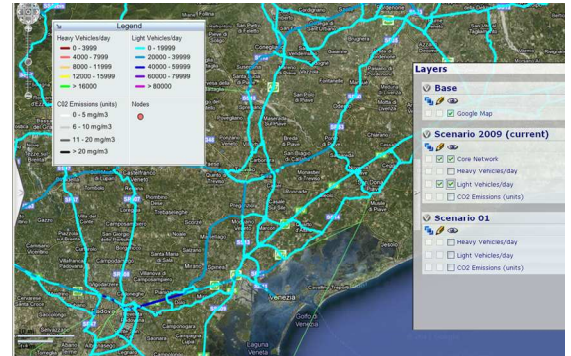


Project advancement (January 2012)

Under the technical profile, relevant results have been achieved for what is concerned with the Transport Decision Support System such as finalization of the Core Network (georeferenced representation modeling the alpine road network), the first calibration of the transport model, the first infrastructure scenario at 2020 and the off-line installation of the AlpCheck2 system ([figure on the right](#)). Furthermore, application of dispersion model and Environmental Sensitivity Index in Slovenia ([see below for a broader description](#)) have been achieved along with a review of social costs of road transport externalities. All the pilots are running: two are in the finalization stage (evaluation of results), while two are in the design and data collection for testing phase. Methodology for assessing the quality of technical achievements is defined in its main components. In networking and dissemination the Mid-Term Conference was organized, 11 external Institutions involved for being part of the Trans-national Platform Panel and 11 Project identified to cooperate with.



AlpCheck2 Information System

ESI (Environmental Sensitivity Index) calculation methodology

Determination of environmental sensitivity index (ESI) derives from the need of the oil industry, which in the sixties and seventies of the last century already expected higher oil spills and was preparing for potential consequences. Required input data for calculating ESI are indicators from which the index is calculated, graphic layers with the relevant content, with which the indicator values for all the area can be identified and relevant division of the observed area. For calculating ESI in Slovenia, the area of Slovenia was firstly split to 8218 hexagons. For the full coverage of the area hexagon is the most suitable geometry, compared to an equilateral triangle and a square.

Figure 1: Network of hexagons with a side of 1 km

In the second step four variants with different “demographic/environmental” ratio were created. For demographic indicators the total number of population and population of under 5 and over 65 years of age were used. Environmental indicators are described with water bodies (lakes, rivers and groundwater) and green areas (Natura 2000). Combinations of different rating and weighting ponders (Variants 1 to 4) are shown in Table 1. After the comparison and review of all four variants, the fourth variant was suggested for further analysis.

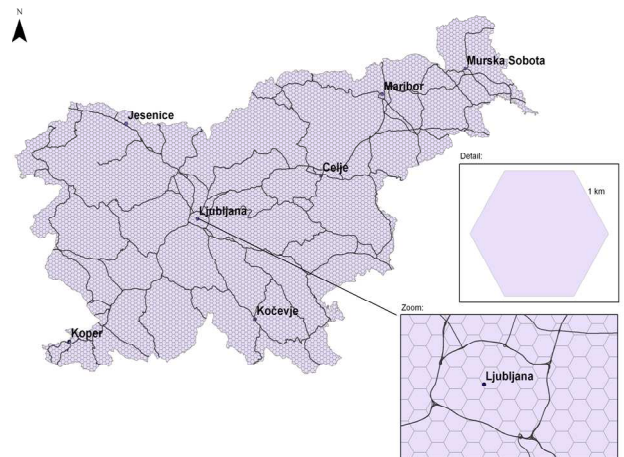
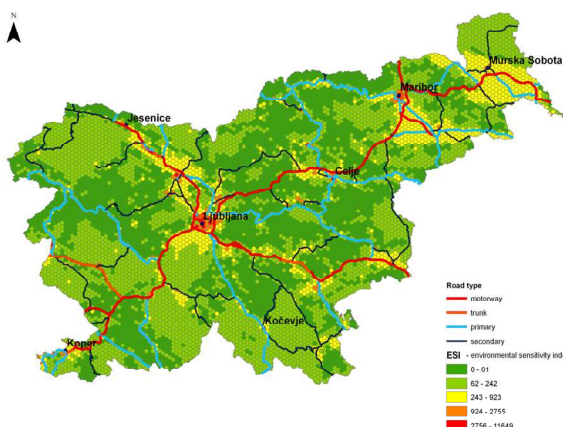


Table 1: Different combinations of rating and weighting ponders

Variant	Population – total	Population - age -5/+65	Water bodies	Green areas
1	0.3	0.4	0.2	0.1
2	0.1	0.4	0.3	0.2
3	0.0	0.5	0.3	0.2
4	0.4	0.1	0.3	0.2



In the third step, selected variant 4 was covered with the road network that is considered for the AlpCheck2 project. We analyzed the size of the network, located in each sensitivity class and the road categories, presented in each class. Environmental sensitivity index was classified into five classes of sensitivity with a normal distribution. Analysis shows that most of the total of 3.130 km of the road network is located within less sensitive area (ESI < 243), 31 % of roads fall in sensitive area (ESI 243 – 923) and only 0.4 % of roads are located in the most sensitive area (ESI > 923).

