



ForumAlpinum 2010 (6-9 October 2010, Munich, Germany)
organised by the International Scientific Committee on Research in the Alps (ISCAR) and
the Bavarian Academy of Sciences and Humanities

Metropolises and "their" Alps

Key Outcomes

In his opening address Minister of State Markus Söder mentioned the large number of issues in the Alpine region that need to be taken into account for everyone's benefit: climate change, biodiversity, water resources, natural hazards (eg. permafrost and ice, etc.), quality of life (for residents and leisure-seekers). He continued to state that the Alpine region constitutes a **development potential for Europe** which requires awareness not only of unique values (know – appreciate – conserve), but also of unique opportunities, and pointed out that the linkage of both aspects requires an Alpine strategy that includes the area surrounding the Alps.

- This was how Mr. Söder introduced ForumAlpinum 2010, which addressed a wide range of **interrelationships between the Alpine region and adjacent metropolises**. Forum participants launched into hard-hitting discussions on the policies required to take these interrelationships into account. Some called for more co-operation across areas defined along functional lines, for which the EU has launched the concept of Macro-Regional Strategies which is already being implemented in the Baltic and Danube regions. Others argued for the conservation of the Alpine region as a unit (within the confines of the AlpConvention) as the only way in which it could display its strengths and avoid dependencies. Proposals and arguments were discussed frankly during ForumAlpinum 2010.

Discussions focused on the divide between rural and urban areas, which also runs through the Alps. Several speakers emphasised economic imbalances between, and resulting dependencies in, these areas by contrasting urban development and rural stagnation, mentioning the **"decay" of the Alps due to urbanisation**, transit corridors and the penetration of large metropolises. One of the key missions of the Alpine Convention, therefore, is to strengthen the political position of Alpine regions vis-a-vis its metropolises, and to facilitate equitable solutions of shared issues. However, this can only be achieved if the Alpine region's rural peripheries can give themselves a **new profile** that manages to attract knowledge carriers. Education, energy, public health and ageing population, as well as innovation in general are issues that may offer themselves for such re-profiling.

As a counter-argument to this Alp-centred approach, some speakers pointed out the fact that knowledge carriers or development promoters have increasingly migrated to urbanised areas from predominantly Alpine rural peripheral areas, and that the economic and social survival of these regions will depend on whether they can produce economic added value by providing **complementary services for urban areas** (landscape, agriculture, nature conservation, leisure, energy production, etc.). This is where the **Alpine Convention** can facilitate partnerships between peri-Alpine rural areas and surrounding metropolitan regions. The **EU macro-region** was repeatedly mentioned as a suitable "area of co-operation".

During the panel discussion that concluded ForumAlpinum 2010, high-ranking delegates from large metropolises (Munich, Zurich, Vienna and Ljubljana) underscored the fact that metropolitan and Alpine regions already share or complement each other's competences for co-

operation. From an Alpine perspective the most important shared issues are transport/access, tourism and peri-urbanisation. From a metropolitan perspective, they concern freshwater supply, access to local recreation and new housing in the metropolitan area. However, metropolises have an equal need to focus on co-operation with adjacent metropolitan areas and peri-Alpine areas in terms of transport/access, migration, integration, etc.

Next, real-life examples were used to discuss requirements and issues for co-operation between metropolises and Alpine regions. Munich's candidature for **the 2018 Olympic Winter Games** has demonstrated that the Bavarian Alpine region lacks necessary infrastructures for a global event. Olympic Winter Games since Turin (2006) have shown that winter resorts and big cities need to co-operate. In this light, Munich may have an advantage over Annecy – but only if robust co-operation can be achieved that also takes agricultural interests into account, for example.

Increasing tourist, commuter and **migrant flows** between economic centres and the Alpine region are another issue that requires co-operative solutions. Environmentally sustainable, **adequate and safe transport access** – chiefly by public transport – and access to Europe's main transit axes are in the interest not only of peri-Alpine metropolises but also of Alpine regions.

Finally, idealised urban **images of the Alps** were addressed in terms of being a possible cause of conflicting interests between Alpine residents and visitors, for example as regards the conservation of cultivated landscapes. The resolution of such conflicts requires an inclusive dialogue. Here, the Alpine Convention may also be in a position to make a valuable contribution.

