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EuroS@P

WP2. Road Infrastructure Safety Management methodology - Network Wide Road Safety Assessment

T2.4 Development of an expert certification programme

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1 ABOUT THE EUROSAP-NWRSA PROJECT

The main objectives of the **European Road Safety Partnership - Network Wide Road Safety Assessment** project are for students to gain knowledge and improve the competence and skills of road authorities, auditors, and road safety inspectors, as well as lecturers and experts (teaching staff) in the area of Network Wide Road Safety Assessment (NWRSA) as part of Road Infrastructure Safety Management (RISM).

To achieve this goal, international cooperation within the project will be necessary to increase education quality, allow for knowledge exchange between partners, and implement and disseminate innovative solutions.

Achieving the project's main objective will increase the possibilities of solving such a socially significant problem as road safety. The main aim will be achieved through the implementation of sub-objectives:

- Prepare the methodological basis and develop didactic and training materials for six courses, including competence certification.
- Building a knowledge base of stakeholders and professionals in RISM for European Union countries.
- The participants of the pilot training courses verified, evaluated and recommended the prepared didactic and training materials and methodologies.
- Disseminate information about the project and its results using digital tools.

Work packages 2

Two primary goals of WP2 are:

- Preparation of the methodological basis for developing the didactic training materials for six courses under WP3, along with developing 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 its 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,
- Elaborate on the survey results on specialists and stakeholders and prepare input data for knowledge bases.

2 PRELIMINARY PART

As part of the EuroS@P project, an RSP certification process was developed at two levels: Road Safety Professionals Level 1 and Road Safety Professionals Level 2. The prepared process is the basis for developing a certification programme at the Expert level.

2.1 Summary of the EuroS@P certification process

The EuroS@P project aims to enhance road safety through a comprehensive certification program for road safety professionals (RSP). This initiative focuses on developing competencies, creating an e-learning platform, and fostering international collaboration to reduce road accidents and fatalities.

1. Key Objectives:
   - **Educational Solutions**: Development of an e-learning platform and teaching materials for universities and training courses.
   - **Competency Enhancement**: Raising competencies and skills in Road Infrastructure Safety Management (RISM) by updating curricula and providing innovative didactic materials.
   - **Professional Certification**: Establishing a certification system for Road Safety Professionals (RSP) with two levels - RSP Level 1 and RSP Level 2.
2. Target Groups:
   - Students, researchers, and academic teachers.
   - Road authority staff at various levels.
   - Experts, specialists, and practitioners in road safety.
   - Indirectly, all road users can improve overall road safety.
3. Certification Levels:
   - **RSP Level 1**: For professionals with basic road safety knowledge and an understanding of EU road safety legislation, particularly the EU directive 1936/2019 (RISM). Candidates must have relevant experience or academic qualifications and complete coursework and a final examination.
   - **RSP Level 2**: This level is for those focusing on advanced road safety engineering principles and methodologies, particularly the EuroS@P Pedestrian Crossing Safety Inspection (PCSI) and Road Safety Inspection (RSI) procedures. Candidates must first complete RSP Level 1 and pass specific EuroS@P modules.
4. Implementation Methodology:
   - **Open source - E-learning Platform**: The certification process is facilitated through the e-learning platform, which hosts course materials, exams, and certification templates.
   - **Localisation**: While core content remains consistent, localised examples and case studies are encouraged.
   - **Assessment and Certification**: Assessors, who are well-qualified professionals, evaluate candidates' competencies through exams and practical applications. Successful candidates are awarded certificates and entered into a professional database.
5. Core Competencies:
   - **Legislation**: Understanding and interpreting road safety laws at the national and EU levels.

- **Data Analysis**: Analysing road safety data to identify patterns and make informed decisions.
- **Safe Infrastructure Design**: Knowledge of safe road design principles and conducting safety assessments.
- **Methodologies**: Applying targeted and network-wide safety assessment techniques.

6. Certification Administration:

- **Registration and Enrolment**: Candidates apply and are verified by administrative staff.
- **Learning Materials**: Candidates access and study the provided materials.
- **Assessment**: Candidates complete coursework and exams, which assessors review.
- **Certification Issuance**: Successful candidates receive their certificates and are entered into the RSP database.

Alignment with European Trends: The certification aligns with EU road safety legislation, particularly the RISM directive, ensuring professionals are equipped to address road safety challenges effectively.

Overall, the EuroS@P project aims to standardise and elevate road safety practices across Europe by equipping professionals with the necessary knowledge and skills through a structured certification program.

3 ENTRY REQUIREMENTS FOR CANDIDATES

3.1 Role of the road safety expert

The work of road safety experts has a significant impact on reducing road accidents, injuries, and fatalities. Their contributions lead to:

- Safer Roads: Improved road designs and infrastructure that minimise hazards.
- Informed Policies: Data-driven policies and regulations that enhance road user safety.
- Educated Public: Increased awareness and adoption of safe driving behaviours.
- Reduced Costs: Lower economic costs associated with traffic accidents, including healthcare and economic expenses.

