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ALPINE CONVENTION

Report on the State of the Alps

Alpine Signals – Special edition 1
Transport and Mobility in the Alps



The present document has been established under the coordination of the Permanent Secretariat of the Alpine Convention involving an "Integration Group" composed by experts from different Member Countries of the Alpine Convention. Based on discussions in this group, the different chapters have been drafted by different authors. The Working Group "RSA/SOIA" and the Working Group "Transport" have accompanied the drafting process. National delegations have provided extensive comments on previous drafts. The Permanent Secretariat thanks all persons involved for their intensive cooperation.

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| B | Driving Forces of Mobility & Transport | Italy | F. Ruffini |
| B1 | Population in the Alps | Italy | F. Ruffini, Ch. Hoffmann, Th. Streifeneder, G. Zanolla |
| B2 | The Alpine and European Economy | Italy | F. Ruffini, Ch. Hoffmann, Th. Streifeneder, G. Zanolla, L. Cetara |
| B3 | The Change in Land Use | Austria | A. Bartel, G. Banko |
| B4 | Tourism and Transport | Germany | K. Schönthaler, S. v. Andrian-Werburg |
| C | Effects of Transport & Mobility in the Alps | Permanent Secretariat | R. Schleicher-Tappeser |
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| D1-D8 | Relevant Traffic Policies for the Alps and the AC | Working Group Transport (France) | M. Meaux, C. Ferreol |
| E1 | Conclusions and Synthesis in View of Sustainable Mobility | Germany Italy Austria | S. Marzelli based on contributions of K. Schönthaler, S. v. Andrian-Werburg, F. Ruffini, Th. Streifeneder, Ch. Hoffmann, G. Zanolla, L. Cetara, B. Schwarzl, A. Kurzweil, N. Ibesich, A. Banko, A. Bartel, C. Nagl, and W. Spangl |
| E2 | The Main Challenges for the Future | Permanent Secretariat / Working Group Transport | R. Schleicher-Tappeser, M. Meaux |

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Preface

The Alpine Convention is a multilateral framework treaty, signed in 1991, between the eight states of the Alpine bow as well as the European Community. Its main objectives are the protection of the Alpine territory and the safeguarding of the interests of the people inhabiting it, embracing the environmental, social and economic dimensions in the broadest sense. In order to achieve its objectives, over the years the framework treaty has been equipped with a large number of thematic protocols.

As stated in the Multi-Annual Work Programme of the Alpine Conference for the years 2005–2010, the Report on the State of the Alps is an instrument designed to provide a broader public with information and appraisals on the main developments taking place in the Alps, and at the same time it serves as a basis for strategy development for politics and administration.

The Transport Protocol to the Alpine Convention, adopted in the year 2000, represents one of the most important cornerstones of the whole Alpine Convention. This first Report on the State of the Alps addresses coherently the subject of transport and mobility within the Alps, and between the Alpine space and other European regions, from environmental, social and economic perspectives.

This report is the result of a joint effort by authors from various contracting parties and was approved by the IXth Alpine Conference in 2006 in Alpbach (Austria). It is the outcome of a complex process of data collection and assessment, as for the first time Alpine-wide statistical data were provided by the contracting parties in order to be analysed from a pan-Alpine perspective. This sometimes revealed inconsistencies between the data, as well as interpretation difficulties, but also facilitated discussions, raised awareness and improved comprehension of the transport dynamics among the contracting parties.

The final outcome provides readers with a report rich in data, information and analysis, embracing a wide range of challenges, which it is hoped will further stimulate the discussions in the competent political fora. The key questions, not surprisingly, are all related to the dichotomy between the need to combine mobility and accessibility with the preservation of the Alpine environment and the quality of life of the population living in the Alps. Technological development plays an important role and already provides a set of improvements to the aforementioned dichotomy. However, key problems remain open and important political decisions lie unavoidably ahead of us. The last part of the report, "Main challenges for the future", aims to contribute to the corresponding decision-making process.

The Permanent Secretariat of the Alpine Convention wishes to thank all authors and representatives of the contracting parties for their contributions. Special thanks go to Mr Stefan Marzelli and his collaborators at ifuplan for the valuable editorial work.

