



Climate Projection Data base for Roads – CliPDaR: Design a guideline for a transnational database of downscaled climate projection data for road impact models – within the Conference’s of European Directors of Roads (CEDR) TRANSNATIONAL ROAD RESEARCH PROGRAMME

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The European road sector is vulnerable to extreme weather phenomena, which can cause large socio-economic losses. Almost every year there occur several weather triggered events (like heavy precipitation, floods, landslides, high winds, snow and ice, heat or cold waves, etc.), that disrupt transportation, knock out power lines, cut off populated regions from the outside and so on.

So, in order to avoid imbalances in the supply of vital goods to people as well as to prevent negative impacts on health and life of people travelling by car it is essential to know present and future threats to roads. Climate change might increase future threats to roads. CliPDaR focuses on parts of the European road network and contributes, based on the current body of knowledge, to the establishment of guidelines helping to decide which methods and scenarios to apply for the estimation of future climate change based challenges in the field of road maintenance. Based on regional scale climate change projections specific road-impact models are applied in order to support protection measures.

In recent years, it has been recognised that it is essential to assess the uncertainty and reliability of given climate projections by using ensemble approaches and downscaling methods. A huge amount of scientific work has been done to evaluate these approaches with regard to reliability and usefulness for investigations on possible impacts of climate changes.

CliPDaR is going to collect the existing approaches and methodologies in European countries, discuss their differences and – in close cooperation with the road owners - develops a common line on future applications of climate projection data to road impact models. As such, the project will focus on reviewing and assessing existing regional climate change projections regarding transnational highway transport needs. The final project report will include recommendations how the findings of CliPDaR may support the decision processes of European national road administrations regarding possible future climate change impacts.

First project results are presented at the conference.