Work Package 2: Road Infrastructure Safety Management methodology – Network Wide Road Safety Assessment

Work Package No. 2 (WP2) is the first element in the implementation of the planned project. It will be the basis for the implementation of works under the following packages: WP3, in which the didactic-training materials will be created, which will then be subject to verification and evaluation as part of WP4 (pilot training).

Two main goals of WP2 are:

- preparation of the methodological basis for the development of the didactic-training materials for six courses under WP3, along with the development of competency certification
- building two knowledge databases on stakeholders and specialists in the RSIM for the EU countries

The main goal will be achieved through the implementation of specific objectives:

- development of techniques for the implementation of the training and teaching process with the use of supporting tools,
- development of recommendations for/to the necessary NRWSA supporting tools,
- development of a methodology for assessing the level of knowledge along with their verification for NRWSA specialists necessary to obtain a certificate of competence,
- preparation of a survey collecting detailed information about specialists and stakeholders in the field of the RSIM, along with conducting research,
- elaboration of the survey results on specialists and stakeholders, preparation of input data for knowledge bases

WP2 is divided into six tasks:

- T2.1 Development of the cooperation strategy between the Partners and Associate Partners.
- T2.2 Development of methodology for innovative training and teaching materials.
- T2.3 Develop a methodology for implementing a systems approach to RSIM at strategic, regional, and local levels.
- T2.4 Development of an expert certification programme.
- T2.5 Building a knowledge base on stakeholders in the RSIM.
- T2.6 Building a knowledge base on road safety specialists in the RSIM.

A workshop in Poland has been planned as part of the work, where project partners will work on the developed methodologies. Cyclical online meetings will complement the workshops. The main target group will be employees of universities and institutions dealing with education in the field of the RSIM.

Improving competencies and acquiring new knowledge will not be possible without the implementation of modern and innovative didactic-training materials. To develop them, a methodology is necessary in which the main assumptions will be defined (total number of hours divided into lectures, practical classes, workshops, and fieldwork).

WP2's main result will be the development of methodologies for creating didactic-training materials in the RSIM—Network Wide Road Safety Assessment field. The second result will be building a knowledge base of stakeholders and specialists in the RSIM field for EU countries.

To assess the qualitative and quantitative achieved goals of the package, the following measures will be used to check the values with those assumed in the project:

- the number of prepared agreements with Associate Partners: the final number at the stage of the application preparation is difficult to estimate,
- preparation of syllabuses for methodologies: estimated number 2,
- development of methodologies for two tasks (T2.2 - T2.3): estimated number 2,
- implementation of recommendations obtained during pilot training of methodologies: estimated number 2,
- workshop participants: the estimated number 12,
- built knowledge bases: the estimated number 2,
- workshop budget: the estimated amount €1000,
- travels of workshop participants from the project partners' countries: the estimated amount €11 600.

Verification method of assumed indicators:

- the number of agreements between project partners and Associate Partners,
- the number of prepared methodologies for the didactic-training materials and a systemic approach to the RSIM,
- the number of verified methodologies in accordance with course recommendations,
- the number of the built knowledge bases,
- invoices for the organisation of workshops,
- documents confirming the travel of project participants: flight tickets, hotel invoices, and other documents confirming the use of funds,
- the number of workshop participants.

The lead institution for the entire work package (CA) will be responsible for overseeing the coordination of work within all tasks and ensuring that the methodologies are developed as intended. The Task Leaders will be T2.1 GUT, T2.2 GUT, T2.3 LU, T2.4 UC, T2.5 UZ, and T2.6 BUW. All partners will actively participate in the tasks. The detailed division of work packages will be defined during the first project meeting.

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

1. Invite the project partners who will act as Associate Partners (participate in training, give opinions on prepared materials, etc.). Developing a common understanding between them and the project partners,
2. development of the methodological foundations along with specifying the detailed scope of the NRWSA didactic-training materials,
3. determination of the detailed rules for conducting the certification process of competencies in the NRWSA,
4. Provide data to the knowledge bases about stakeholders and specialists in the field of the RSIM from their own country and from countries with which a given Partner cooperates as part of other projects.

Scheduled online project meetings will allow all partners to cooperate. Work on implementing individual tasks will be assigned to particular project participants. Task Leaders and Work Package Leaders will keep track of progress. A detailed schedule of tasks will be defined as part of the preliminary work.

