

RIMAROCC: Risk Management for Roads in a Changing Climate

a research project of the
cross-border funded joint research programme
“ENR SRO3 - Road Owners Getting to Grips with Climate Change”

1) Introduction

“Road Owners Getting to Grips with Climate Change” is a trans-national joint research programme that was initiated by “ERA-NET ROAD – Coordination and Implementation of Road Research in Europe” (ENR), a Coordination Action in the 6th Framework Programme of the EC. The funding partners of this cross-border funded Joint Research Programme are the National Road Administrations (NRA) of Austria, Denmark, Finland, Germany, Ireland, Netherlands, Norway, Poland, Sweden and United Kingdom.

2) Project Description

The objective of the Rimarocc project is to develop a common ERA-NET ROAD method for risk analysis and risk management with regard to climate change. The purpose is to support decision making concerning adaptation measures in the road sector. To facilitate the work of end users the method will be based upon, or at least be compatible with, general existing methods for risk analysis (and management) within the ERA-NET ROAD funders and other relevant methods. The project is focusing on Risk Analysis – with risk assessment, risk management in cost-benefit analysis and level of acceptable risk, and on Risk management Options. This integrated approach will greatly facilitate the consistency of methodological deliverables and the work of end users among road authorities. Specific attention will be given to both **new** road design and improvement/maintenance/operation of **existing** roads.

The first step of the project is a listening process to identify priority needs of the users, based on a simplified version of Value Engineering. This is done through a dialogue where the functions and specific objectives of a risk management method are listed and weighted. These demands are the basis for the development of the Rimarocc method.

The results from the project will be presented as reports (e.g. state of the art on existing methods for risk analysis and risk management within Road Administrations) and as a proposed method with examples where the method has been adopted to structural -, section -, network - and area level.

The results will be presented at conferences in Europe e.g. the TRA 2010 in Brussels and Transportforum 2011 in Linköping.

3) Expected Results

State of the art: A state-of the-art review of used methods for risk analysis and risk management within ERA-NET Road members and other relevant methods.

Text Expected Results, added value, dissemination (1/2 - 2/3 page)

Critical climate factors: A review of climate factors critical to the road network that has been identified within Europe and elsewhere.

A common method: A systematic way of structuring and calculating for risk analysis and risk management with regard to climate change, based upon the specific demands and weighted needs identified among the ERA NET ROAD members.

Example studies, where the method is used on the structural (e.g. a bridge) -, section (e.g. a 20-50 km long motorway section) -, network (e.g. 100-100 km network of primary roads) - and area (e.g. a regional territory) level.

4) Project Facts

Duration: 01/10/2008 – 31/07/2010

Budget: EUR; 300.000

Coordinator: Bo Lind, Swedish Geotechnical Institute

Chalmers Vasa, Hugo grauers gata 5 B

S-412 96 Göteborg, Sweden

Tel., +46 31 778 65 66

email bo.lind@swedgeo.se

Fax.,+46 31 7785940

Partners: Michel Ray, EGIS, France

Thomas Bles, Deltares, The Netherlands

Frode Sandersen, NGI, Norway