Overall, road safety experts are essential in creating safer travel environments for all road users, thereby saving lives and reducing the burden of traffic-related injuries on society. A road safety expert is crucial in enhancing road safety through various responsibilities. Here is a more detailed description of their key tasks:

1. Road accident analyses. Experts carry out detailed analyses of road traffic crashes, which, among other things, include:
   - Data Collection: Gathering data from various sources, including police reports, hospital records, and traffic monitoring systems.
   - Accident data collection: Gathering information on the accident scene, road conditions, vehicle speed, vehicle condition and driver behaviour.
   - Accident reconstruction: Analysis of physical evidence from the accident scene to understand the course of events
   - Identification of causes: Identify the main and indirect causes of accidents, their circumstances, the number of victims, and their severity.
   - Risk analysis: calculation of the number of accidents, victims, accident costs per km of road, and number of vehicles.
   - Trend Analysis: Identifying patterns in traffic accidents, such as peak times, common locations, and frequent causes, as well as black spot analysis.
   - Risk Assessment: Evaluating which groups (e.g., pedestrians, cyclists, motorcyclists) are most at risk and why.

2. Road Infrastructure Assessment and Improvement Experts analyse and recommend changes to road infrastructure to improve safety. Examples of measures include
   - Road Safety Audit: Safety assessment of new road projects
   - Road Safety Inspection: targeted inspection of existing roads, intersections, or pedestrian crossings.
   - Road Safety Impact Assessment.
   - Network Wide Road Safety Assessment.

3. Policy Development:
   - Implementation of new law: support the implementation of new EU Directives and national and local law.
   - Legislation: Providing evidence-based recommendations for laws and regulations, such as speed limits, seatbelt use, and driving under the influence.

- Regulatory Compliance: Ensuring new road projects and vehicle designs meet safety standards and regulations.
- Funding and Resources: Advising on allocating resources for road safety initiatives and infrastructure improvements.

4. Education and Training
   - Public Awareness Campaigns: Designing campaigns to educate the public about safe driving practices, such as the dangers of texting while driving or the importance of helmet use.
   - Driver Training Programs: Developing and implementing training programs for new and experienced drivers, focusing on defensive driving techniques and hazard perception.
   - Community Outreach: Engaging with communities to address specific local road safety issues and promote safer behaviours.

5. Advocacy
   - Public Speaking: Representing road safety issues at conferences, workshops, and public forums to raise awareness and influence policy.
   - Media Relations: Engaging with the media to highlight key road safety messages and provide expert commentary on traffic safety issues.
   - Policy Advocacy: Lobbying for stronger road safety laws and increased funding for safety initiatives at local, national, and international levels.

6. Collaboration
   - Multidisciplinary Teams: Working with civil engineers, urban planners, law enforcement, public health officials, and policymakers to develop holistic road safety strategies.
   - Stakeholder Engagement: Involving a wide range of stakeholders, including local communities, advocacy groups, and private sector partners, in road safety planning and implementation.
   - International Cooperation: Sharing knowledge and best practices with road safety experts from other regions and countries to improve global road safety.
   - Local and state authorities: Advice on transport policy and road regulations.
   - Road services: Assist in the planning and implementation of road projects.
   - Police: Support prevention and education activities.

7. Research
   - -Safety Technologies: Investigating new technologies such as advanced driver-assistance systems (ADAS), autonomous vehicles, and smart infrastructure.
   - Behavioural Studies: Analysing driver behaviour and its impact on road safety, including the effects of distractions, fatigue, and impairment.
   - Environmental Impact: Studying how weather, road conditions, and urban design affect traffic safety etc.

3.2 Skills and Qualifications

Key Competencies of the Road Safety Expert:

1. Educational Background
   - Degree: Typically holds a degree in civil engineering, transportation engineering, or transport.
   - Advanced Studies: Often has advanced degrees or certifications in road safety, traffic engineering, or urban planning. Road safety auditor certificate.

2. Technical Skills
   - Data Analysis Tools: Proficient in using statistical software and geographic information systems (GIS) for analysing traffic data.
   - Research Methods: Skilled in both qualitative and quantitative research methodologies.
   - Technical Writing: Capable of writing detailed reports, policy briefs, and research papers.

3. Personal Attributes
   - Analytical Thinking: Strong ability to analyse complex data and identify trends and patterns.
   - Communication Skills: Excellent verbal and written communication skills for effectively conveying information to diverse audiences.
   - Problem-Solving: Creative and pragmatic in developing solutions to road safety challenges.

4 PROPOSED METHODOLOGY FOR THE EUROSAP-NWRSA ROAD SAFETY EXPERT CERTIFICATION

The EuroSAP-NWRSA Road Safety Expert Certification (RSCE) is a comprehensive program that raises road safety standards across Europe. The proposed methodology outlines the steps for effective implementation, utilising materials developed under the EuroSAP-NWRSA project and the Moodle Learning Management System (LMS) for seamless administration, content delivery, and certification.

