

PROJECT PROFILE

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| Title | Road owners getting to grips with Climate Change |  |
| Contractor | Vagverket (Swedish Road Administration) | |
| Contact details | Christopher Patten Swedish Road Administration SE-781 87 Borlange Sweden Christopher.Patten@vv.se | |
| NRA Mentor | Vincent O'Malley, Albert Daly | |
| Start date | Oct-08 | |
| End date | Sep-11 | |
| Status | On-going | |
| Type of project | ERA-NET ROAD Joint Research Programme SRO3 | |
| Cost | €150.0k : Total budget: €1,650.0k | |
| Project reference | NRA PO 6901 | |

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| Description | <p>The road network is influenced by climate conditions. Climate change may result in more frequent and more intense rainfall, milder winters, warmer summers, and increases in wind speed and storm frequency. This will affect the road network in several ways. The adaptation of road networks to these changes is one of the important issues that road authorities need to address in the near future. This research programme aims to provide road authorities with the knowledge and tools necessary to "get to grips" with climate change and its effects on all elements of road management.</p> <p>This initiative is a trans-national joint research programme initiated by ERA-NET ROAD. Funding for the programme is being provided by 11 national road administrations in Europe including the NRA. The programme is being managed by the Swedish Road Administration under Swedish law and regulations. The projects commissioned were devised by consortia from various EU countries.</p> |
| Objectives | <p>Road authorities need to evaluate the effect of climate change on the road network and take remedial action through all components of road management including design, construction and maintenance. At the same time, consideration must be given to safety and accessibility to ensure that users expectations are not compromised. This research programme aims to provide the knowledge and tools necessary mitigate against climate change by:</p> <ul style="list-style-type: none"> a) Adapting design rules b) Updating and improving data collection c) Developing risk management methods |
| Benefits | <p>The results of this research will enable road administrations to identify and prevent problems with the road infrastructure due to climate change. This includes evaluating the impact of climate on road infrastructure, methods for calculating costs and benefits of adaptation measures and risk management. Participation in the joint reasearch programme will enable the NRA prioritise mitigation measures in ways that are consistent with other European countries.</p> |
| Outputs | <p>The outputs of this research programme will be a series of reports focusing on different aspects of climate change and its effects on the management of national road networks. The four projects commissioned in the programme are:</p> <ul style="list-style-type: none"> SWAMP: Storm water prevention - Methods to predict damage from the water stream in and near road pavements in lowland areas RIMAROCC: Risk management for roads in a changing climate P2R2C2: Pavement performance and remediation requirements following climate change IRWIN: Improved local road winter index to assess maintenance needs and adaptation costs in climate change scenarios |