

## **“Road Owners Getting to Grips with Climate Change” Joint Research Programme - Call for proposals**

### **1) Introduction**

“Road Owners Getting to Grips with Climate Change” is a trans-national joint research programme that was initiated by ERA-NET ROAD (ENR). “ERA-NET ROAD – Coordination and Implementation of Road Research in Europe” is a Coordination Action funded by the 6th Framework Programme of the EC.

The participating National Road Administrations (NRA) in this cross-border funded Joint Research Programme are Austria, Denmark, Finland, Germany, Ireland, Netherlands, Norway, Poland, Sweden and United Kingdom. They established the Programme Executive Board (PEB) with Sweden as the Programme Leader (PL) and Austria as the Programme Executive Chair (PEC).

The PEB uses the “Common Obligation Programme Model” from the ‘ENR toolkit’ to perform this cross-border funded joint call for proposals. The call for proposals is conducted by the Swedish Road Administration under Swedish law and regulations and the budget for this Joint Research Programme is jointly funded by all participants of the PEB.

### **2) Objectives**

Road authorities are looking for project proposals that can provide them with tools to identify and prevent problems with the road infrastructure due to climate changes. This includes evaluating the impact of climate on road infrastructure, methods for calculating costs and benefits of adaptation measures and risk management.

The specific parameters of the European countries, for instance risk of flooding, snow and winds should be taken into consideration. However, road authorities are interested in a common way of estimating and prioritizing mitigation efforts/measures.

The **topics of interest** are stated below.

#### Survey of the State-of-the-Art

- Climate change scenarios (downscaling and specification for roads);
- Inventory of data collections (condition of roads & climate events, meteorological data);
- Inventory of adaptation work on standards and specifications;
- Inventory of current work outside ERA-NET ROAD;
- Development of a suitable database for the recording of experiences and solutions

#### Risk Analysis

- Risk assessment
- Risk Management in cost-benefit analysis
- Defining the level of acceptable risk

#### Climate Impact on Road Infrastructure

- Direct and indirect effects of climate parameters on roads and surrounding areas (heavy rain fall, soft underground, flooding, erosion protection etc).
- Robustness of infrastructure – structural parameters affected by climate change
- Typology of unwanted events i.e.
- The need for upgrading of design loads (snow, rain, wind and waves) for various climate scenarios

### Road Infrastructure Capacity for Climate Change

- Establishing a method for mapping and classifying important/vulnerable structures in a road network (for instance bridges crossing rivers or seas);
- Establishing and classifying vulnerability parameters (e.g. strength, drainage capacity, traffic capacity);
- Link to climate/weather/geological events; defining climate-related parameters (e.g. temperature, rain intensity).

### Risk Management Options

- Identifying the risk that can be managed by improvement and/or maintenance of present infrastructure.
- Identifying the risk which must be managed by emergency actions.

### Conclusions

- Adapting design rules and specifications;
- Updating Data collection, improving data quality;
- Developing risk management methods.
- Formulating quick win measures

### **3) Eligible applicants**

Only applicants from legal entities established in Europe are eligible.

Applications must be submitted by a coordinator of a consortium of at least two independent legal entities (including the coordinator) from different countries.

### **4) Budget and timetable**

The total budget earmarked for the cofinancing of projects amounts to EUR 1,35 million. Financial assistance will exceed to 100 % of the total eligible costs for basic and applied research projects. The costs are inclusive VAT.

The duration of this programme is three years.

The call **opens on 31<sup>st</sup> of March 2008**.

The call **closes on 12<sup>th</sup> May 2008**.

The duration for individual projects can be up to 30 months. Projects aiming at exchange of information, developing common web sites etc. can be of shorter duration.

Given the budget of **EUR 1,35 million**, it is estimated that **five to fifteen projects** could be financed.

### **5) Further information**

The programme language is English. The programme currency is Euro.

The full text of this call for proposals (*Description of Research Needs*), together with the *Application Form* and the *Guide for Applicants*, can be found at the following internet address:

**<http://www.road-era.net/>**

Applicants must comply with all terms of the full text and be submitted on the forms provided.