The methodology for implementing the EuroSAP-NWRSA RSC provides a structured and comprehensive roadmap for integrating and administering the certification program. It is designed to offer a clear and coherent guide, drawing from the capabilities of the Moodle e-learning platform and the EuroSAP-NWRSA Task 2.4 document guidelines. While the entire RSCE process and administration scheme was developed under the EuroSAP-NWRSA project, the actual implementation, administration, and adaptation of the certification process will ultimately be managed by the relevant national-level authorities and academic institutions. These entities have contextual knowledge of their specific regions, road safety challenges, legislative nuances, and educational paradigms. Therefore, while the proposed methodology offers a foundational structure, it is up to these national bodies and universities to customise, refine, and execute the certification in line with both EU, national and EuroSAP-NWRSA task 2.4 rules, ensuring it meets the unique needs and standards of their respective countries. This decentralised approach ensures that the certification remains consistent on an EU-wide scale and locally relevant, balancing standardised excellence and regional adaptability.

Implementation methodology emphasises the importance of adhering to the guidelines set out in the WP2 Task 2.4 Development of an expert certification programme while allowing for national-level customisation and administration. The implementation methodology consists of the following steps:

1. Moodle Platform Configuration: Register on the Moodle RSEC platform (https://enauczanie.pg.edu.pl/moodle/course/) to obtain instructor privileges. Ensure that all teaching materials, exams, certification templates, and other essential materials are present and visible.
2. Localization: While the core content should align with the T2.4 guidelines, adding localised content, examples, or case studies relevant to each nation is permitted. Additional questions related to national legislation can be included in the exam structure, provided they adhere to the RSC course guidelines. The material should be publicly accessible for download, free of charge, and listed to the student along with the remaining material. The passing score threshold remains at 85%. Using the supporting templates and documents provided on the platform during this step is highly recommended.
3. Course Modules and Exams: Integrate the course modules, including interactive lessons, multimedia content, and examinations, ensuring they align with the task 2.4 guidelines.
4. Verification: After course completion, instructors must ensure that candidates have met all requirements per the T2.4 guidelines.

5. Certification Templates: Access the certification templates for RSEC on Moodle, ensuring they are easily accessible for issuance upon successful completion of the course.
6. Issuance of Certificates: Once verified, instructors need to use the developed certification templates available on the RSE e-learning platform to issue certificates to successful candidates. This helps to standardise the issuance process and align with the stipulations in the task 2.4 document.
7. Entry of Successful Candidates into the RSE Database: After the certificates have been issued, assessors must ensure that all successful candidates are entered into the RSE database, which is available on the e-learning platform.

4.1 Proposed Methodology for Implementation of the EuroSAP-NWRSA RSEC

The EuroSAP-NWRSA Road Safety Expert Certification (RSEC) is designed to improve European road safety standards. The proposed methodology leverages the materials developed under the EuroSAP-NWRSA project and the Moodle Learning Management System (LMS) for administration, content delivery, and certification. Key steps include:

- **Moodle Platform Configuration**: Registering and configuring the Moodle RSEC platform to ensure all teaching materials, exams, certification templates, and essential resources are available and visible as per the task 2.4 guidelines.
- **Localisation**: While the core content remains consistent with the task 2.4 guidelines, localised content, examples, or case studies relevant to each nation can be added. Additional questions regarding national legislation can be included in exams, provided they adhere to RSC course guidelines.
- **Course Modules and Exams**: Integrating interactive lessons, multimedia content, and examinations to align with Task 2.4 guidelines. This ensures candidates have access to comprehensive and engaging learning materials.
- **Verification**: Instructors must ensure that candidates have met all requirements per task 2.4 guidelines before issuing certificates.
- **Certification Templates**: Access and use the certification templates for RSP Level 1 and Level 2 on Moodle to issue certificates upon successful completion of the course.
- **Issuance of Certificates**: Utilising developed certification templates available on the RSC e-learning platform to issue certificates to successful candidates, ensuring standardisation and adherence to Task 2.4 stipulations.
- **Database Entry**: Assessors must ensure that all successful candidates are entered into the RSC database available on the e-learning platform.

4.2 Requirements for RSC Instructors/Assessors

Assessors play a critical role in evaluating candidates' competencies and ensuring the high standards of the RSC certification. Essential requirements for assessors include:

- **Degree in Relevant Field**: A master's degree in road safety, civil engineering, transportation planning, or a related discipline.
- **Advanced Training**: Preference for those with advanced training or postgraduate degrees in road safety or related areas.
- **Relevant Work Experience**: At least ten years of professional experience in road safety management, infrastructure planning, or a related field.

- **Experience in Assessment**: Prior experience conducting assessments, evaluations, or examinations in a professional or academic setting.
- **Understanding of RSE**: Comprehensive knowledge of the curriculum, objectives, and requirements for RSE level certifications.
- **Completion of RSE Certification**: Ideally, assessors should have completed the RSE certification to understand the process from both perspectives.
- **Moodle Platform Familiarity**: Proficiency in using Moodle for evaluation, feedback, and communication purposes.
- **Data Analysis Skills**: Ability to analyse and interpret examination results, performance metrics, and relevant data.
- **Ethical Integrity**: A commitment to upholding the highest standards of ethics and fairness in the assessment process.
- **Communication Skills**: Proficiency in conveying feedback, decisions, and recommendations clearly and constructively.

