PROJECT

RISER

Roadside Infrastructure for Safer European Roads

**Funding:** European (5th RTD Framework Programme)
**Duration:** Jan 2003 - Jul 2006
**Status:** Complete with results

**Background & policy context:**

The number of fatal and serious injuries related to the occurrence of a single vehicle leaving the road is a significant portion of European road casualties. The range of casualty statistics varies from country to country, but the European average of single vehicle collision fatalities is one third of annual road fatalities. The outcome of these accidents was highly dependent on the interactions between the vehicle and the roadside environment. The vision of the RISER project was to develop a knowledge base that can provide better roadside design tools and strategies as available resources were conspicuously incomplete. The objectives of the project were to provide a technical foundation upon which the implementation and operation requirements for European roadside areas and infrastructure could be based.

**Objectives:**

The main objectives of RISER were to:

1. Develop a database(s) with information describing run-off-road crashes.
2. Analyse the collected data to provide engineering and human factors links between the roadside infrastructure and safety and operational issues.
3. Develop a set of best practice guidelines that will improve the state of roadside safety in Europe.

**Methodology:**

1. To identify all possible information sources that may be exploited to document run-of-road collisions. From this information databases for single vehicle collisions should be developed.
2. To develop a link between the standardisation activities and real world collision performance.
3. To develop analysis procedures that can be applied in the design and operation of the roadside.

**Parent Programmes:**

FP5-GROWTH KA2 - Sustainable Mobility and Intermodality

**Institute type:** Public institution
**Institute name:** European Commission, Directorate-General for Energy and Transport (DG TREN)
**Funding type:** Public (EU)

**Partners:**

Austria:
Technical University of Graz (TUG)

Belgium:
European Union Road Federation (ERF)

Finland:
Helsinki University of Technology (HUT)

France:
Key Results:

The RISER project has made a significant contribution to the understanding of single vehicle accidents in Europe. During the duration of the project, two important data sources were developed to identify the characteristics of SVAs in Europe. This data became a foundation upon which further studies on the human factors, crash performance, and maintenance of roadside infrastructure elements could be developed.

The RISER documents provide a European reference that can be used to improve road safety levels through the improvement of roadside infrastructure. It is important to recognise that road infrastructure improvements benefit all road users and have no particular vehicle or driver requirements to be effective. Road infrastructure should be a democratic component of the road network, serving all road users.

The RISER project produced eight specific (public) reports and one dissemination website. The relevant deliverables for public use have been distributed in a project CD available from the RISER consortium. The most important reports were:

- D06: European Best Practice for Roadside Design: Guidelines for Roadside Infrastructure on New and Existing Roads, and
- D08: European Best Practice for Roadside Design: Guidelines for Maintenance and Operations of Roadside Infrastructure.

These two documents summarise the findings into documents that are suitable for road administrations, road safety researchers, road operators, and manufacturers of road equipment.

Technical Implications

The current situation regarding accident data collection in European roads shows that, in order to find countermeasures to improve safety, more thorough information about the road infrastructure and the causation of the accident is required.

To reach a complete description of accident scenes and outcomes, it is important to not only have collection procedures covering a broad scope of information, but also a coordinated approach is desirable among the different collecting actors. Procedures were proposed to improve the type and
quality of data collected for roadside safety issues.

**STRIA Roadmaps:** Infrastructure  
**Transport mode:** Road transport  
**Transport sectors:** Passenger transport, Freight transport  
**Transport policies:** Safety/Security  
**Geo-spatial type:** Infrastructure Node