

DETECTOR

Decision-support Tools for Embedding

Research project funded under the CEDR Transnational Road Research Programme

CEDR Call 2015: Climate Change from Desk to Road

CEDR Call 2015: Climate Change from Desk to Road is a Transnational Research Programme organised by CEDR. The funding partners for this programme are Germany, Ireland, Netherlands, Norway, Sweden and Austria.

Details

Acronym: DeTECToR
Start: September 2016
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**Conférence Européenne
des Directeurs des Routes**
**Conference of European
Directors of Roads**

Project Summary:

DeTECToR addresses the economic costs associated with integrating Climate Change into decision-making and the issues surrounding the embedding Climate Change into practice and procurement of National road Administrations (NRAs). The project recognises that there are clear synergies between these two topics they will be investigated simultaneously to enable a holistic approach to integrating Climate Change into NRA decision-making. The project will build on previous work by CEDR and others: the consortium partners have been involved in a number of these research projects and this experience will be combined with literature review and interviews with experts to produce a comprehensive view of the latest information and guidance on Climate Change adaptation and mitigation. DeTECToR will identify how the latest thinking on Climate Change can be used to determine the most cost-effective climate adaptation strategies, and how to embed Climate Change mitigation and adaptation into operations and procurement processes.

Summary sheets of the most relevant research projects and guidance will be produced, which will include case studies illustrating real-world implementation. These summaries will act both as a useful resource for NRAs and will also be used in the development of the DeTECToR decision-support tools and guidance, to help NRAs put this research into practice. DeTECToR will develop two new sets of tools and guidance, the first to help NRAs integrate Climate Change adaptation into economic decision-making, and the second to help them to implement these decisions by embedding Climate Change mitigation and adaptation into their operations and procurement processes. The tools and guidance will be produced in parallel with each other, so that interdependencies can be exploited and the resulting products align. NRAs will be engaged throughout the development process to ensure that the tools and guidance are tailored to their needs and can be integrated into their existing processes.

There will be pilot studies to trial the products and capture feedback on their usability. The economic tool will incorporate previous work by the consortium and others on methodologies for assessing the change in risk to road networks from different climate hazards, such flooding, drought or sea level rise due to Climate Change. The tool and accompanying guidance document will support the NRAs at the early stages of infrastructure projects such as determining the route of new roads and at later lifecycle phases to determine the most appropriate measures for maintenance work and operation of the network. It will facilitate cost-benefit analysis relating to different adaptation measures, and include both direct costs as well as indirect costs due to delays, accidents etc.

A self-assessment tool will be produced to enable NRAs to review their operations and procurement procedures and identify opportunities to better embed Climate Change mitigation and adaptation measures within these. This self-assessment will take the form of a series of questions relating to project specification, tender evaluation, contractor performance indicators etc. The answers given will be used to generate recommendations and good practice examples targeted at the areas where gaps have been identified. DeTECToR will therefore produce harmonized decision support tools and guidance that will enable NRAs to implement the latest Climate Change research and thinking. By applying a robust methodology for determining the most cost-effective adaptation measures they will be able to develop the business case for adaptation action, and by reviewing their operations and procurement processes, they will be able to