorial Cooperation (EGTC) with South and North Tyrol, made the transfer of expertise possible, enabled the use of funds to be improved and allowed collaborative promotional activities to be carried out in this sector.

Finally, one should bear in mind that the smart development of endogenous potentials is closely linked to the dynamics of the population in the Alpine Space and of the rural-urban relationships. Inhabitants of the metropolises on the Alpine fringe benefit from an important variety of recreational opportunities, and mountainous destinations can, in return, profit economically from these day-trippers. Big cities in the perialpine belt perform very well with regard to the Lisbon objectives of growth and creation of jobs. However, their populations consume a high percentage of goods and services, and in particular ecosystem services provided by the Alpine core region. The challenge is to ensure solidarity and a fair relationship between regions in the perialpine belt and those in the core mountain areas. The transnational project InnoCité has provided small and medium-sized cities with a set of useful participatory instruments, such as new modes of governance or public-private partnership for city planning. These instruments help to create and promote incentives to attract new investors and entrepreneurial activities.
Towards effective and inclusive knowledge management

“Brain gain rather than brain drain” for the Alps was a statement made at the Ljubljana forum, referring to the particularly rich and diverse traditional knowledge, on the one hand, and the impeding outward migration of young people on the other. Many alpine regions have conserved unique techniques and practices, for instance in building. The challenge here is to increase the professional skills of the younger generation by transferring this heritage. Anchoring both traditional knowledge and new knowledge on green housing is the aim of the AlpHouse project. The partnership involved has organised training and specific learning modules for apprentices, craftsmen and experts, which entail the successful transfer of knowledge on the renovation of traditional buildings.

Tourism organisations are also facing severe challenges in terms of education and training. The low qualification level of employees, combined with a low income, a high workload and unattractive working hours, characterise the typical seasonal jobs in tourism. Experts are particularly concerned about the lack of a skilled young labour force, especially in view of the demographic change and high seasonal fluctuations in personnel. Up until now, employers in Alpine destinations have tended to focus on winter or summer seasons and to hire staff for only half of the year. This trend needs to be reversed in order to give tourism professionals – particularly the young ones – improved prospects and greater motivation. Offering employees job security throughout entire seasons is a possible approach, assuming that all-year-round tourist attractions and packages increase.

Furthermore, in order to be able to adapt their labour force, tourist destinations should put awareness building and critical impact assessment on their agenda. The positive economic effect of tourism is very often overestimated. The local population needs more and improved information on the true economic impact of tourism: what is the added value of tourism activities? How does it influence the labour market, the natural or cultural heritage and housing costs of the local population? All in all, an improved awareness of tourism as part of a sustainable regional development is required.

In order to motivate and mobilise every single player into bringing about major changes in society, for instance in the energy sector, a need for new educational methods has emerged. These should be geared towards schools and universities, but also companies, public administration and financial institutions.

More innovation clusters, networks and platforms were called for in all of the workshops. They would provide opportunities for the regular exchange of information and dialogue, and they would enable national and physical borders to be overcome in order to ensure that the Alpine intellectual capital becomes more competitive. Such instruments would bring universities, regional bodies and innovative companies together in order to create conditions which are productive and enhance creativity. Moreover, they should be designed to ensure the transfer and absorption of knowledge from an expert to a practical level. The OPEN-ALPS project, for example, is supporting Alpine SMEs by promoting the Open Innovation Paradigm (OI). It assumes that companies can and should use external as well as internal ideas in order to develop their technology. The partnership will devise a transnational support service of hubs, offering a web-based management platform cross-linking innovation seekers and practitioners, specific transnational forums and open innovation laboratories.

The workshop participants also underlined the strong impact of the creative industries on competitiveness. In fact, as mentioned in ESPON Territorial Observation No.5, regions with high concentrations of creative and cultural industries have Europe’s highest prosperity levels. It is interesting to note that experts on migration have noticed that the increase in the ratio of the creative workforce in relation to
the total active population has been greater in rural areas than in urban areas in Europe. CCAlps, a project which has recently been launched, will create a real and virtual network of hubs in the Alpine Space, that places the spotlight on creativity and innovation, and is able to focus on specific issues and opportunities for local and transnational development. The project will bring together cultural and creative industries, innovators, entrepreneurs, policy makers and universities. In short, the project aims to increase the participation of creative industries in the socioeconomic development of the Alpine area.

