

Project co-funded by European Union funds (ERDF, IPA, ENI)

Your Road Safety is on our RADAR.

OUTPUT 3.2.

TRAINING COURSES



RADAR – Risk Assessment on Danube Area Roads



https://www.interreg-danube.eu/radar



Internal Report Hierarchy Level			
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Abbreviation list

AADT	Annual average Daily Traffic
ACM	Automobile Club of Moldova
AMZS	Automobile and Motorcycle Association of Slovenia
ASP	Associated Strategic Partner
BBARS	Bulgarian Association for Road Safety
BIHAMK	Bosnia and Herzegovina Automobile Club
EIRA- EURORAP	European Institute for Road Assessment - EuroRAP
FPZ	University of Zagreb, Faculty of Transport and Traffic Sciences
iRAP	International Road Assessment Programme
ITS	Information Technology Solutions
KFV	Austrian Road Safety Board
KTI	Institute for Transport Sciences Nonprofit Ltd
MTMA	Ministry of Transport and Maritime Affairs
PP	Project Partner
RADAR	Road Assessment on Danube Area Roads
SR4S	Star Rating for Schools
SRIP	Safer Roads Investments Plans
ТА	Thematic Area
UAMK	General Automoto club of the Czech Republic
ViDA	The iRAP online software
VRU	Vulnerable Road Users
WP	Work Package



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1. Executive Summary

The Risk Assessment on Danube Area Roads (RADAR) project aims at providing a safer transport network and safer mobility. The objective of RADAR project Work Package (WP)3 Road Safety Training is to increase knowledge and skills, build capacities of Project Partners (PPs), road safety specialists, Associated Strategic Partners (ASPs) and engineers in road infrastructure safety. The need for learning activities is high as capacity in the Danube region is scarce. It is also required to encourage transnational use of a common methodology and bring countries to a common level of understanding on prioritisation of where to invest to reduce severe injuries. The learning activities provide the opportunity to present this information in an objective way to support decision-making. This is based upon risk assessment (actual crash data) and on information gathered about which road attributes lead to high risk.

In WP3 of the RADAR project the following three Outputs (O) were foreseen: O3.1 The Road Safety Procedures Training Concept was delivered first and has served as a basis for this O3.2 Training Courses output that includes physical 3-day training sessions performed in 8 countries, one online training course and 4 webinars. The O3.1 included training material developing, training curriculum and training time plan. All training materials have been translated to the national languages of the participating countries and have been available in each national training session organised under this O3.2. The trainings have demonstrated how to assess a road network for safety, prioritise road sections and match crash countermeasures to high-risk sections. They have also included webinars on RADAR's four pre-selected Thematic Areas (TA)'s: Safer Roads Investments Plans (SRIPs), Provisions for safety of Vulnerable Road Users (VRU), Information Technology Solutions (ITS) and speed management and Star Rating for Schools (SR4S). Further to that, in the respective WP the O3.3 Study Visits has also been delivered that aimed at delivering 4 individual study visit itineraries, which were thematically linked to the 4 main road safety focus areas of the RADAR project - SRIPs, Provisions for VRU, Speed management and ITS and SR4S. Study visits were prepared as 2-day events combining both theoretical sessions and practical site visits.

This document represents the official Output 3.2 Training Courses that have been organised in each participating county and/or online. It provides the overview of all training sessions organised, a rough overview of the curriculum O3.1 and a presentation of each physical training session and online session organised with the information on participants, specifics of the course, pictures, attendance lists, results of evaluation as well as links to the Project event data.



2. Road Infrastructure Safety Training Courses Overview

Between March 2019 and July 2020 eight physical 3-day training sessions have been implemented in the RADAR project participating countries Slovenia, Croatia, Bulgaria, Bosnia and Herzegovina, Montenegro, Austria, Hungary, and the Czech Republic. Due to the COVID-19 outbreak in Europe in early 2020, the remaining training sessions have been held online, namely one online training course for participants in Moldova, and 4 training webinars related to respective RADAR project TAs.

The trainings have been organised by each national PP, and the representatives from national stakeholders and target groups have been invited to participate. The main experts accredited for training in Road Assessment Programme from the Scientific Committee of the project have been nominated as trainers.