4.3 Administration of the RSC Process

The RSC process is designed to be user-centric, ensuring candidates have a clear path from registration to certification. The process involves several steps:

1) **Registration & Enrolment**
   - **Online Application**: Candidates apply directly to assessor institutions, providing the necessary details and documentation as required by the RCS registration template.
   - **Verification**: Administrative staff verify the authenticity of the provided documents and the candidate's eligibility.
   - **Confirmation**: Successful candidates receive a confirmation email with further steps.
2) **Access to Learning Materials**
   - **Course Enrolment**: Candidates enrol and access course materials, including documentation, interactive modules, and supplementary resources.
3) **Learning & Assessment Phase**
   - **Module Completion**: Candidates progress through the course modules, completing interactive lessons and quizzes.
   - **Final Examination**: Candidates apply to undertake the final examination.
4) **Assessment & Evaluation**
   - **Examination Review**: Assessors review the examination results, ensuring fairness and consistency.
   - **Verification for RSE**: candidates must enrol and pass the prepared courses on the EuroSAP-NWRSA Moodle platform.
5) **Certification Decision**
   - **Pass/Fail Determination**: Each candidate is decided on a pass/fail basis based on examination scores. Candidates have two chances to complete the exam before repeating the whole course.
   - **Review & Approval**: A senior assessor or committee review ensures the integrity of the decision-making process.
6) **Certification Issuance**
   - **Certificate Generation**: Certificates are generated using templates stored on the RSC Moodle platform.

- **Email Notification**: Successful candidates receive an email notification with their digital certificate attached or a link to download it.

7) **Entry into the Road Safety Professional Database**

- **Database Entry**: Assessors ensure that all successful candidates are entered into the RSC database, available on the e-learning platform.

4.4 Web Platform for RSEC Methodology Dissemination

The RSE Certification Online Platform, built on the Moodle LMS, is designed to host, manage, and disseminate the documentation for the RSEC methodology. Key features include:

- **Dedicated Digital Space**: The platform provides an intuitive, secure, and efficient experience for both administrators and users.
- **Accessibility**: Materials for RSEC methodology are accessible at https://enauczanie.pg.edu.pl/moodle/; login and password will be added when the e-learning platform is available.

4.5 RSE Certification Procedures

- **Prerequisites**: Successful completion of RSP level 1 and RSP level 2, present another certificate from a different Road Safety course (e.g., Road Safety Audit).
- **Certification Process**: Candidates undergo advanced coursework on EuroSAP-NWRSA methodologies (which will be prepared in WP3), complete module-specific exams, and receive certification upon successful completion. The process involves accessing certification materials, completing detailed registration, completing e-learning modules, and completing assessments.

4.6 Road Safety Professional Database

A robust system for record-keeping and data management is essential for the certification process. The database includes:

- **Assessor Database**: A comprehensive record of all assessors involved in the RSE certification process, including qualifications and experience.
- **Certified Professionals Database**: A record of all candidates who have achieved RSE certification, including contact information and certification details.

4.7 Alignment with European Legislative and Road Safety Trends

The RSE certifications align with the European Union's legislative framework and contemporary road safety methodologies. The program ensures that professionals are equipped with both theoretical knowledge and practical skills necessary to address road safety challenges within the European context. The RSE procedures and certifications are aligned with the RISM directive, focusing on the Network Road Safety Assessment procedure, and ensuring that professionals can meet the unique needs and standards of their respective countries.

4.8 Administration of the RSC process

The RSEC process, while comprehensive, is user-centric, ensuring candidates have a clear path from registration to certification. The use of the online e-learning platform streamlines many administrative tasks, ensuring efficiency and consistency throughout the process. The involvement of qualified assessors at crucial stages guarantees the credibility and high standards of the certification (Figure 4.1).

1. Registration & Enrolment

- **Online Application:** Candidates apply directly to assessor institutions, providing necessary details and documentation as required by the RSEC registration template, which assessors are required to share with the candidates. Assessors must share the RSE registration form with candidates.
- **Verification:** Administrative staff verify the authenticity of the provided documents and the eligibility of the candidate.
- **Confirmation:** Successful candidates receive a confirmation email with further steps from assessors.

2. Access to Learning Materials

- **Accessing learning materials: Assessors send the Candidates access to the learning materials (document is provided for assessors on the** RSEC e-learning platform).
- **Course Enrolment:** Candidates enrol in the RSEC course (online or traditional) and access course materials, including documentation, interactive modules, and supplementary resources.

3. Learning & Assessment Phase

- **Module Completion:** Candidates progress through the course modules, completing interactive lessons and quizzes.
- **Final Examination:** Upon studying all relevant material, candidates can apply to undertake the final examination to their assessor.

4. Assessment & Evaluation

- **Exam distribution**: Assessors distribute the exam and supporting documents to the candidates, strictly adhering to submitted templates and task 2.4 guidance.
- **Examination Review:** Assessors review the examination results, ensuring fairness and consistency.

5. Certification Decision

- **Pass/Fail Determination:** Based on examination scores, a pass/fail decision is made for each candidate. Each candidate will have two chances to complete the exam before needing to enrol again.
- **Review & Approval:** A review by a senior assessor or committee ensures the integrity of the decision-making process.