In summary, examples in the Alpine Space clearly show that innovation does not necessarily imply creating something completely new. Frequently, it consists of implementing a new mix (recombination) of existing knowledge, tradition, products or services. Within the Alps Bio Cluster project, for instance, three cross-sectoral and multidisciplinary networks have been established. One of these, “Ecosystem Services for Human Health” is a new approach, linking traditional Alpine potentials with new demands. The project excels also in another respect: by means of its leading “e-Care” group, the team has tackled the lack of health professionals in Alpine areas and the difficulties associated with the isolation of rural areas. The target has been to take better care of isolated patients at home through the use of ICT. In addition, the transnational approach has allowed an exchange of expertise to take place between differently organised Alpine medico-social systems and medical care systems.

Finally, ICT should be efficiently used as key tools in order to achieve effective and inclusive knowledge management. In this respect, the new ICT4EE Wiki is an interesting web-based toolkit launched by the Committee of the Regions and the European Commission. It provides local and regional authorities with an extensive body of practical advice and examples of good practice in the planning and implementation of energy efficiency initiatives involving ICT.
Needs for action

1. Go beyond Alpine organisations
2. Inner/Outside stakeholders
Territorial cooperation is a major European tool for implementing the objectives of the Europe 2020 Strategy in the territories. Transnational projects are transforming objectives into practical action on the ground. The transnational cooperation programmes are key players in the development and implementation of specific strategies on a wider geographic scale, which build on endogenous potentials, pool development potentials and resources, and overcome barriers. The Alpine Space Programme area, with its particularly high level of regional diversity, is a “test lab” in which different development paths for innovation and smart specialisation can be showcased, with the overall aim of increasing competitiveness.

Enhancing endogenous potential for innovation

Innovation is a driver of smart growth. In a territory with such a high level of diversity as the Alpine area, innovation processes should go far beyond focusing on research and development or on the hi-tech sectors. The development options should be selected and pursued according to the regional specificities and the skills of the local population. The Alpine Space Programme has put this place-based approach to competitiveness into practice and assists regions by dealing with a variety of topics, engaging different levels of partners and by encouraging a policy mix, rather than pursuing sectoral approaches. A broader understanding of innovation by regions would also mean introducing new management techniques and tools for public administrations as well.

Policy tools that pave the way towards competitiveness are based on a careful analysis of local and regional common assets, preferably with a balanced and “bottom-up” methodology. This should lead to the setting of priorities and the launching of smart strategies, which in return will attract specific investment and help to turn assets into business and growth opportunities.

Within the Alpine Space, certain key potentials exist that cannot be found in other parts of Europe: these include technology and design, for example with regard to Alpine architecture and construction, as well as unique resources such as mountain forestry and complex, cross-sectoral expertise, such as traditional land use or river management techniques which facilitate adaptation to climate change. In the course of the Ljubljana Forum, experts identified a “triangle” of assets which offers the key opportunities for the Alpine Space: this consists of ecosystem services, knowledge potential and quality of life.

Transnational cooperation in the Alps, with its strong regional dimension, also offers huge potential in the energy field. The diversity of sources calls for the enhancement of energy governance rather than technology alone. Devising a specific strategy for the Alpine Space, or making energy a priority for the ETC period 2014–2020, were two options underlined during the forum. This could enable new markets and new business propositions to be located and developed, and innovation to be enhanced in the energy sector.

Supporting the efficient flow of knowledge

Smart regional strategies and innovation are closely linked with the existence of effective knowledge chains. Regional policy can therefore help to create and support inter-regional links between players in areas which have similar specialisation. Open or closed cooperation networks, clusters or centres of excellence are common tools which can be used for the transfer and diffusion of knowledge. These
should be focused initiatives which enable SMEs – the very backbone of the Alpine economy – to interact and improve their collaboration with research facilities.

So far, academic and industrial clusters have been established, for instance, in ICT or the energy sector. However, in the future, centres of excellence should also be created in the field of administration or research. In a transnational programme these tools should be more than a simple cooperation process, they should bridge knowledge creation and its implementation by business players. A triple helix approach is recommended, combining the efforts of

- public administration bodies in the creation of effective framework conditions in line with
- the business sector needs and in cooperation with
- think-tank institutions, such as universities or research institutes and intermediaries, such as technology parks.

Transnational projects can – through their multi-sectoral and multi-level partnership – connect all types of cluster players in order to move from the exchange of expertise to joint implementation. Engaging different categories of partners helps to overcome potential conflicts and enables an open innovation process to be promoted.

