

## **Road Meteorology in the Czech Republic and Practice of the Czech Hydrometeorological Institute (CHMI)**

The CHMI issues special forecasts for the purpose of winter road maintenance as a commercial activity. The primary partner, in the respect, is the Road and Motorway Directorate of the Czech Republic ( <http://www.rsd.cz> ). The contract with this authority covers maintenance of the motorways and main roads and also the information service for regional subcontractors. Besides this, there are some other activities of local significance, for example, special information services for cities (Prague, Pilsen).

In order to prepare special forecasts, CHMI has been availed access to the database of the road meteorological stations operated by the Roads and Motorways Directorate. There is no energy balance model for forecasting road temperature and state at this time except for the IceCast modul of Vaisala technology, which is run on Czech motorways network. It also uses the thermal mapping technology.

To cover road maintenance, special short-range forecasts for individual motorways and political regions are issued four times per day. In addition, a 3-day outlook for each region is prepared every day. All this information is available online in the road weather information system (SMIS) but one needs a password to access it. Road managers can also consult forecasters via telephone.

Severe weather warnings during winter are issued through a general warning system. The warnings cover heavy snowfall, snow drifts and glaze. The decision as to whether or not to issue a warning is based on thresholds of intensity of a given weather system. In case weather is not expected to be severe enough to warrant issuance of a warning, but it is feared that it might complicate transport services, a special supplement to the general weather forecast is issued. The supplement is also broadcast by the media during regular news.

Besides the special road weather information system (SMIS) and communication channels of the national warning system (rescue management, police, media...), information about adverse winter weather is communicated by media as general weather forecast. In this respect there is good experience with radio, TV and news web sites. The web portal of CHMI is undergoing general reconstruction and it is expected to contain pages focused on road meteorology and special public warnings in future.

There are some occasional training seminars for road managers and forecasters with usage of experiences from SIRWEC conferences ( <http://www.sirwec.org> ); from literature such as 'Meteorological Applications' or other bulletins; and from case studies.