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**EuroS@P**  
EUROPEAN ROAD SAFETY PARTNERSHIP

## **WP4. Teaching materials development related to pedestrian crossing safety management**

### **IO. 13 Theoretical and practical teaching materials development related to the pedestrian crossing safety management**

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## 1 ABOUT THE EUROS@P PROJECT

The main objective of the EuroS@P project is to promote the best education solutions in the area of RISM directive, with an increase of awareness and knowledge of road safety, by:

- 1) Developing an e-learning platform with access to project products,
- 2) The development of teaching and training materials dedicated to conducting classes at universities and training courses for RISM staff,
- 3) Raising competencies and skills in RISM by changing curricula at universities and equipping students and staff with didactic materials based on innovative RISM methods and tools,
- 4) Creating the foundations for Road Safety Professional Certification (RSP),
- 5) The development of a lasting relationship and the continuation of active international cooperation between project partners with the possibility of its extension to other institutions.

The EuroS@P project targets the following groups:

- 1) Students, researchers, and academic teachers at universities.
- 2) Road authority staff at national, regional and local levels.
- 3) Experts, specialists, and practitioners involved in RS activities, including staff who conduct training in various RS courses.
- 4) All users of road infrastructure, as an indirect target group, for whom the risk of road accidents will ultimately be reduced by increasing the effectiveness and efficiency of RISM activities.

The project is also supported by a group of associates who will cooperate with project partners to consult and evaluate the results. They will implement final products and promote the dissemination and accessibility of the project results.

### ABOUT OUTPUT IO.13

- **Objective:** Theoretical and practical teaching materials development related to the pedestrian crossing safety management
- **Work package:** 4 Teaching materials development related to the Pedestrian crossing safety management.
- **Target Groups:**
  - Research and teaching staff from institutions involved in the project.
  - Students of civil engineering and transportation engineering.
  - National, local and regional road authority staff.

## 2 SUBJECT ASSUMPTIONS

### 2.1 Directive 2019/1936/EC

Due to the requirements of Directive 2019/1936/EC, there is a huge demand for educated staff who will be able to implement it. Up to now, curricula have hardly considered road safety issues. This is gradually improving, but the road network management staff do not have enough knowledge to effectively implement road infrastructure safety management tools. This expertise is necessary to implement measures to reduce the number of fatalities and seriously injured in the next decade by 50%.

The approach to road safety issues should be changed from reactive to proactive. The former serves to respond only to existing risks on the roads in operation (identification, risk assessment and response).

The latter approach, which is much more effective, consists of preventive measures (anticipating the occurrence of accidents and using solutions that prevent them), which are implemented for planned, designed and existing road sections. This approach will be emphasised as part of the prepared materials.

### 2.2 The planned result

The planned result of the task is the development of innovative teaching materials related to pedestrian crossing safety management.

### 2.3 Division of Pedestrian Crossing Safety Management

The task was implemented under working package 4 (WP4 Teaching materials development related to pedestrian crossing safety management). Theoretical and practical teaching materials were prepared based on the prepared methodology (IO.10) and implementations in Poland and Germany (IO.11-12).

The work was divided among all consortium participants and included:

- Preparation of the syllabus.
- Preparation of the presentation.
- Development of materials from research and implementation projects related to the PCSM.
- Verifying and evaluating developed teaching materials during didactic workshops and multiplier events.

The planned outcome of the task is the development of modern and innovative digital teaching and training content for remote education in the field of pedestrian crossing management.

Following the assumptions made during the development of the methodology of the pedestrian crossing safety inspection (IO.10), it is assumed learning by doing. Emphasis on practical

activities, student collaboration, and knowledge exchange during group work or webinars. The planned division of PCSI lessons is shown in Table 1.

Table 1 The planned division of pedestrian crossing safety management lessons

Types of classes	Type of learner
	Students/auditors/experts
Lecture	13
Field activities	9
Practicals (remote)	8
Number of lessons	30

## 2.4 Type of didactic and training resources

As part of the project implementation, the following type of data was prepared:

- PowerPoint – presentation, which should be presented by the teacher (Figure 1),
- PowerPoint-audio – presentation with teacher soundtrack and subtitles if the speaker presented issues in another language than English (Figure 2),
- PowerPoint with YouTube resources (Figure 3).
- Video field activities tutorials (Figure 4).
- GPS coordinates for exercises (Figure 5).
- Field forms (Figure 6).
- Interactive quiz – different quizzes (open questions, multichoice, yes/no).
- Webinar, Q&A, PowerPoint - student presentation (Final discussion with the teacher, all groups together).