**Balancing the potentials of the core Alpine areas and the metropolises**

The need for the development of efficient dialogue platforms with regard to the relationship between core Alpine areas and their surrounding urban centres was also identified during the forum. Whilst most cities in and around the Alps offer job opportunities, education, trade services and enough critical mass for a creative growth, the core Alpine areas offer water, fresh air, biodiversity, strong cultural roots and attractive leisure amenities. In addition, they often provide workforce and living space. In order to maintain this mutual exchange, complementary and well-balanced development strategies for the future should encourage urban-rural partnerships, ensuring a fair share of costs and benefits.

The Forum Alpinum held in Munich in October 2010 highlighted the most important trends in the relationship between urban, peri-urban and rural areas: whilst there is no single metropolis in the Alps themselves, and only few functional urban areas, alpine regions are surrounded by dynamic metropolitan regions connected via transalpine transport routes. This has led to strong urbanisation processes, ranging from fast growing cities along international transit routes, to commuter towns or urbanised tourist destinations. The main hubs around the Alps exert an even stronger influence, as they are considered to be “engines” with strong job markets. Future policy interventions should take advantage of this potential for mutual influences. A better understanding of the spatial links between metropolises and their surrounding regions is needed, for instance, regarding leisure and housing in Alpine tourist destinations.

In general, policy design in the Alps should encompass functional relations between Alpine areas and surrounding metropolises. The development of functional planning can help to overcome polarisation, and private-public partnerships can enhance good accessibility to remote areas – for instance, by improved public transport or ICT – and serve as a sound basis for specific development strategies.

**Creating synergies and increasing impact**

The priority of the moment is to make the most effective use of public funds through the exploitation of synergies. In this context, “multi-level governance” is what is needed here. The mobilisation of different players on horizontal and vertical levels can improve the coherence, coordination and complementarities of policies, programmes and projects related to the Alpine Space. In general, harmonised policies can pool all the resources required for competitiveness and innovation more effectively.

In Ljubljana, the participants identified the need for more experimentation in regional policies. The Alpine region should be considered a “living lab” for open innovation processes. Practitioners and policy...
makers should have the courage to implement ambitious measures and policies, even when there is a risk that these may not entirely succeed. European policy makers call for more concrete testing in the territories. Indeed, attempts that have not been successful also enable us to learn and develop recommendations for improved implementation in the future. What is most important here is that experience can serve as a source of learning to other Alpine or European regions.

In order to assess these experiments in the territories, and more generally to improve the efficiency of regional and local policies, the local and regional governments would need to agree on common standards or measures. A common set of tools should be created, enabling them not only to increase their planning capacity, but also to compare and quantify the objectives and results achieved in terms of sustainable development. This is particularly relevant when a new technology, such as e-mobility is introduced. The development of a “rating system” (European Green Mountain Protocol) has been proposed and this is a model which could be shared in the Alpine Space, providing local communities with guidelines for an advanced governance system towards the achievement of increased competitiveness.

If new initiatives are to have a greater impact on the Alpine territories, they should build on those which already exist and project results should be integrated into existing policy frameworks at different levels. Building on projects which are up and running, or have been completed both inside the Alpine Space and also in other cooperation areas, can make the impact of ETC programmes more visible. In any case, most of the project results offer a high degree of transferability, ensuring that practices can be implemented in different regional contexts. Indeed, the projects should focus on their impacts on the territories and programmes should provide the means for transferring and capitalising on their results.

In summary, there is a need for more strategic policy intelligence to enhance competitiveness in the Alpine Space. This encompasses monitoring, evaluation, sound analyses of innovation systems, intelligent benchmarking, long-term approaches and, most notably, policy learning and experimentation. This should be implemented in all Alpine Space regions and could be a core aspect towards the creation of a macro-regional strategy for the Alps.

**A macro-regional strategy for the Alps**

Based on the general decision of the Programme Committee taken on 10th/12th May 2011, the partner states of the Alpine Space Programme (Austria, France, Germany, Italy, Liechtenstein, Slovenia and Switzerland) launched the project entitled “Strategy Development for the Alpine Space”.

The overall aim of the project is to establish a long-term strategic approach for the Alpine Space. This will encompass a broad perspective and the results will contribute towards the debate on a potential macro-regional strategy and pave the way for the future Alpine Space Programme in 2014-2020. The project will therefore help to determine which topics require a broader European perspective within a macro-regional strategy and which issues can be dealt with on a transnational, national, regional or local level.

