

# OUTPUT 08

## **Practical implementation of RSI methodology on the selected road sections in Italy**

The task will be implemented under working package 3 (WP3. Teaching materials development related to the road infrastructure safety inspection). Practical implementation of RSI will be implemented based on the methodology developed in Intellectual Output 5. As part of the task, the following elements will be included:

- Preparatory work related to the selection of research sections (selected sections of regional, local and national roads, including urban areas), collecting data on these sections (including traffic data, data on road events) and organisation of field tests.
- Field work involving the inspection of the national road network, so far assessed according to the methodology in force and other road sections that have not yet been assessed. As part of the inspection, attention will be paid primarily to the distinctive problems of road safety in Italy (pedestrian safety, accidents related to road surroundings, night-time or excessive speed).
- Preparation of the inspection report.
- The necessary scope of remedial actions necessary to improve road safety on selected road sections.

As part of the task, three types of inspection will be carried out (on national, regional and local rural and urban roads):

- General – performed during daytime, with the use of a research vehicle, aiming to identify hazards and their sources on the road and in its surroundings.
- Detailed – performed during daytime on selected sections or point locations (intersections, junctions) by the research team, without vehicle, in the form of a field visit, where, in addition to identifying hazards and their sources, the behaviour of road users will be assessed.
- Special inspection at night, with the use of a research vehicle, aiming to identify the source of hazards associated with limited visibility of infrastructure elements, traffic organisation, other users and vehicles, due to specific conditions of the assessed situation on the road. The planned results of the task are:
  - Identification and classification of hazards and their sources on sections and in locations covered by practical classes in Italy.
  - Data collection for the database built as part of teaching materials (Intellectual Output 9).
  - Outlining recommendations regarding verification of the RSI methodology developed as part

of Intellectual Output 5. • Preparation of content-related input for use in the developed teaching materials, as part of Intellectual Output 9.

**Target groups:**

1. Research and teaching staff from institutions involved in the project. 2. Students of civil engineering and transportation engineering taking part in pilot research in Italy.

**Elements of innovation:**

1. Implementing the updated methodology, dedicated to the countries of the project participants.
2. Conducting RSI on regional and local roads which have not been covered by RSI procedures.

**Expected impact:**

The results of the practical implementation of RSI procedures in Italy, together with the reports, can be used in future teaching (for students) and training (for staff performing RSI) processes throughout Europe. Materials developed as part of the task will be used in training and course programmes.

**Transferability potential:**

The results of the practical implementation of RSI procedures in Italy, together with recommendations for updating the developed methodology, will be available on the Internet platform, which will give access to universities, research centres and road authorities dealing with this issue throughout Europe.

**The division of work:**

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

- Establishing a research schedule.
- Conducting field tests on selected road sections.
- Preparing reports on the implemented RSI.
- Outlining recommendations for verification of Intellectual Output 5.
- Developing assumptions for the implementation of Intellectual Output 9.
- Preparing publications summarising completed work.

### **The tasks leading to the production of the intellectual output:**

The leading institution (UC) will be responsible for supervising the development and implementation of the field tests schedule in Italy including preparatory works, research, development of reports and recommendations for updating the RSI methodology. Consortium participants will cooperate during the implementation of pilot research and in the development of materials and recommendations, exchanging knowledge and experience. Under Intellectual Output 6 the necessary scope and detailed division of work will be determined.

### **Applied methodology:**

As part of this task, exploration of available databases on road events and traffic parameters will be carried out. Field work will be carried out using GIS tools and image recording.