

WP4 – Development of teaching and training resources with the use of remote teaching methodology

IO.10 - Development of road safety audit resources

The task will be carried out under Work Package 4 (WP4. Development of teaching and training resources with the use of online teaching methodology). In this task, based on IO.4 – 9, the methods of remote education will be applied in the following:

- lectures (aims and objectives of the EU RISM directive, audit procedures and techniques, checklist),
- fieldwork (collecting film and photographic documentation in specific locations, identification and assessment of hazards and their source, which applies to road sections under construction, before commissioning and random inspections of those already operating),
- practical classes (carrying out audits of selected design documentation at various stages of the investment process (from planning to the construction project and for different technical classes – from motorways to local roads),

RISM is based i.a. on inspection activities, which include road safety audits. It is necessary to identify and rectify deficiencies at the planning, design and construction stages in order to avoid erroneous solutions for road infrastructure that pose risks to the life and health of road users. Road safety auditing is a team effort, so therefore, as part of the task, additional techniques will be prepared to enable remote work in a group under the supervision of the teacher or trainer.

The planned output of the task will be the development of modern and innovative digital teaching and training content, intended for remote education in the field of the road safety audit, with the support of road infrastructure safety management tools. As part of the syllabus of the civil and transportation engineering courses in partner universities, there will be the provision for 30 hours of lectures, 15 hours of fieldwork and 15 hours of practicals. The potential extension of the programme will be possible when universities adapt their syllabuses.

Target groups:

1. Research and teaching staff from institutions involved in the project and ultimately other European institutions.
2. Students of civil and transportation engineering.
3. Road authority staff at a national, local and regional level.

Innovative elements:

1. Building a database with classified errors in the investment life cycle (planning, concept, design, construction and maintenance).
2. The application of RISM tools in the training and teaching processes with the use of remote education methods.

Expected impact:

The developed resources can be applied in the teaching (for students) and training (for road infrastructure management) throughout Europe. An innovative approach to distance learning in the field of road safety auditing, using support methods and tools, which will significantly increase the quality of teaching and training when it is necessary to employ remote education.

Transferability potential:

Tools to support the road safety audit training process, such as error databases and recommendations and applications, will be made available on an online platform for the use of research centres and road authorities across Europe.

The division of work:

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

- Adaptation of educational resources to the needs of the updated methodology of remote education (within the framework of IO.4 – IO.9) for lectures, fieldwork and practicals.
- Building databases containing identified and classified design errors in the documentation of road investments.
- Development of recommendations for actions to improve safety, which will increase the quality and effectiveness of the training process in this subject.
- Preparing publications summarising the completed works.

The tasks leading to the production of the intellectual output:

The leading institution (GUT) will be responsible for supervising the development of teaching and training resources. Participants from CUT, UZ, GUT will work together to develop the resources, exchanging their knowledge and experience. Under the IO.10 the necessary scope and detailed division of work will be defined.

Applied methodology:

Within the framework of this task, databases will be built, with the possibility of their expansion and adaption to the needs of individual users. To support distance learning in audit training, methods dedicated to academic staff, students and road infrastructure management will be used (with the capacity for continuing development and increase of effectiveness).