The strategic approach which is to be established will not solely reflect the opinions of the stakeholders of the Alpine Space Programme, but will also be discussed with various groups of policy players, across different sectors, levels of governance and EU programmes. The programme therefore acknowledges the initiatives for the establishment of a macro-regional strategy launched by the Arge Alp Regions and the Alpine Convention. Both initiatives have mandates, aims and addressees which are different from the present Alpine Space Project. The Alpine Space Programme strives to use the synergies arising from the different approaches, competences and perspectives and to avoid any duplication of work.
PROJECTS

A non-exhaustive overview of Alpine Space projects pooling potential for Competitiveness and Innovation

**ALIAS - Alpine Hospital Networking for Improved Access to Telemedicine Services**
Addresses medical services and information inadequacy to ensure Health Care provisions in the Alpine Space. It links hospitals to create a network of ALIAS Virtual Hospitals to share medical information and adopt telemedicine services.
Project duration: 01/08/2009 – 21/07/2012
www.aliasproject.eu

**AlpEnergy - Virtual Power Systems as an Instrument to Promote Transnational Cooperation and Sustainable Energy Supply in the Alpine Space**
Works on standardising both technologies and procedures to manage variation in renewable energy supply through virtual power systems.
Project duration: 01/07/2008 - 31/12/2011
www.alpenergy.net

**AlpHouse – Alpine building culture and ecology**
Enables local craft companies to renovate traditional buildings and settlements to meet highest standards of energy efficiency while preserving the regional characteristics of Alpine architecture.
Project duration: 01/09/2009 - 31/06/2012
www.alphouse.eu

**ALPlastics - Strategic Innovation in the Alpine Plastics Clusters**
Will create proper conditions for a public/private cooperation and an efficient management of plastics clusters in the Alpine Space.
Project duration: 01/09/2011 - 31/06/2013

**Alps4EU**
Aims to overcome clusters initiatives fragmentation and favours the emergence of meta-clusters, applying a macro-regional vision and driving Alpine area clusters to be more competitive in the European scenario for the benefit of all Alpine Space’s economy.
Project duration: 01/09/2011 - 01/03/2014

**AlpsBioCluster - TransAlpine Bio Cluster**
Establishes a transnational cluster network in the biotech and medtech sector by involving actors from six Alpine regions in research, training and industry, especially small and medium-sized companies, in order to boost joint economic development by reaching a critical mass of key players.
Project duration: 01/10/2008 - 30/09/2011
www.alpsbiocluster.eu

**ALPSTAR - Towards carbon neutral Alps - Make best practice minimum standard**
Addresses the need expressed by the international community for transnational, well-directed and cross-cutting action to effectively manage climate change in the Alps.
Project duration: 01/07/2011 - 31/03/2014
www.alpstar-project.eu

**CAPAcities - Competitiveness Actions and Policies for Alpine Cities**
Aims at promoting the potential of little Alpine towns through an integrated and transnational approach by innovative urban policies and actions, and by creating alliances with the neighbouring MEGAs and stronger territories.
Project duration: 01/10/2011 – 31/03/2011
www.capacities-alpinespace.eu
CCAlps - Creative companies in Alpine Space
Creates a real and virtual network of hubs in the Alps, that puts creativity and innovation at the centre and that is able to focus on specific issues and opportunities for local and transnational development.
Project duration: 01/10/2011 – 30/07/2014

ClimAlpTour - Climate Change and its Impact on Tourism in the Alpine Space
Provides Alpine tourism centres with the information and adaptation strategies to increase their potential in all seasons, even if snow-reliability is affected by climate change.
Project duration: 01/09/2008 – 01/12/2011
www.climalptour.eu

COMUNIS - Inter-municipal cooperation for Strategic Steering of SME-oriented Location Development in the Alpine Space
Aims to develop a well-defined integrative and cooperative strategy for Commercial Location Development and enhancing inter-municipal and intra-territorial cooperation to overcome individualistic attempts of problems solution on the level of single municipalities.
Project duration: 01/07/2009 – 30/06/2012
www.comunis.eu

ENERBUILD - ENERgy Efficiency and Renewable Energies in the BUILDing Sector
Strengthens small-to-medium building businesses as relevant economic actors in Alpine valleys and supports the shift to ecological buildings by providing craftsmen and architects with know-how, public builders with decision guidance and customers with innovative financing tools.
Project duration: 01/07/2009 – 30/06/2012
www.enerbuild.eu