ForumAlpinum 2010 gathered together various perspectives – science, Alpine metropolises, Alpine regions (represented by the President of the Alpine Convention, and Alliance in the Alps, the network of municipalities), and the EU's Alpine region programme. The result was a **broad discussion of future co-operation between metropolises and the Alpine region**. New perspectives found a constructive echo, particularly in the context of discussions on the future of the Alpine Convention and its position on an Alpine macro-region.

This was the backdrop against which ForumAlpinum talks and workshops explored in greater depth selected issues that affect metropolises and Alpine regions alike, e.g. climate change, biodiversity, geo-risks and georesources, and numerous related questions such as urbanisation, mobility, adaptation, agriculture, etc. The need to protect and conserve was repeatedly weighed against the need and scope of utilisation and exploitation.

- The fact was undisputed at ForumAlpinum 2011 that **climate change** can have a particularly drastic impact on the Alpine region, and that surrounding areas may also be affected.

Among necessary adaptation strategies, **water management** was discussed with particular intensity. The Alps have been and remain Europe's chief source of water supply. However, trends show that precipitation will increasingly fall in winter, with diminished snow thickness, shorter duration of snow cover, and receding glaciers. To safeguard water availability for agriculture, energy production and tourism (including artificial snow), current rights of use and storage systems will need to be re-assessed.

Equally undisputed was the promotion of **alternative energies**, in particular for power and heat production. Beyond hydropower production, which has probably reached its peak, the Alpine region has considerable potential, in particular in terms of solar, biomass and geothermal energy and – to a lesser degree – wind energy. The hitherto neglected capture of geothermal energy needs to be brought into focus as it is particularly suited for constant energy supplies in peripheral areas and for combination with biomass energy. The expansion of alternative energies needs to be assessed on a large scale to minimise latent conflicts (landscape, views, negative impact on sensitive areas, earth tremors related to geothermal facilities) and to technologically improve facilities (e.g. structures/construction sector, power lines/national grid, coupling of energy production and electric vehicles). The use of alternative energies holds great innovative promise for rural areas – not just in the Alpine region.

So far the relevance to tourism of **bioclimatology** to tourism has been neglected. In view of increasing heat waves in peri-Alpine areas and in the Mediterranean, the Alps' "crisp mountain air" may well come to play an important role in summer-tourism destination management.

The **2009 Climate Action Plan** permits the Alpine Convention to play a leading part in the Alpine region in terms of Alp-specific implementation of climate policies (prevention and adaptation). The Climate Action Plan can also rely on numerous programmes and projects across the Alps, in particular those from the EU's Alpine Region Programme and CIPRA's privately funded cc.Alps project. A promising concept for the integration of climate-relevant policies and programmes was also discussed during ForumAlpinum 2010, e.g. the concept of **climate-neutral Alps**, which can be implemented both sectorally and regionally.

- Owing to their altitudinal belts (Mediterranean to Arctic) and their traditionally great usage diversity, the Alps are one of Europe's great **biodiversity** hotspots, and the conservation of small-scale usage diversity in the Alpine region is one of the most frequently debated issues.

The discussion has essentially focused on **agriculture**. In particular – and for some time now – the debate has focused on how to continue agricultural use. ForumAlpinum 2010 expanded this focus. Food production (in particular upmarket dairy and meat products), as well as services in the interest of society in general (e.g. the safeguarding of cultivated landscapes, habitats or intact resources) will become increasingly relevant, and will increasingly have to comply with intra and extra-Alpine urban populations' preferences based on the historic Alp mythos, and currently prevalent *Zeitgeist*. Today's expectations may converge in stagings of near-natural, diverse agriculture, a *Heimat* idyll with visible roots in traditional cultivated landscapes and strong visual images/impressions. People also increasingly associate the near-natural environment with wilderness.

Faced with these wide-ranging demands, **mountain agriculturalists must discuss the goals of future tasks and products** (food, agriculture, tour operators, etc.) – ideally at European level and, via the Alpine Convention, with urban stakeholders. Agricultural research should support this process. However, such a discussion must include the concept of retreats where nature can or should be left alone (again).

Let us also remember that the floral and faunal **colonisation of the Alps** since the last Ice Age is still ongoing, with numerous access routes to the Alps now available, due to climate change, to hitherto non-native and occasionally invasive species. A **comparison of the Alps with big cities** (such as Munich) yields striking results: in contrast to agricultural areas, their greater structural diversity has resulted in significantly higher species diversity. They also have climate extremes, with the Alps significantly cooler than their surroundings, and big cities significantly warmer (up to +3°C). Their higher temperature has turned cities into laboratories to study biodiversity response to increasing temperature and decreasing humidity. Finally, both the Alps and metropolitan regions constitute large-scale dividers.