This report, published in a special edition series of the "Alpine Signals", will be followed by other reports on the State of the Alps on other themes, with the aim of continuing to provide a dynamic picture of some of the important developments for the Alps and their population. At the time of publication of this first report, work has already begun on data collection and analysis in view of the second report, on the subject of water in the Alps.

Marco Onida

Secretary General of the Alpine Convention

Introduction

Reporting on the state of the Alps is an important tool for developing and monitoring policies for the sustainable development of the Alpine space. Not by chance this first report on the state of the Alps focuses on transport and mobility. This introduction will first give some background on the role of this issue in the Alpine context and then introduce the aim, the focus and the structure of the present report.

The evolution of the role of transport in the Alps

Since the beginnings of human history in the Alps, transport has been a central issue. The Romans succeeded in constructing and securing cross-Alpine roads which guaranteed the connection to their territories on the other side of the Alps. Likewise, the main valleys, at least on the southern side of the Alps, developed thanks to ensured accessibility. With the breakdown of the Roman Empire connections became unsafe, infrastructure partly decayed; settlements in the Alps became isolated and declined. In the boom time of the High Middle Ages, transport and trade along the valleys and across the Alps again played an important role. However, in the following centuries the development of Alpine cities lagged behind, mainly because of the transport restrictions of the Alpine topography: the cultivated area accessible within a one-day there-and-back journey was only half as large for a city such as Innsbruck and two thirds as large for Bolzano compared to that for a city in the plains. Only the introduction of the railway drastically changed the situation – cities no longer depend on their immediate surroundings for everyday supplies.

Facilitation of transport allowed for a strong development of tourism from the late 19th century – the Alps had become the romantic symbol for freedom, peacefulness and authenticity, for the absence of the stress and dirt of industrialised cities – and led to a further improvement in the transport infrastructure. Cross-Alpine trade and Industries developed, but also increasing nationalism and militarisation and corresponding efforts for fortification boosted the construction of railways. However, for most of the Alpine territory access remained very difficult.

Only some 100 years ago, the introduction of the motor car started to change the situation completely. Especially mass motorisation in the last 50 years and heavy investment in the infrastructure in particular have led to a full integration of the Alpine economies into the European markets, to rather late – compared to other regions – but radical changes in lifestyle, to a decline of Alpine agriculture and to new opportunities for Alpine locations. Directly (construction, transport services) and indirectly (tourism, new industries, trade) transport has led to the creation of new economic activities.

Thanks to the central position of the Alpine mountain range in European geography, many Alpine regions, which were once among the most peripheral in Europe, today are in a rather favourable situation concerning accessibility.

Changes in transport infrastructure and technology have always had a complex impact on local and overall development,

creating new opportunities and new imbalances. The strong impact on the environment, however, is a rather new problem that has arisen already with the railways but acquired a new dimension with widespread motorised transport and the corresponding massive infrastructure. Environmental concerns have raised sharp political debates about Alpine transport in recent years; often they were associated with a concern for disappearing ways of life, and the spreading of urban settlement structures. The huge increase in cross-Alpine freight transport has met resistance by the Alpine population largely supported by the population outside the perimeter of the Alpine Convention.

The concepts of transport and mobility

Transport and mobility are closely linked, but they are not identical. Transport is a means of changing the location of people and of goods in order to fulfil different needs, such as going to school, shopping, meeting colleagues or delivering industrial products. The extent to which transport is needed to fulfil these needs depends on many trends and policies which shape the spatial organisation of society. The use of different transport modes – walking, bicycle, car, railway, truck, plane etc. – depends on distance, frequency, availability, degree of comfort, prices, and – last but not least – habits.

Mobility, on the other hand is a much more abstract and emotionally charged concept. Mobility is associated with the freedom of moving, of making experiences, of exchanging goods and views, of having access to the rest of the world. Mobility is essential for personal development, for innovation, for trade, for business, for culture, for everything that makes up society.