6. Certification Issuance

- **Certificate Generation:** For successful candidates, certificates are generated by Assessors using the templates stored on the RSEC Moodle e-learning platform.

- **Email Notification:** Candidates need to receive an email from an assessor notifying them of their results. Successful candidates receive their digital certificate either as an attachment or via a download link.

7. Entry into Road Safety Professional Database

- **Database entry:** The assessor database sheet is a comprehensive record of all assessors involved in the RSE certification process, and is available to all assessors on the RSEC E-learning platform. It is mandatory that all assessors are entered into the database by an administrator of an RSC e-learning platform, and each assessor must ensure that all candidates, with their data, for which the certification is issued, are entered into the joint RSP database.



- Obtaining the certification for RSP Level 2 or other type of RS cetrtyficate (example Road safety auditor).
- Experience in road safety minimum 10 years.

2. Registration

- Fill out the registration form
- Receive course access, schedule details, and EuroSAP-NWRSA materials.

3. Coursework

- Access advanced engineering materials on the e-learning platform.
- Complete courses on EuroSAP-NWRSA in accordance with the requirements

4. Certification Issuance

- Verify attendance and successful completion of the EuroSAP -NWRSA e-learning modules, as well as.
- Receive the RSCE Certification, emphasising proficiency in applying principles of road safety with EuroSAP-NWRSA methodologies.

Figure 4.1 RSE Course Certification 4-step process

5 ISSUANCE OF RSE CERTIFICATE

5.1 Road Safety Expert assessment

The Road Safety Expert certification is a significant milestone for professionals seeking to deepen their expertise in road infrastructure safety management. Rather than assessing candidates through a separate examination, the certification evaluates their proficiency based on their performance and completion of specific methodologies prepared under the EuroSAP-NWRSA project. This approach allows for a practical demonstration of skills and knowledge, providing a comprehensive assessment of a candidate's readiness to excel in RISM:

- Model road safety infrastructure management structure
- Network-Wide Road Safety Assessment Fundamentals
- The reactive approach of NRWSA
- The proactive approach of NRWSA
- Integration of selected activities using proactive and reactive methods
- Management of activities at strategic, operational and local levels

Methodologies are integral to the modern road safety landscape, addressing specific challenges and scenarios in the field. To ensure a thorough understanding and practical application of these methodologies, candidates are required to complete dedicated e-learning platform modules available at https://enauczanie.pg.edu.pl/moodle/. These modules are designed to offer:

- **Comprehensive Course Content:** Detailed lessons covering the breadth and depth of EuroS@P road safety methodologies, from foundational principles to advanced techniques.
- **Interactive Learning Experiences:** Engaging activities, simulations, and real-world scenarios that allow candidates to apply their knowledge in practical contexts.

To be eligible for the RSE, candidates must:

- **Complete RSC's RSP Level 1 certification and complete both EuroS@P PCSI and RSI e-learning modules:** This ensures that candidates have a holistic understanding of both methodologies and can integrate them effectively in real-world scenarios

OR

- Document having completed courses/studies in other areas of safety management, road infrastructure safety management (for example, Road Safety Auditors).

- **Apply for RSE certification:** Upon verification of the successful completion of both EuroS@P modules (RSP 2) or other RS knowledge documents, candidates will be awarded the Road Safety Expert. This certification is not just a testament to their theoretical knowledge but also a reflection of their practical expertise in implementing advanced road safety measures.

5.2 Significance of the RSE Certificate

The Road Safety Expert certificate acknowledges the recipient's proficiency in road safety through the application of EuroS@P methodologies, which will be prepared in work package 3. Holders of the RSE certificate have demonstrated their ability to conduct one or more

EuroSAP-NWRSA methodologies, ensuring adherence to the highest standards and best practices in the field, as reflected in their Certificate.

Earning the RSE Certificate is a testament to their unwavering commitment to advancing road safety and demonstrates their mastery of modern road safety methodologies and their practical application.

5.3 RSCE examination and assessment

5.3.1 RSCE examination structure

The RSCE Examination is intended to serve as an important measure of expert road safety knowledge within the road safety profession. Designed to evaluate a candidate's detailed understanding of Road Safety, especially in the context of the EU Directive 1936/2019 - RISM, the examination is comprehensive. All defining features of the examination's structure are provided within the following table. The examination structure will be available for download in a separate document, to be shared with students to ensure maximum transparency.

Table 5.1 RSCE examination structure

RSCE examination structure
Number of Questions
The RSCE Examination consists of 60-90 questions. This number has been carefully chosen to provide a comprehensive yet concise evaluation of a candidate's knowledge across all relevant topics. Each question will be designed to test and assess the depth of a candidate's understanding. The goal is to maintain a balance, ensuring that candidates are examined on a wide range of important road safety topics and legislation.
Duration of the Examination
The RSCE Examination is allocated 90 minutes for completion. This timeframe has been carefully chosen to ensure candidates have ample time to read, analyse, and answer each question without feeling pressured. On average, this allows about 1 minute per question, enabling candidates to reflect on and review their answers within the allotted time.
Multiple-choice questions (MCQs): Structure and Scoring
Multiple Choice Questions (MCQs) are the main format for the examination. Each MCQ presents a statement or question with multiple potential answers. Candidates must choose the correct answer or answers, testing their recall, comprehension, and application of information. Each MCQ carries one mark.
Scoring Mechanism
The RSCE Examination scoring mechanism is transparent and easy to understand, providing candidates with clarity on how their performance will be assessed.
Point distribution for each question type
Each question in the exam is worth 1 mark, making it easy for candidates to track their potential scores. This also simplifies the post-exam evaluation process, providing swift and accurate result compilation.
Criteria for passing and grading thresholds
To attain the RSCE Certification, candidates must achieve a minimum score of 85% to pass the examination. This high standard ensures that only candidates with a strong, thorough