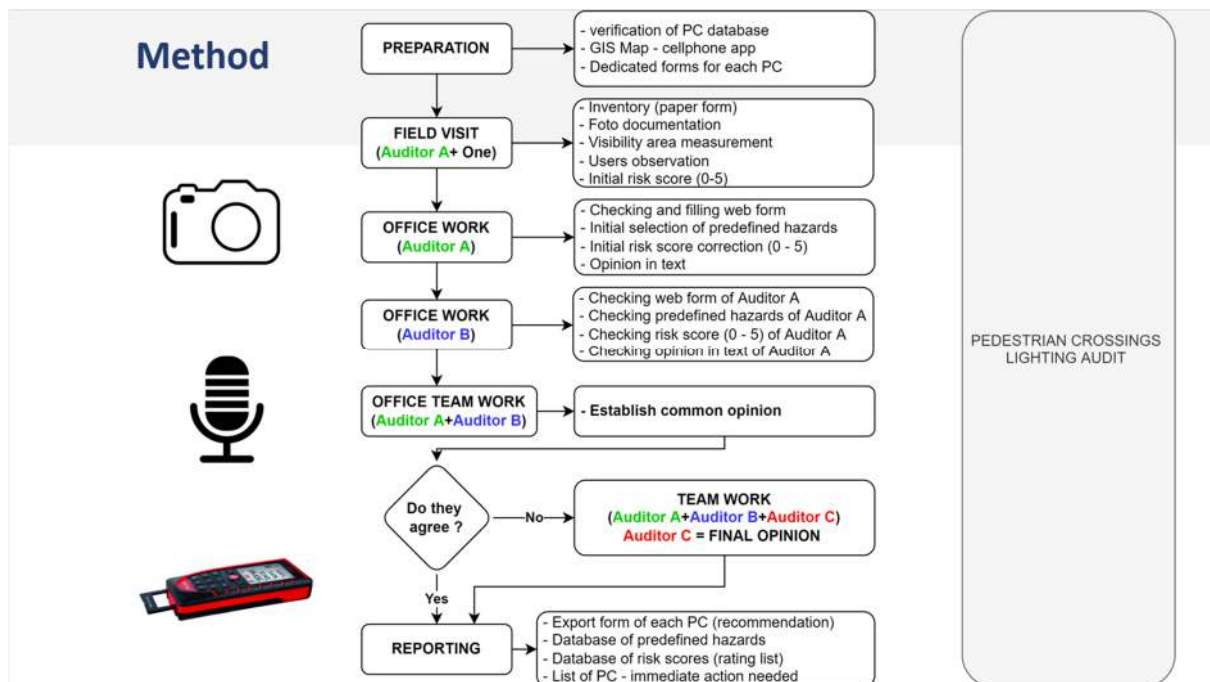


Figure 1. Example of didactic materials – presentation



Figure 2. Example of didactic materials – presentation with recorded voice

Walking in the USA blows and this is why



Figure 3. Example of didactic materials – presentation with YouTube resources

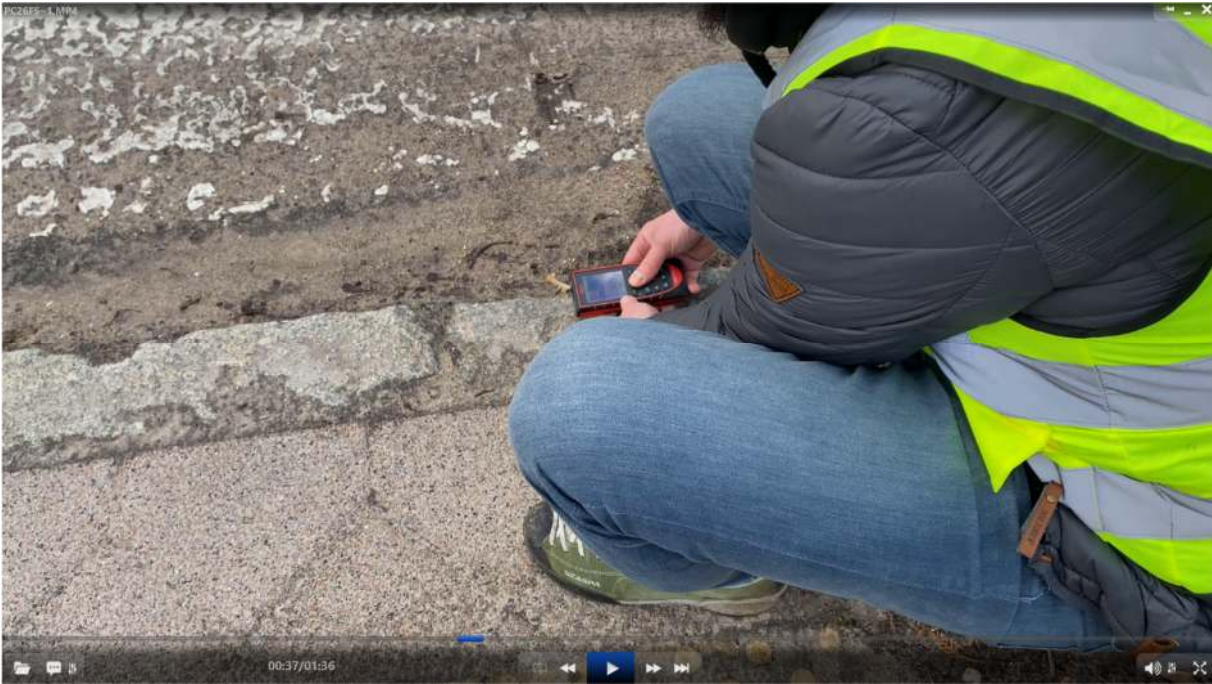


Figure 4. Video field tutorials activities



Pedestrian crossing number	GPS
P01	52.253686, 20.910276
P02	52.239121, 20.910058
P03	52.2613942, 20.9677509
P04	52.1979445, 20.9217141
P05	52.263051, 21.021741
P06	52.2569615, 20.9914774
P07	52.1987075999999988, 20.8724601000000014
P08	52.3183268000000012, 21.0324884999999995
P09	52.17605, 21.0467
P10	52.16235, 21.04779
P11	52.2427130000000020, 20.9409939999999999
P12	52.14397, 21.03846
P13	52.13122, 21.0605

Figure 5. Example of didactic materials –GPS coordinates for exercises

AREA TARGETED ROAD SAFETY INSPECTION FORM AT PEDESTRIAN CROSSINGS				Sheet	1
Auditor					
Verifying Auditor					
Date		Time			
Weather		Sunny	Partly cloudy	Total cloudiness	
		Rainy	Snowy	Misty	
CHARACTERISTIC DATA					
PC NO.	8				
CITY	Gdansk		CATEGORY	G	
STREET	Zaglowa		NO. OF LANES	2x2	
INTERSECTION/OBJECT	AberExpo				
DESCRIPTION					
ORIENTATION					
NW					NE
W					E
SW					SE

Figure 6. Example of didactic materials – prepared Excel sheet

## 2.5 Gdansk University of Technology e-learning platform

Per the adopted assumptions, the material development is available on a publicly accessible e-learning platform. Detailed information about the e-learning platform is described in IO.15 Development of the e-learning platform.

## 2.6 YouTube EuroS@P canal

A dedicated channel on the YouTube platform will complement the course on the platform. The EuroS@P canal is accessible at [youtube.com/@eurosp4658](https://youtube.com/@eurosp4658).

### 3 DETAILED DIVISION OF DIDACTIC AND TRAINING MATERIALS

Table 2 describes the planned didactic and training materials under the pedestrian crossing safety management issues.