Biodiversity conservation is one of the European Union's top priorities, with member states striving to halt biodiversity loss in the context of Natura 2000 and Countdown 2010. EU R&D and LIFE programmes also promote fundamental research and implementation projects. **EU activities** currently focus on invasive species, the role of agriculture, establishing green infrastructures, developing a biodiversity strategy, nature conservation's contribution to ecosystem services, and shouldering global co-responsibility. There is only partial overlap between these fields of activity and the **need for action** discussed in ForumAlpinum 2010 workshops. From a research perspective, the EU and Alpine countries should focus particularly on setting up an integral monitoring programme across the Alps (Long Term Ecological Research – LTER), on the conservation of large-scale ecological corridors (ideally an East-West green belt from the Caucasus via the Carpathians and the Alps to the Pyrenees), and on the purposeful transfer and implementation of knowledge gained from European research programmes.

- At first glance, **geo-risks** would appear to be a classically Alpine issue. However, past decades have demonstrated that developments in the Alpine region, flood events in particular, directly affect adjacent areas. Similar evidence dates back to the 19th century, when large-scale deforestation led to devastating floods. Natural disasters also affect important Alpine transport infrastructure. Therefore, it is extremely important to ensure safety in the Alpine region.

Since approximately 1980 natural disasters in the Alpine region have regularly caused very costly damage. This development is the result of a **"Disaster Gap (Katastrophenlücke)"** that lasted for about one-hundred years (approx. 1880-1980). The Disaster Gap is due to two

facts, i.e. the relatively rare occurrence of large natural events, and successful subsequent prevention and technological protection policies. Within three generations, disaster-awareness was erased from collective memory, robbing populations in affected areas of a **risk culture** based on direct experience. In the 1960s and 1970s, settlements and important infrastructure sprang up in areas of potential risk, many of which indeed suffered extensive damage in the 1980s. In this sense there is a direct correlation between the pre-1980s Disaster Gap and increasing damage from 1980 onwards. Alpine states and insurance companies are currently working on mitigating and, if possible, avoiding the Disaster Gap in the Alpine region.

Earthquakes are another reason why we should always be aware of potential risks. Due to its geo-tectonic position, **the Alpine region will always be affected by earth tremors**, most of which will be almost undetectable while some quakes will be quite severe (Switzerland: to magnitude 6.5). We can now identify tremor-prone areas (i.e. valley floors with loose sediments; tremor-induced landslides) and calculate the probability of tremors (Switzerland: 50 major tremors per 1000 years). But there is as yet no Alpine risk assessment for use in spatial planning (zoning and land-use plans, building regulations), for example, nor do we have Alpine earthquake alarm and monitoring systems. Tremors can also be triggered by human activities such as tunnel construction or drilling for geothermal energy.

- ForumAlpinum 2010 clearly showed that **the political future of the Alpine Convention** must not be hastily reduced to the discussion of "EU macro-region versus Alpine Convention". Currently, the EU macro-region and the Alpine Convention are in the initial stages of "geopolitical action", with many unanswered questions and as yet inadequate baseline information. The research challenge is to provide fundamental scientific data for this macro-regional process (for recommendations on this issue, see <http://www.iscar-alpineresearch.org/>).

The Alpine Convention can play an important part in this process. But it will have to reconsider its self-conception. What is required are not only improved instruments to implement the Alpine Convention in the Alpine region and a stronger integration of regional corporations, but also a wider political and thematic scope for territorial co-operation, both within the Alpine Convention and with external institutions. Focusing on the implementation of protocols would seem to impede rather than promote the evolution of the Alpine Convention. ForumAlpinum 2010 participants therefore proposed to embark on the protocol-less route currently travelled by Switzerland and Italy.

A strategy primarily based on the framework convention could provide a new foundation for all signatory states to focus on essential issues (see current practice in the context of Working Groups or Platforms) and permit the expansion of the Alpine Convention to include territorial co-operation beyond the Alpine Arc.

Further information on ForumAlpinum 2010:

ForumAlpinum 2010 Proceedings: <http://epub.oeaw.ac.at/forumalpinum2010>
Recommendations (research questions & needs for action): <http://www.iscar-alpineresearch.org/>.

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