RSCE examination structure
understanding of road safety principles and legislation will earn the certification. It emphasises the examination's dedication to maintaining the highest standards in the road safety profession.
RSCE – NWRSA issues
Model road safety infrastructure management structure Network-Wide Road Safety Assessment Fundamentals The reactive approach of NRWSA The proactive approach of NRWSA Integration of selected activities using proactive and reactive methods Management of activities at strategic, operational and local levels

5.4 RSCE exam questions

All examples of questions which can occur during RSCE are listed below (The final list of questions will be prepared after finishing work on WP3):

Question 1. What is the primary goal of a network-wide road safety assessment?

a) To increase road traffic volumes
b) To identify and mitigate road safety risks across the entire network
c) To reduce travel times
d) To enhance public transport services

Question 2. Which of the following is a common method used in network-wide road safety assessments to identify high-risk locations?

a) Traffic volume counts
b) Historical crash data analysis
c) Speed limit enforcement
d) Driver behaviour surveys

Question 3. What is a "black spot" in the context of road safety?

a) An area with high levels of pollution
b) A section of road where there is frequent traffic congestion
c) A location with a high number of crashes
d) A road with poor lighting conditions

Question 4. Which type of data is most critical for conducting a thorough road safety assessment?

a) Weather data
b) Economic data
c) Traffic flow and crash data
d) Road user satisfaction surveys

Question 5. What is a key benefit of implementing road safety audits?

a) Increasing the number of lanes on highways
b) Identifying potential safety issues before they result in crashes

c) Reducing the need for traffic law enforcement
d) Improving the fuel efficiency of vehicles

Question 6. What type of methodology is necessary for a network-wide road safety assessment?
a) Reactive analysis
b) Proactive analysis
c) Both reactive and proactive
d) Black spot management

Question 7. Which stakeholder group is typically NOT directly involved in road safety assessments?
a) Urban planners
b) Emergency response teams
c) Vehicle manufacturers
d) Civil engineers

Question 8. What is the purpose of a Road Safety Impact Assessment (RSIA)?
a) To evaluate the economic impact of road construction projects
b) To assess the potential road safety impacts of new road projects or changes to existing roads
c) To analyse the environmental impact of road networks
d) To measure the effectiveness of public transportation systems

Question 9. Which technology is often used to gather data for network-wide road safety assessments?
a) Solar panels
b) Geographic Information Systems (GIS)
c) Wind turbines
d) Hydroelectric sensors

Question 10. What is the significance of the "safe systems" approach in road safety management?
a) It focuses on the design of vehicles for enhanced safety
b) It considers human errors as inevitable and designs road systems to minimise their consequences
c) It aims to increase the speed limits to improve traffic flow
d) It emphasises individual driver responsibility over infrastructure improvements.

6 ROAD SAFETY CERTIFICATION EXPERT DATABASE

The certification process centres on evaluating and improving candidates and also requires a robust system for record-keeping and data management. A well-structured certification database ensures transparency, traceability, and accountability throughout the process. This chapter provides an in-depth exploration of the certification database's structure and management. It consists of two primary sheets: one for assessors and another for successful candidates. This organised approach facilitates efficient management and accessibility of crucial information for all involved parties.

6.1 Database of RSE Instructors/assessors

The assessor database sheet is a comprehensive record of all assessors involved in the RSE certification process. This database also serves as a verification tool, ensuring that only qualified and approved assessors evaluate candidates.

Attribute fields in the Assessor database:

- **Assessor ID:** A unique identifier for each assessor.
- **First name**
- **Last name**
- **Country of practice**
- **Contact Information:** Email and phone number.
- **Qualifications:** Relevant degrees, certifications, and training.
- **Years of Experience**
- **Specialisation:** Specific areas within road safety where the assessor has expertise.
- **Number of Candidates Assessed:** A running total, updated after each assessment cycle.

6.2 Database of RSE certified professionals

Post-assessment assessors must update the database with details of successful candidates. This sheet records all candidates who have achieved RSE certification.