Mobility necessarily involves transport. However, how much, and which kind of transport is needed for ensuring a certain degree of mobility, depends on the spatial organisation of society, the transport systems and alternative means of communication. Most people like travelling for fun. However, in everyday life there is also much compulsory, unpleasant mobility: we would often like to avoid commuting, business travel, driving to a distant office or hospital, shipping goods over long distances if only jobs, schools, services, clients were nearby. The different lifestyles and the different structures we can find in the Alps involve very different mobility patterns. Mobility as opportunity is an important goal in modern societies, but mobility as obligation should be minimised.

Different structures and interests across the Alpine space

Given the strong pressure on some main corridors, the accelerated integration of the European economies, the declining market share of the railway, steadily increasing passenger mileage and the considerable costs of transport infrastructure, transport has for many years been the main political issue concerning the Alps. It is a complex issue for international negotiation as structures, needs, perspectives and interests vary considerably between the countries and regions involved.

The main European economic centres are interested in easy and cheap transit through the Alps and therefore have a different perspective than the Alpine population. Tourism operators have different interests from freight hauliers. Densely populated valleys like those in the central Alps have completely different preconditions for public transport and other needs than large areas in the eastern and especially the western Alps with very few inhabitants. Settlement structures and tourism patterns differ strongly between the east and the west. Regions in federal states have more leeway for action than those in centralised countries. Road operators easily operate across borders whereas national railways still maintain different regulatory, tariff and technical systems. The relationship between direct and indirect costs differs between the main corridors making comparisons difficult. And finally the political and economic role of the Alpine population and the symbolic significance of the Alps differs from country to country.

Therefore, transport is not merely a technical issue. Transport decisions are intrinsically linked to a regional specific mix of different economic, environmental, social, cultural and political issues which needs to be considered when looking for common solutions.

The role of transport in the sustainable development of the Alpine space

This historical and conceptual overview already shows that the issue of transport in the Alps – as few others – intensely concerns all kinds of policies and all dimensions of sustainable development.

Evidently, the three basic development dimensions – *economy, environment, society and culture* – are all most relevant in this context.

Also, all equity issues of sustainable development, i.e. *social equity, equity between generations and equity between territories* are essentially affected by Alpine transport policies.

And finally, the systemic principles associated with sustainable development play a central role in the discussion of transport issues in the Alps: the *diversity* of conditions across the Alps has to be respected, while the diversity of approaches in different regions is a great potential. Respecting and making sensible use of *subsidiarity*, i.e. differentiatedly involving the appropriate levels in the multi-level governance systems in the Alps improves effectiveness. *Networking and cooperation* are essential for mutual learning, especially in international and cross-border activities. *Participation* of those ultimately concerned is a prerequisite for lasting changes.

As will be evident throughout this report, solving problems and conflicts seriously requires a spirit of integrated sustainable development.

The role of transport in the Alpine Convention

Since the beginnings, transport has played an important role in the Alpine Convention although main transport decisions for the Alps are being taken by the transport ministers in other institutional settings. Among the eight implementation protocols of the Alpine Convention, the transport protocol

was the one that was the most difficult to negotiate. It also raises the most controversial discussions in the ratification process. The transport protocol gives a broad overview on the issue and its interlinkage with other policy fields. It sets rules and gives general orientation for transport policies in the Alpine space. The Working Group Transport is the one with the longest history in the Alpine Convention and has the task of monitoring progress along the guidelines given by the protocol. It also maintains contacts with other institutions such as the Zurich Group, the coordination body of the Alpine Transport Ministers.

The aim and focus of the report

The report is addressed to the wide range of politicians, professionals and non-professionals involved or interested in the debate on transport in the Alpine space.

The aims of the report can be summarised in four points:

- to provide an understanding of the complex issue of transport in the Alps,
- to provide overview on present state and on trends,
- to show different structures and problems in different parts of the Alps,
- to identify the main challenges that call for joint action.

Compared to other European, national and regional reports on this issue, the specific focus of this report lies in:

- the presentation of harmonised data for the whole Alpine area,
- putting the issue of Alpine transport in the context of an sustainable development,
- showing the specifics of transport problems in the Alps compared to other regions which might justify specific policies, and
- formulating the relevant questions and challenges without however formulating a political programme.