InnoCité - how to improve competitiveness of small-medium cities under the influence of Alpine great urban centres
Enhances sustainable development in small-medium cities by improving their attractiveness and quality of life and by creating a common vision taking into account residential, administrative and economic functions. Partners seek to integrate results into their local, regional and national programmes by encouraging effective political commitment.
Project duration: 01/07/2008 – 30/06/2011
www.innocite.eu

MORECO - Mobility and Residential Costs
Supports a sustainable, resource-friendly settlement development which follows supply facilities and public transport axes.
Project duration: 01/07/2011 – 30/06/2014
www.moreco-project.eu

NEWFOR - NEW technologies for a better mountain FORest timber mobilization
Enhances and develops tools and adapted policies for decision making in the field of a sustainable and adaptive mountain forest resources management facing the sustainability of mountain forest ecosystems services.
Project duration: 01/09/2011 – 31/08/2014

OpenAlps - Open Innovation in Alpine SMEs
Strengthens the competitiveness of the Alpine Space by introducing and realising innovations in SMEs based on the Open Innovation paradigm.
Project duration: 01/07/2011 – 30/06/2014

POLYS - Polycentric Planning Models for Local Development in Territories interested by Corridor 5 and its TEN-T ramifications
Aims to make mountain areas catch the opportunities of major transport infrastructures, rather than just suffer their environmental and social impact, targeting the phases of piloting and policy implementation.
Project duration: 01/09/2011 - 31/08/2014

SHARE - Sustainable Hydropower in Alpine Rivers Ecosystems
Intends to develop, test and promote a decision support system to merge on an unprejudiced base river ecosystems and hydropower requirements.
Project duration: 01/08/2009 - 31/07/2012
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Marilena Barbaro – Ministry of the Economic Development and Cohesion Policies (I)
Blanka Bartol – Ministry of the Environment and Spatial Planning (SI)
Thomas Bausch – Munich University of Applied Sciences, Faculty of Tourism (D)
Jacques P. Bersier – Science and Technology Centre of the Canton of Fribourg (CH)
Andréj Breznikar – Slovenia Forest Service
Theo Eberhard – Munich University of Applied Sciences, Faculty of Tourism (D)
Mirjan Gašek – City of Ljubljana (SI)
Matjaž Gerš – E-Zavod (SI)
Edita Granatir Lapuš – Entrepreneurship and Competitiveness Directorate of the Ministry of Economy (SI)
Cliff Hague – UK ESPON Contact Point (GB)
Hans-Rudolf Helfer – Association Manufuture (CH)
Norbert Höptner – Steinbeis-Europa-Zentrum (D)
Laurence Jacquinot – Chamber of Commerce and Industry of Lyon (F)
Ludwig Karg – B.A.U.M. Consult GmbH (D)
Miro Kristan – Soča Valley Development Centre (SI)
Gianni Lazzari – Habitech (I)
Cinzia Margiocco – Lombardy Region, Cross-border Programme Italy-Switzerland (I)
Umberto Martini – University of Trento (I)
Claire Nauwelaers – International Policy Expert (B)
Mitja Pavliha – Ministry of the Environment and Spatial Planning (SI)
Wolfgang Pfefferkorn – CIPRA International
Tanja Rener – Government Office for Local Self-government and Regional Policy (SI)
Tatjana Rener – Government Office for Local Self-government and Regional Policy (SI)
Georges Ribièré – Ministry of Ecology and Sustainable Development (F)
José Antonio Ruiz de Casas – DG Regional Policy, Territorial Cooperation, European Commission
Christian Salletmaier – Land of Salzburg (A), Managing Authority, Alpine Space Programme
Peter Schröder – Helmholtz-Zentrum Muenchen (D)
Dominik Siegrist – CIPRA International
Ivan Stanič – City of Ljubljana (SI)
Jernej Strith – Government Office for Climate Change (SI)
Paolo Zaggia – Finlombarda S.p.a (I)
Alma Zavodnik Lamovšek – University of Ljubljana (SI)

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For further information contact
Joint Technical Secretariat
ETC - Alpine Space Programme
Bayerisches Landesamt für Umwelt
Lazarettstr. 67
80636 München - Germany
Tel: +49 (0)89 9214 1800
Fax: +49 (0)89 9214 1820
jts@alpine-space.eu
www.alpine-space.eu