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Theoretical and practical teaching materials development related to: Road Infrastructure Safety Inspection, Pedestrian Crossing Safety Management and Road Safety Professional Certification Course

Prepared Resources

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EuroS@P

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1 ABOUT THE EUROS@P PROJECT

Road safety is a major challenge facing the modern world, with over a million road fatalities each year worldwide. This constitutes the leading cause of death among young people (up to 25 years of age) and an increasing proportion of elderly victims. The situation in Europe indicates that there has been no significant improvement in road safety in recent years.

The Road Infrastructure Safety Management System (RISM) has been developed to improve road safety. The first EU Directive 2008/96/EC stipulated mandatory coverage of only the TEN-T network. The new Directive 2019/1936/EC covers all national roads and all other roads that will be financed or co-financed by the EU. The effectiveness of implementing the Directive relies on preparing dedicated safety management staff. These specialists must be highly competent in both theoretical and practical aspects of road safety.

However, there are significant gaps in technical university curricula in the area of road safety. This suggests that future staff of road authorities will not be fully prepared for the challenges imposed by the Directive. Additionally, staff already engaged in RISM must constantly supplement their knowledge and gain new experience in this field. This will allow for a permanent increase in their competence, which will contribute to the increase of the level of RISM and consequently decrease the number of accidents and victims.

Road safety is an interdisciplinary area that requires adaptation of methods, tools, and actions to improve the safety of road users. Due to the wide variation in the level of road safety in European countries, international cooperation is needed to exchange experiences and standardise the implementation of high safety norms through appropriate methods and tools. The EuroS@P project will raise the level of teaching and training using innovative didactic materials that will be widely available.

The project was divided into six work packages, resulting in 13 Intellectual Outputs (IO). The new teaching and training materials were developed, including analytical and fieldwork methods and tools dedicated to RS inspections of existing roads and the assessment of the safety of pedestrian crossings. The development of an e-learning platform with prepared materials will increase the availability and promotion of the project results.

The main objective of the EuroS@P project was to promote the best educational solutions in the RISM area, with the increase of awareness and knowledge of RS. This includes building an e-learning platform with access to project products, developing teaching and training materials dedicated to conducting classes at universities and training courses for RISM staff, raising competences and skills in RISM by changing curricula at universities and equipping students and staff with didactic materials based on innovative RISM methods and tools, creating the foundations for Road Safety Professional Certification (RSP), and developing a lasting relationship and the continuation of active international cooperation between project partners with the possibility of its extension to other institutions.



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The EuroS@P project targets students, researchers, and academic teachers at universities, road authority staff at national, regional, and local levels, experts, specialists, and practitioners involved in RS activities, including staff who conduct training in various RS courses and all users of road infrastructure.

The project aimed to promote excellence in teaching and skills development in the field of road safety infrastructure management (RSIM). The project seeks to encourage innovative solutions and develop students and project participants who will become leaders in implementing such solutions in the future. Safety is currently the most important criterion in the design and maintenance of road infrastructure. The EuroS@P project has enabled the creation of innovative educational content through international cooperation, practical implementations, and research projects. The participation of reputable partners in the RS improvement field has allowed the promotion of best practices in RS management. This will prepare the next generation of road authority staff for the challenges imposed by the Directive.

The project's results will help students, RS specialists, and road authority staff improve their competence and knowledge in the area of RSIM. The project will also foster cooperation among various European scientific and research centres in the field of RSIM.

The project emphasises the importance of extending and developing the competencies of educators and other personnel who support adult learners. To achieve this, the competence of educational staff must be improved continuously, and road authority staff responsible for RISM must keep their knowledge updated and verified. As the field of RS is constantly evolving with new methods, techniques, and tools, it is crucial to raise the knowledge of educational staff.

The EuroS@P project has developed new curricula with innovative teaching methods based on scientific research. The project has prioritised the development of innovative training materials for RISM training. These materials are based on exchanging knowledge and experience from various scientific and research centres, and they are available on the elearning platform.







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2 STRUCTURED MODULES AND RESOURCES

2.1 General features

When creating a course, it is essential to organise the content into well-structured modules with clear headings, subtopics, and resource materials. This will help students or specialists to navigate the course easily. To achieve this, divide the course into manageable modules, each focusing on a specific aspect of roadside environment safety. Additionally, provide downloadable lecture notes, readings, and supplementary resources under each module.

Moodle is a comprehensive learning platform that offers educators, administrators, and learners an all-in-one solution for creating personalised learning environments. It is a free online Learning Management System (LMS) that enables educators to build their private websites and design dynamic courses to enhance the learning experience. With Moodle, educators have the tools they need to create customised online courses, track student progress, and facilitate communication between learners and teachers.

2.2 Gdansk University of Technology e-learning platform

GUT e-learning is a platform developed by the Gdansk University of Technology to provide remote education, conduct tests to verify knowledge, and access virtual laboratories. E-learning is integral to the university's education and virtualisation, utilising ICT (Information and Communication Technologies). The courses are available in electronic form via web browsers and mobile applications, created using Moodle - a popular software for eLearning.

At Gdansk University of Technology, it covers a fully remote form (e-learning) and a mixed form, in which traditional classes and distance learning complement each other (blended learning).

2.3 EuroS@P e-learning platform

The Moodle-based e-learning platform, developed under the EuroS@P-IO.15, is a comprehensive digital tool to enhance road safety education.

The e-learning platform is available on the Internet, which enables its use by research centres and road authorities throughout Europe. The e-learning platform contains road safety courses, all available to be applied to existing university course curricula. Through the e-learning platform, the project is committed to creating a one-stop solution for online learning on Road Safety by offering training on all aspects of the subject that cater to all levels.

The platform's content is a synthesis of extensive research on the impact of infrastructure on road safety, combined with established road safety methodologies.

The platform with EuroS@P courses is accessible at <u>https://enauczanie.pg.edu.pl/moodle/my/.</u> The didactic and training materials will be available after logging into the e-learning platform.





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Detailed information describing the process of registration is available at <u>https://support.pg.edu.pl/archive/display/HPPG/Access+to+eLearning+platform</u>.

Users of the platform can:

- Observe EuroS@P Pedestrian Crossing Safety Management courses for students and experts.
- Observe EuroS@P Road Safety Inspection courses for students.
- Observe EuroS@P Road Safety Inspection courses for specialists.
- <u>Observe the EuroS@P Road Safety Professional certification course</u>.

2.4 YouTube EuroS@P canal

A dedicated channel on the YouTube platform will complement the course on the platform. The platform with EuroS@P canal is accessible at <u>youtube.com/@eurosp4658</u>

The platform's content is video, which is used in didactic materials divided into playlists:

- EuroS@P Road Safety Inspection Motorway, expressway sections,
- EuroS@P Road Safety Inspection Rural Intersections
- EuroS@P Road Safety Inspection Urban Intersections
- EuroS@P Road Safety Inspection Rural interchanges
- EuroS@P Road Safety Inspection Urban interchanges
- EuroS@P Pedestrian Crossing Safety Management tutorials