Figure 2: ESI zones and the national road network



Alpine Mobility Check Step 2



SWOMM 2010 – Transport & Environment in Mountain Areas: Traffic Patterns, Ecosystems Services, Policies for Sustainable Development

Scientific Workshop
 December 14th, 2010
 FAO Head Quarter - Rome

The sixth *Scientific Workshop on Mountain Mobility and Transport* (SWOMM), took place on 14 December 2010 at the Food and Agriculture Organization (FAO) headquarters in Rome, promoted by the [Italian Ministry for the Environment](#) and organized by the SWOMM Scientific Secretariat and the [Mountain Partnership Secretariat](#) in the framework of the [AlpCheck2 Project](#) (Alpine Space ETC Programme).



Experts in the fields of ecology, transport, economics and social development policies from public institutions, research centres and other stakeholders associations discussed on how to strike the delicate balance between transportation development and environment preservation in mountain areas in general, and in particular in the Alps.

As resulted from the discussions, although transport services are meant to foster the socio-economic development of mountain areas, which are often isolated and lacking in basic infrastructure, transportation and in particular road traffic is responsible for some negative externalities affecting the alpine area (i.e. air and noise pollution). Decision

makers should be provided with future scenarios based on sound environmental and socio-economical assessments, as foreseen in AlpCheck2. Such analyses prove to be strategically important in order to meet the goal of a 20 percent reduction in greenhouse gases (GHG) by 2020 set by the European Council, while maximizing the socio-economic benefits from transport.

Mountain ecosystems provide important services to both mountain and lowland populations as they are the source of 50 percent of the world's fresh water and are home to important biodiversity that should be preserved. Developing appropriate means for the economic valuation of these services will increase recognition of their value and lead to more effective payment for ecosystem services (PES) schemes.

Specific methodologies for the assessment of transport impacts and of mountain ecosystems value were presented during the SWOMM 2010, together with cutting-edge technologies aimed at reducing negative externalities from transport. Reference was made in particular to various EU projects, to experiences of international cooperation implemented in other mountain ranges (Carpathians and Himalaya) and to forward-thinking regions where effective transport services seem to go hand in hand with a high quality of the environment (e.g. cases presented by Austria and Switzerland).

The workshop was the occasion to share knowledge and best practices and it clearly emerged that the combination of lower emissions and appropriate incentives for the provision of valuable services can help promote sustainable development of mountain areas worldwide.

<http://www.swomm.info/2010/12/swomm-2010-transport-and-environment-in-mountain-areas/>



Credit photos: ©SWOMM 2010

The challenges of a sustainable mobility through the Alps Tools, main issues and contribution of Alpcheck2 project

**Transnational conference
November 24th, 2011
CETE Méditerranée – Aix-en-Provence**

The third transnational conference organized in the framework of the AlpCheck2 Project (Alpine Space ETC Programme) took place on November, 24th 2011 at the CETE (technical study and engineering Center) in Aix-en-Provence.

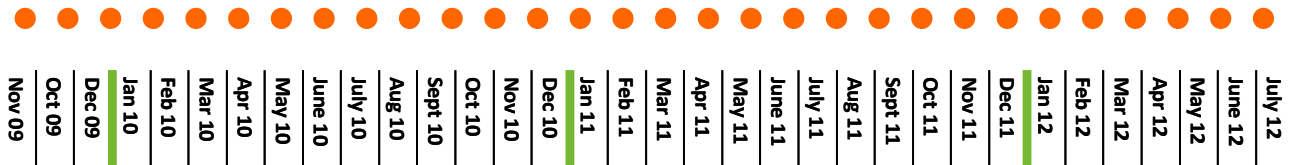
During the conference, experts in the fields of ecology, transport planning and management, economics and traffics, from public and private institutions discussed on how to:

- improve the knowledge of the Alpine transport network with the aim of making the best choices for transport policies: some useful tools have been presented such as the observatory of traffic through the Alps or the French strategies on how taking into account environmental externalities (investment, standards and pricing);
- contribute to the development of an international approach: the policy of transport of the Alpine convention has been presented;
- share the most recent information and disseminate new experiences: some examples have been given as the control of hazardous materials in an Alpine valley, an innovative method to assess modal shift, or works on the evaluation of road traffic in the Alps with a focus on emissions of greenhouse gas, air pollutants and noise.



Credit photos: © CETE Méditerranée 2011

Project Time Line:



Forthcoming events:

- 21st March 2012 - Munich: Transnational Platform Panel Seminar # 2

Information and contacts:

For information about the project, please send an email to info@alpcheck2.eu

For subscribing to the six monthly Newsletter, please send an email to newsletter@alpcheck2.eu

And check also the website : www.alpcheck2.eu