- **Candidate ID:** A unique identifier for each candidate.
- **First name**
- **Last name**
- **Contact Information:** Email
- **Certification levels:**
- **Date of Certification**
- **Assessor ID:** The ID of the assessor who evaluated the candidate.
- **Country of practice**

7 APPENDIX

List of prepared appendices to Road Safety Expert certification methodology:

1. Road Safety Expert certification registration form.
2. Road safety expert exam.
3. E-mail template - confirmation of registration for Road Safety Expert Certification.
4. Road Safety Expert Certification template.
5. RSE certified professionals/experts database.
6. RSE Inspector/assessor database

Appendix 1

EuroSAP-NWRSA - Road Safety Expert Certification

Road Safety Expert certification registration form

Personal Information

Full Name: _____
Date of Birth (DD/MM/YYYY): _____
Gender: ☐ Male ☐ Female ☐ Other ☐ Prefer not to say
Contact Address:
Street: _____
City: _____ **Postal Code:** _____
Country: _____
Email: _____
Phone: _____

Professional Information

Occupation: _____
Organization: _____
Experience in Road Safety (years): _____
Relevant Certifications:

1. _____
2. _____
3. _____

Educational Background

Degree: _____
Institution: _____
Graduation Year: _____

Supporting Documents

☐ Proof of completion for EuroS@P RSI and/or PCSI courses
☐ Proof of completion for EuroS@P RSP Level 1 course

Declaration

I, _____, declare the provided information is true. I am aware and consent to the fact that any false information may lead to my disqualification.

Signature: _____ **Date:** _____

Appendix 2

EuroSAP-NWRSA - Road Safety Expert Certification

Road safety expert exam

Candidate: _____ ID number: _____

Date: _____ Location: _____

Duration: **90 minutes**, Questions: **60 – 90**

Instructions for candidates:

1. Fill out all fields before starting.
2. Read all questions carefully.
3. Mark answers per the given instructions.
4. Do not use correction fluid. Cross out mistakes.
6. Raise your hand for assistance.
7. Do not leave without permission.

Declaration:

I confirm adherence to the exam guidelines and declare that there is no malpractice.

Signature: _____ Date: _____

Appendix 3

EuroSAP-NWRSA - Road Safety Expert Certification

E-mail template - confirmation of registration for Road Safety Expert Certification

Dear ***[Candidate's Full Name]***,
We are pleased to inform you that your registration for the Road Safety Expert Certification process has been completed and evaluated. Based on the information you provided, we can confirm that you are eligible to proceed to the next phase of the certification.

Below are the essential details you will need as you continue your journey towards RSE certification:

1. ***Course Access***: [Provide Link/Method for accessing the course]
2. ***Study Materials***: [Provide Link/Details on where they can find the study materials]

Please review all the provided resources. If you have any questions or need assistance, feel free to reach out to me.

Best of luck with your certification journey!
Warm Regards,
[Assessor's Full Name]
[RSE Certification Team]
[Contact Details - Optional]

Appendix 4

EuroSAP-NWRSA - Road Safety Expert Certification

Road Safety Expert Certification Template

CERTIFICATE OF ACHIEVEMENT

This certifies that

[NAME OF THE CANDIDATE]

has successfully completed the requirements for **Road Safety Expert Certification (RSEC)** and passed the examination for

Road Safety Expert – Network Wide Road Safety Assessment

*The candidate demonstrated a comprehensive understanding of **core road safety principles**, including **foundational concepts and terminology, as well as** knowledge of **EU Directive 1936/2019** – RISM in the area of Network Wide Road Safety assessment. They demonstrated proficiency in identifying key stakeholders in road safety, understanding the human factors influencing it, and applying this knowledge in scenario-based assessments.*

[DATE]

