

XIVth WINTER ROAD CONGRESS

RECONCILING ROAD SAFETY AND SUSTAINABLE DEVELOPMENT IN A CONTEXT OF CLIMATE CHANGE AND ECONOMIC CONSTRAINTS

Winter maintenance encompasses an entire series of activities, measures, and procedures in the winter period, which have the task of ensuring the possibility of road traffic flows with highest possible safety of the traffic participants and affordable costs. Contemporary approach to winter maintenance imposes the need of constant control of road maintenance costs in winter conditions, with the purpose of reducing them and at the same time retaining the required quality of service. This approach, known as the procedure of managing the use of resources JiT/JiQ (Just in time/ Just in quantity) in the conditions of crises is becoming more and more significant. This was also the main focus of the XIVth Winter Road Congress, held from 4 to 7 February in Andorra. The slogan was *Reconciling road safety and sustainable development in a context of climate change and economic constraints*.

The Congress gathered experts from the whole world in order to exchange experiences about the technical, social and economic challenges in the area of winter maintenance of roads, in the context of extreme weather conditions. The Congress was designed as a wide forum which considered the current state of research in this area, advances in various technologies, as well as overviews of the best practices regarding the sustainability of the winter road maintenance system in general. It was pointed out that ensuring on-

going winter maintenance sustainability, focused primarily on traffic safety in winter conditions represents today a challenge to many countries and governments.

The entire Congress programme was divided into eight areas:

- Winter viability and climate change;
- Winter viability in a context of budgetary restraint;
- Extreme winter events;
- Winter viability management;
- Operational approaches, equipment and material for winter viability;
- Users in winter conditions;
- Road tunnels in winter conditions;
- Road bridges in winter conditions.

There were two papers from Croatia presented at the Congress. Mr. Zrinko Hrčić (Egis Road Operation Croatia Ltd.) in his work "*Winter Service on the Bridges on A2 Motorway in Croatia as a Part of Sustainable Development*" analysed the measured temperatures in the period of four years on five bridges of the Zagreb-Macelj motorway. Based on this analysis special maintenance strategies of single bridges have been designed and they plan a saving in the icing material of up to 12.3%.

Mr. Sadko Mandžuka (Faculty of Traffic and Transport Sciences), Mr. Vladimir Golenić and Mr. Marko Gojić (LED Elektronika Ltd.) presented in their paper "*Low-cost Cooperative Road Weather Monitoring Station*" a new solution of a road weather monitoring station based on a co-operative principle. The paper presented a proposal of its system architecture, as well as some solutions in the proposed short-range communication and interface towards the drivers.

During the XIVth International Winter Road Congress a relevant exhibition was organised with over



The Congress Opening Ceremony

seventy exhibitors taking part. Apart from the exhibition of vehicles and equipment for winter maintenance services, the participation of small and mid-size R&D companies from the whole world was of special significance. They have shown an entire series of contemporary technical and technological solutions for this

field of activities. The exhibition also included various stakeholders and professional associations as well as government agencies.

Prof. Sadko Mandžuka, Ph.D.
Faculty of Transport and Traffic Sciences
University of Zagreb