

OUTPUT 03

Review of tools and methods related to safety ranking and management of the road network in operation.

This task will be implemented as part of working package 1 (Directive 2019/1936/EC - The Road Infrastructure Safety Management - international perspective).

Safety management of the road network in operation (RSRM) - a tool, which is part of the road infrastructure safety management system (RISM), will be reviewed and evaluated within the task.

Under previous Directive 2008/96/EC, the member states were required to prepare an assessment of the existing Trans-European Road Network (TEN-T). The member states could extend the scope of this method to other roads.

RSRM is a systematic and recurrent procedure aimed at identifying the most dangerous sections of the road network in operation, assessing the hazards on these sections and preparing and providing information to road users on the occurring hazards. This tool defines the requirements for the classification of sections with a high concentration of accidents and the network safety ranking.

In Poland, the regulation of 10 November 2015, item 1845 introduced the requirement to prepare road safety analyses indicated above for all national roads as part of the classification of the level of risk related to the accident rate. Unfortunately, only sections with high fatality rates were taken into account, not including serious injuries. The accident cost estimation used in the network safety ranking comes from 2013, which must be updated due to economic changes. These two aspects require a change in the adopted limits of road safety level in individual risk classes and an update of the previously adopted methodology and regulation on road safety analysis.

In accordance with the assumptions made in the new Directive 2019/1936/EC, the assessment should cover the entire road network. The necessity of these changes is presented in points 12 and 13 of the directive.

12) Risk-based network-wide road safety assessment has emerged as an efficient and effective tool to identify sections of the network that should be targeted by more detailed road safety inspections and to prioritise investment according to its potential to deliver network-wide safety improvements. The entire road network covered by this Directive should therefore be systematically assessed, including by means of data gathered by electronic and digital means, to increase road safety across the Union.

13) Integrating the best performing elements from the previous 'safety ranking and

management of the road network in operation procedure' into the new network-wide road safety assessment procedure should allow better identification of road sections where the opportunities to improve safety are the greatest and where targeted interventions should deliver the biggest improvements.

Target groups:

1. Research and teaching staff from institutions involved in the project.
2. Specialists dealing with road safety issues at the regional, national and international level.

Elements of innovation:

1. Data gathering and comparison of the methodology applied in the tools used in the RSRM in Poland, Croatia, Italy and Germany.
2. Developing a set of best practices, verification of previous assumptions and scope of areas covered by the RSRM in the countries of consortium participants.
3. Constructing a database with information on implemented tools and methodology of conducted analyses.

Expected impact:

Acquisition of knowledge by research and teaching staff from institutions involved in the project. Publication of joint articles and conference presentations related to the comparison of the methodology, scope and issues related to the RSRM in selected EU countries.

Transferability potential:

Comparison of individual RSRM methods in the countries of the partners participating in this project will allow the transfer of acquired knowledge to other EU member states and EU associated countries.

The division of work:

The work will be divided among all consortium participants and will include:

- Review of the RSRM methodology and tools.
- Comparison of methods and areas of application.
- Preparation of recommendations for the RSRM for regional and urban roads
- Development of maps containing a ranking of sections with a report.
- Preparation of a publication summarising the analysed issue.

The tasks leading to the production of the intellectual output:

Each of the participants of the consortium involved in this task will be responsible for collecting necessary information about the methodology of conducting the RSRM in a given country. The leading institution (UZ) will be responsible for gathering all materials, organising them, preparing a report and supervising the joint publication.

Applied methodology:

In the task, a case-based methodology will be applied that allows for focus on selected issues within the RSRM in individual countries. This, in turn, allows for the assessment of the value of key elements used in this procedure and their comparison.