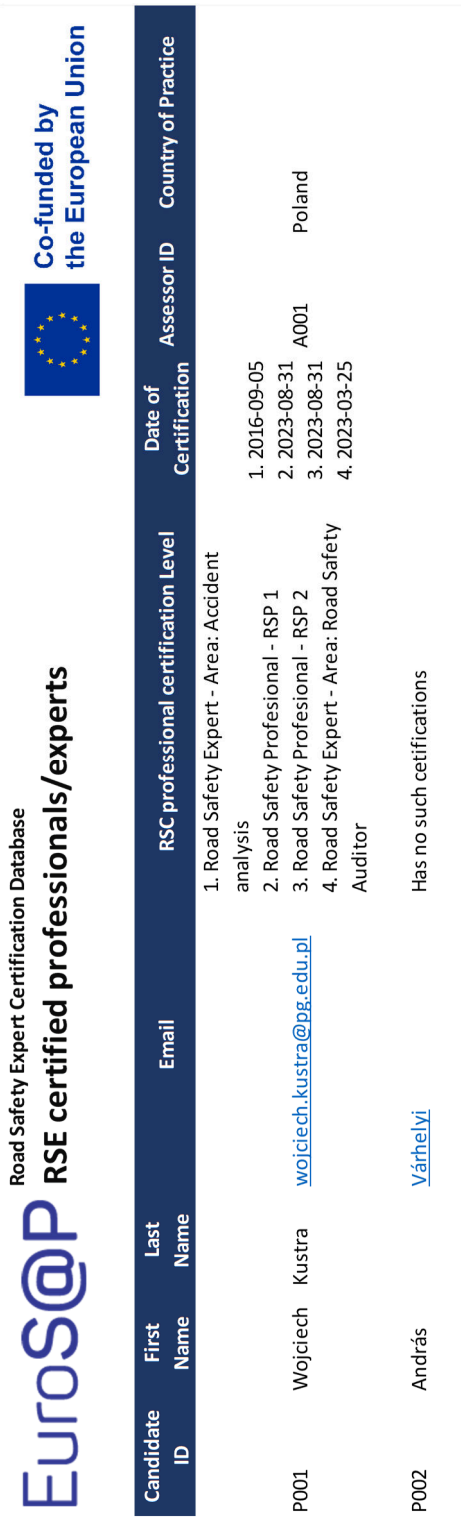
Co-funded by the European Union

EuroS@P

Appendix 5

EuroSAP-NWRSA - Road Safety Expert Certification

RSE certified professionals/expert's database



EuroS@P Road Safety Expert Certification Database

RSE certified professionals/experts

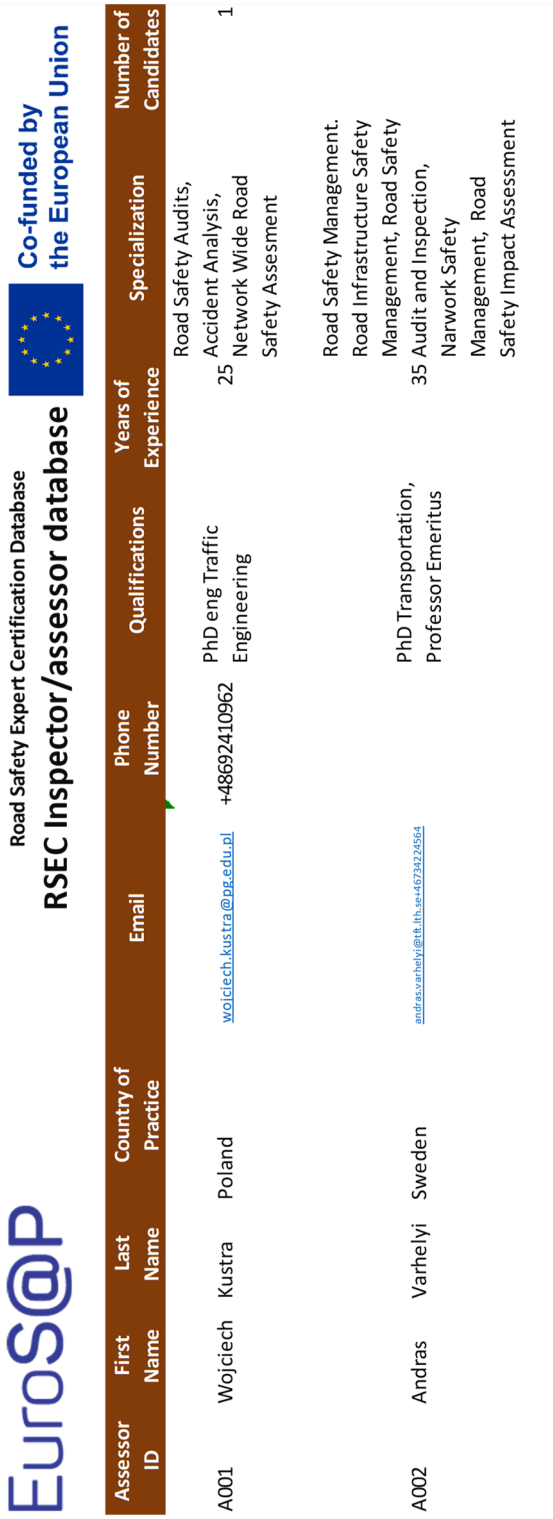
Co-funded by the European Union

Candidate ID	First Name	Last Name	Email	RSC professional certification Level	Date of Certification	Assessor ID	Country of Practice
P001	Wojciech	Kustra	wojciech.kustra@pg.edu.pl	1. Road Safety Expert - Area: Accident analysis	1. 2016-09-05	A001	Poland
				2. Road Safety Profesional - RSP 1	2. 2023-08-31		
				3. Road Safety Profesional - RSP 2	3. 2023-08-31		
				4. Road Safety Expert - Area: Road Safety Auditor	4. 2023-03-25		
P002	András	Várhelyi		Has no such cetifications			

Appendix 6

EuroSAP-NWRSA - Road Safety Expert Certification

RSE Inspector/assessor database



EuroS@P

Road Safety Expert Certification Database

RSEC Inspector/assessor database

Co-funded by the European Union

Assessor ID	First Name	Last Name	Country of Practice	Email	Phone Number	Qualifications	Years of Experience	Specialization	Number of Candidates
A001	Wojciech	Kustra	Poland	wojciech.kustra@pg.edu.pl	+48692410962	PhD eng Traffic Engineering	25	Road Safety Audits, Accident Analysis, Network Wide Road Safety Assesment	1
A002	Andras	Varhelyi	Sweden	andras.varhelyi@th.kth.se+46734224564		PhD Transportation, Professor Emeritus	35	Road Safety Management. Road Infrastructure Safety Management, Road Safety Audit and Inspection, Narwork Safety Management, Road Safety Impact Assessment	

8 CERTIFICATION PROGRAMS - RSA

Topic
Nr hours, theoretical, practical
Issus
Requirement
Certification regulations
Training organisations
Describe the process of training.

Periodical course.