The first edition of such a report does not yet fully meet all these objectives. The limited availability of appropriate data and the difficulties of data harmonisation have shown the importance of joint efforts. However, the overall approach has proven to be valuable for contributing to a coherent Alpine perspective on the subject.

The indicator-related data that have been collected by the contracting parties of the Alpine Convention represent the skeleton of the facts presented in this report. In addition, data from other sources have been used in addition and have always been quoted with their source.

Writing the first report on the state of the Alps

The present report is the first approach to writing a report on the state of the Alps.

Since the nineties there have been efforts to establish a System for the observation of and information on the Alps (SOIA) which suffered from insufficient funds and coordination. New efforts have been made by a Working Group of the Alpine Conference, working on "Mountain Specific Environmental

Objectives" (2000–2002) and then on "Environmental Objectives and Indicators" (2003–2004). In its final report (WG EOI 2004) this group has proposed an indicator system. The group also outlined a corresponding reporting structure and format and delivered pilot chapters for selected topics.

In November 2004, the Alpine Conference asked the Permanent Secretariat (established in 2003) to prepare a first report on the state of the Alps. Due to limited resources, in autumn 2005 the Permanent Committee decided to produce a report focused on transport and mobility based on original data from the member states according to the indicators proposed by the WG EOI.

Besides the importance of the transport issue and its many links to all dimensions of sustainable development, as outlined above, the long experience of the Working Group Transport of the Alpine Convention and its willingness to be involved in this endeavour, were decisive for the decision to focus the first report on the state of the Alps on this issue.

This report is a result of the joint effort of national teams provided by Italy, Germany and Austria, of the French Presidency, of the Working Group Transport and of the Permanent Secretariat. Chapters have been written by different authors considering the comments of the Contracting Parties. After the approval of the contents, final editing has been undertaken by the Permanent Secretariat supported by an external contractor and in close consultation with the authors.

This approach of distributed responsibilities has enabled the report to be produced with very limited resources on all sides. However, it has also led to limitations in the homogeneity of the approach and concerning cross-references between the chapters. Case studies representing different Alpine realities and comparisons between different regions were only possible to a limited extent.

To look at the driving forces and at the impact of transport in a perspective of sustainable development is an ambitious task which involves a range of theories and perspectives where the selected focus is not necessarily shared across all disciplines and countries involved. In this report it was not possible to provide a complete picture – especially concerning the impacts it was necessary to focus on a deliberate selection of relevant and well-documented issues. Undoubtedly, readers could possibly miss a more detailed discussion on social aspects, on biodiversity, on water etc. However, this report is only the first product in the long-term project of monitoring developments in the Alps.

The construction logic of the report

The report has five parts which correspond to its major intentions.

Part A describes the Alpine Transport System. This chapter has a deliberate transport perspective. It provides facts about the situation and the trends concerning the infrastructure, freight transport, passenger transport and the overlapping of these systems and uses as well as an outlook on new infrastructures being built. Based on the most recent figures from the member states it provides a comprehensive overview on cross-Alpine and intra-Alpine traffic.

Part B looks at the driving forces behind the developments described in part A. What are the services that the transport system is delivering? Why is freight transport increasing? How has the Alpine population, its distribution and its demands evolved? How does tourism create transport demands?

Part C looks in the opposite direction and deals with selected impacts of transport in the Alps. The structure of part C corresponds to the three main pillars of sustainable development: chapter C1 deals with the impact on the economy, chapter C2 with the social impacts and chapter C3 with some selected environmental and health impacts. Given the wide range of issues on which transport has an effect, it was not possible to treat all of them.

Part D again takes a different look at the subject: it describes transport-related policies at European, national and for some issues also at regional and local levels. In doing so, it tries to relate these policies to the facts and trends, to the drivers and the impacts described previously, allowing at the end to get an overall impression – surely not a systematic assessment – of the variety and the adequacy of these policies.

Part E, finally, against the background of the foregoing descriptions and explanations and considering fundamental overall policy objectives, looks at the fundamental service functions Alpine transport is supposed to provide for identifying the main political challenges that have to be addressed in the future.