

---

**News Archive Transportation 2008**

**Protecting the Alps from traffic noise and air pollution**

*21 January 2008*

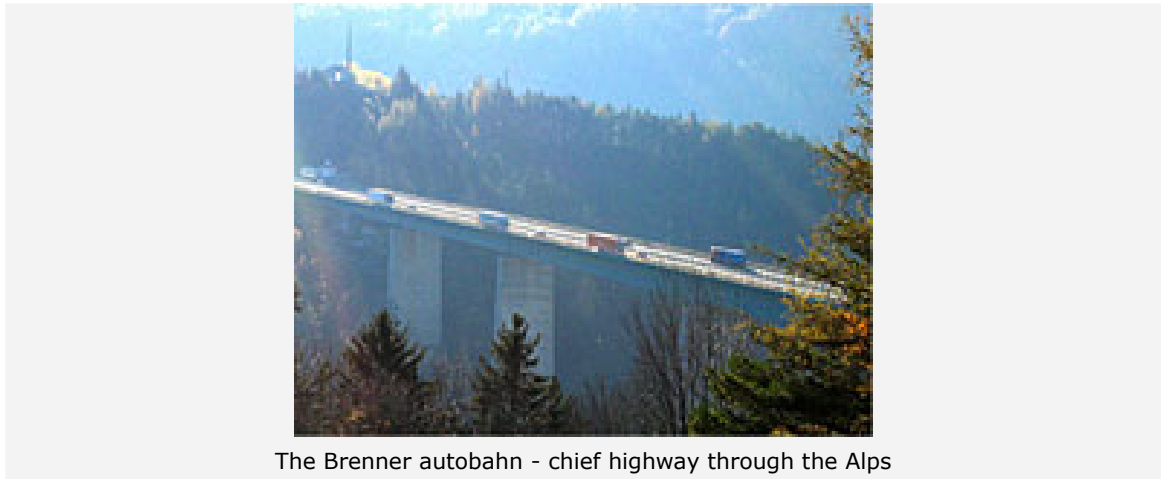


Depending on weather conditions: varying degrees of exposure for residents

A European research project under the name of ALPNAP comes to a conclusion that helps to minimise noise and air pollution along main alpine traffic routes. The project was led by the German Aerospace Center's (DLR) Institute for Atmospheric Physics. The findings will be presented to the public from 23rd to 25th January, 2008 at a conference in Innsbruck.

The growing level of goods traffic is recognised as one of the greatest challenges facing alpine countries. The rapidly increasing number of freight traffic on the alpine transit routes impacts the environment and increases the risks to residents' health. A cross-national approach, in which the individual alpine regions in particular must be involved, is necessary to ease the problem.

ALPNAP supports the responsible authorities in the planning and implementation of impact reduction measures, for example dynamic speed limits such as those recently introduced in the Tirol. The ALPNAP Report, a handbook for the responsible planning authorities, for the first time describes the most effective scientific methods for recording and forecasting air pollution and noise including the negative impacts on the quality of life of the population. It details in particular the complicated conditions for the spread of pollutants and noise in the alpine valleys and includes recommended courses of action.



The Brenner autobahn - chief highway through the Alps

In the project, part of the DLR traffic programme, the Institute of Atmospheric Physics applied various processes to forecast traffic noise. In addition, the scientists also carried out combined analyses concerning the degree to which noise and the concentration of air pollutants in Unterinn Valley is dependent on the weather. It emerged that noise protection walls alongside autobahns in valleys only protect cliff-side residents to a limited degree and therefore the construction of such walls must be thoroughly checked. It was also demonstrated that certain weather conditions in the valleys amplify the impact of noise and pollution and cause limit values to be exceeded. Using these findings as a base, traffic management measures can now be undertaken according to the respective weather conditions, and peaks in pollution can be prevented

#### **European network**

ALPNAP is a project that is partially financed by funds from the European Fund for Regional Development and is in the INTERREG IIIB Alpine Region Programme. It has been running since January 2005 and unites eleven partners from four countries.

Experts from universities and research centres in Germany, Austria, Italy and France are forming a pan-Alp network in the areas of mountain meteorology, air pollution, noise and health ramifications. As part of this, ALPNAP communicates with the project MONITRAF which records and studies the impact of the inner alpine and cross-alpine road traffic along the four transit corridors of Brenner, Fréjus, Gotthard and Mont Blanc . The goal is to develop joint measures to minimise the negative impacts of road traffic and to improve the quality of life in the alpine region. In doing so, measures taken for one transport axis must not result in additional strain on another. The outcomes of ALPNAP's project, which are also summarised in a brochure, now provide the necessary knowledge to prevent this.

#### **Related Contacts**

##### **Miriam Kamin**

German Aerospace Center  
Public Relations  
Tel: +49 8153 28-2297  
Fax: +49 8153 28-1243  
E-Mail: [Miriam.Kamin@dlr.de](mailto:Miriam.Kamin@dlr.de)

##### **Prof.Dr.rer.nat.habil. Robert Sausen**

German Aerospace Center  
Institute of Atmospheric Physics, Earth System Modelling  
Tel: +49 8153 28-2500  
Fax: +49 8153 28-1841  
E-Mail: [Robert.Sausen@dlr.de](mailto:Robert.Sausen@dlr.de)

##### **Dr.rer.nat.habil. Dietrich Heimann**

German Aerospace Center  
Institute of Atmospheric Physics, Earth System Modelling  
Tel: +49 8153 28-2508  
Fax: +49 8153 28-1841  
E-Mail: [Dietrich.Heimann@dlr.de](mailto:Dietrich.Heimann@dlr.de)

---

*Contact details for image and video enquiries as well as information regarding DLR's terms of use can be found on the DLR portal imprint.*