As part of WP2, one workshop in Poland is planned. The host institution (GUT) will prepare the meeting and provide the necessary materials, rooms, and other elements. During the workshop, each of the Task Leaders will present the assumptions for the developed tasks. Joint decisions will be made regarding the final shape of the prepared methodologies, knowledge bases, and the NRWSA expert certificate.

Tasks description

T2.1 Development of the cooperation strategy between the Partners and Associate Partners. In order to effectively implement the tasks in WP2-4, it will be necessary to create a framework for cooperation between Partners and Associate Partners (AP) with whom cooperation will be established under the project. AP will be road managers, associations of auditors, road safety inspectors, and other institutions implementing Directive 2019/1936 in the NRWSA.

T2.2 Development of methodology for innovative didactic-training materials and D2.3 Development of methodology for implementing a systems approach to the RSIM at strategic, regional, and local levels. As part of these two work packages, methodologies for conducting classes and developing educational materials for various modes of learning, remote, stationary, and hybrid, will be developed. Its main goal will be to develop rules for the selection of appropriate forms of communication and supporting tools in such a way that they best serve the presentation of substantive aspects and best support the attention and involvement of learners.

An important element will be the preparation of supporting tools (hardware, software, available data sources on the road, traffic and surroundings, data on traffic incidents and victims), which will allow for a better understanding of the topic, using educational materials prepared as part of WP3 and using them in future work.

T2.4 Development of an expert certification programme. As part of this work package, guidelines will be developed specifying the minimum level of knowledge in the field of the RSIM, the necessary number of training hours, and the method of verifying the acquired knowledge. This will allow us to define the minimum requirements for prepared knowledge-level certificates.

T2.5 Building a knowledge base on stakeholders in the field of the RSIM and T2.6 Building a knowledge base on road safety specialists in the field of the RSIM. As part of these work packages, detailed knowledge bases will be built on the two main groups implementing Directive 2019/1936 on the RSIM.

The criterion for assessing the progress and implementation of works in the project will be reaching the planned milestone as part of WP2: M1 Completion of the preparation of methodologies in the RSIM - Network Wide Road Safety Assessment field.

Two results, R2.2 and R2.3, will enable the preparation of 6 packages of the didactic-training materials under WP3, which will then be assessed and verified as part of WP4. Their evaluation will allow them to receive feedback from people participating in the training about the necessary changes in the developed methodologies.

Annexes 3 - Visual presentation of work packages and tasks - and Annex 4 - Logical work matrix present detailed correlations between tasks and work packages.

Tasks T2.1 to T2.6 will bring the following results:
R2.1 A document containing the strategy of cooperation with Partners and Associate Partners. A document defining the rules of cooperation between Project Partners and Associate Partners.

R2.2 A script containing a methodology for the didactic-training materials in the Network Wide Road Safety Assessment area. A book with a description of the program methodology necessary to achieve the project's goals (main and specific goals) in the RSIM - Network Wide Road Safety Assessment field.

R2.3 A script containing a methodology for implementing a systemic approach to the RSIM at the strategic, regional and local levels. A book with a description of the program methodology necessary to achieve the project's goals (main and specific goals) in the RSIM - Network Wide Road Safety Assessment.

R2.4 Rules for certification of competencies in the NRWSA. The planned result of the task will be the development of a universal methodology for the certification of competencies for specialists in the NRWSA as part of the application of Directive 2019/1936 on the RSIM (defining the minimum level of knowledge, the necessary number of training hours and the method of verifying the acquired knowledge).

R2.5 Built knowledge base on stakeholders in the RSIM. Building a database with detailed information on stakeholders (institution, people, scope of work, area of activity, etc.) in the field of the RSIM for selected European countries.

R2.6 Built a knowledge database about specialists in Europe in the field of the RSIM. Databases with detailed information on specialists (specialist profile, area of activity, research papers, authorship of documents implementing the Directive, contact details) in the field of the RSIM for selected European countries.

This work package provides 15 participants to carry out the work as part of implementing tasks. The target group will mainly consist of research and teaching staff from the centres involved in the project and, ultimately, from other centres in Europe who will be able to conduct training in this area in the future.

The second target group (indirectly through the implementation of tasks in WP5) will be people who can use the developed methodologies and databases.

- experts from organisations dealing with the RSIM at the national, European and global levels (np. PIARC, ERF, IRF).
- civil and transportation engineering students from all over Europe,
- employees of national, local government and regional road authorities and traffic engineers from all over Europe,
- auditors and road safety inspectors.