Table 2 The planned detailed division of pedestrian crossing safety management

No.	Types of classes	Hour	Short Name	Resource Type
<b>CHAPTER 1 - Introduction</b>				
1	Lecture	1	Pedestrian safety management	PowerPoint, PowerPoint audio, Interview, PowerPoint - YouTube Resource
2	Practical	1	Problems of pedestrian crossings	PowerPoint, Student group working
3	Lecture	1	Pedestrian safety management	PowerPoint, Student group working
<b>CHAPTER 2 - Pedestrian crossing road safety inspection (Daily)</b>				
1	Lecture	2	PC - Road safety inspection methodology	PowerPoint, PowerPoint audio, Interview, Interactive quiz,
2	Lecture	5	PCSI - Predefined types of hazard	PowerPoint *12

No.	Types of classes	Hour	Short Name	Resource Type
3	Practical	2	Analysis of Pedestrian crossing inspections - examples with scoring	PDF Reports *6, Pictures of pedestrian crossing Students' own work
4	Practical	3	Analysis of Pedestrian crossing inspections - examples without scoring	Pictures, maps of pedestrian crossing Group working Student PDF report
5	Field activities	2	Pedestrian crossing safety inspections, checklist (with the teacher)	PowerPoint, PDF, maps, Pedestrian card sheets, Group working (fieldwork 3-4 pedestrian crossing)
6	Field activities	7	Pedestrian crossing safety inspections, checklist (without the teacher)	PowerPoint, Tutorials *17 Group working (10 pedestrian crossing/2 students)
7	Practical	2	Analysis of Pedestrian crossing inspections carried out	Group working, Student PDF report/presentation
<b>CHAPTER 3 - Introduction of pedestrian crossing road safety inspection (Nightly)</b>				
1	Lecture	2	PC - Road safety methodology	PowerPoint audio, Interview, PowerPoint - YouTube Resource
<b>CHAPTER 4 – Final, Wrapping up the learning process</b>				
1	Lecture	2	Final discussion and evaluation	Webinar, Q&A, PowerPoint - student presentation (Final discussion with the teacher all groups together)