Country training	Facilitator(s)
Slovenia	Jure Kostanjšek, AMZS Marko Ševrović, EIRA-EuroRAP Klemen Filipič, AMZS Nikola Galović, Rotondo
Croatia	Marko Ševrović, EIRA-EuroRAP Sanja Leš, FPZ Bojan Jovanović, FPZ Jure Kostanjšek, AMZS
Bulgaria	Marko Ševrović, EIRA-EuroRAP Sanja Leš, FPZ
Bosnia and Herzegovina	Marko Sevrovic – EIRA Sanja Les - FPZ Bojan Jovanovic - FPZ
Montenegro	Nikola Galovic – Rotondo Olivera Rozi – EIRA Bojan Jovanovic – FPZ
Austria	Marko Ševrović, EIRA-EuroRAP Jure Kostanjšek, AMZS, Bojan Jovanović, FPZ
Czech Republic	Klemen Filipič, AMZS Jure Kostanjšek, AMZS Bojan Jovanović, FPZ Jiří Landa, UAMK
Hungary	Bojan Jovanovic – FPZ Jure Kostanjsek – AMZS

Table 1 List of trainers of 3-day training in participating countries





Road Infrastructure Safety Training Course in Slovenia



Road Infrastructure Safety Training Course in Croatia



Road Infrastructure Safety Training Course in Bulgaria



Road Infrastructure Safety Training Course in Bosnia and Herzegovina



Road Infrastructure Safety Training Course in Montenegro



Road Infrastructure Safety Training Course in Austria



Road Infrastructure Safety Training Course in Hungary



Road Infrastructure Safety Training Course in Czech Republic





Figure 1 Photo collage from each training session organised



Location	Organiser	Date	Number of participants
Slovenia	AMZS	March 22, 25-26, 2019	22
Croatia	FPZ	April 02-04, 2019	23
Bulgaria	BBARS	June 11-13, 2019	21
Bosnia and Herzegovina	BIHAMK	June 17-19, 2019	21
Montenegro	MTMA	June 25-27, 2019	13
Austria	KFV	September 16-18, 2019	25
Hungary	КТІ	November 05-07, 2019	18
Czech Republic	UAMK	November 26-28, 2019	16
Online Training Course	EIRA-EURORAP &	May 11-13, 2020	44
Online Webinars (SRIP & Provisions for VRUs)	EIRA-EURORAP	June 16 and 17, 2020	621
Online Webinars (ITS, speed management & SR4S)	EIRA-EURORAP	June 30, 2020 and July 02, 2020	842
Total			349 ³

Table 2 Road Infrastructure Safety Training Courses – Review

Table 2 shows the official and total number of participants⁴ per country-tailored Road Infrastructure Safety Training Course organised by date in Slovenia, hosted by PP AMZS, Croatia hosted by PP FPZ, Bulgaria hosted by PP BBARS, Bosnia and Herzegovina hosted by PP BIHAMK, Montenegro hosted by ASP MTMA, Austria hosted by PP KFV, Hungary hosted by PP KTI and Czech Republic hosted by PP UAMK, Online Training course by LP EIRA-EuroRAP and PP ACM.

¹ Webinars are primarily intended for participants who have already participated in the three-day training course and serve to complete the RADAR course concept. As we are unable to disclose the official number of participants, we are using the number of registered participants. The number of registered participants is thus not unique in this table, however the unique number **Road Infrastructure Safety Webinar on Safer Roads Investment Plans and Provisions for Vulnerable Road Users: Pedestrians and Cyclists** (participants who have not previously attended any training course implemented by RADAR project) – **26**.

² Webinars are primarily intended for participants who have already participated in the three-day training course and serve to complete the RADAR course concept. As we are unable to disclose the official number of participants, we are using the number of registered participants. The number of registered participants is thus not unique in this table, however the unique number on the **Road Infrastructure Safety Webinar on Intelligent Transportation Systems and Speed Management as well as Star Rating for Schools** (participants who have not previously attended any training course implemented by RADAR project) – **40**-

³ The unique number of participants within training course and webinars sums to 269.

⁴ This number represent the total number of all participants on training courses and webinars – 349, which includes all unique registered participants.



Table 2 also shows the official number of participants within Road Infrastructure Safety Webinars on Safer Roads Investment Plans and Provisions for Vulnerable Road Users (Pedestrian and Cyclists) and the webinars on Intelligent Transportation Systems and Star Rating for Schools – both organised by EIRA-EuroRAP.

The highest number of unique registered participants was on the Online Road Infrastructure Safety Training Course (44), followed by Austria (25) and Croatia (23). The highest number of registered participants (i.e., participants who have not attended any of the previously implemented training course) overall was at the Road Infrastructure Safety Webinar on Intelligent Transportation Systems and Star Rating for Schools (84). These numbers are based on the unique numbers of participants and do not include the numbers of official presenters for each training course in the eight countries.

The lowest number of participants was at the Road Infrastructure Safety Training Course in Montenegro (13), followed by the one in the Czech Republic (16). The average number of participants on all training courses across the Danube area implemented by RADAR project is **23**, whereas the average number of participants on all training courses and webinars implemented by the RADAR project is **25**.



Figure 2 Range of participants' profiles in the training courses: occupation

Figure 2 shows the Range of Participants' Profiles based on their occupation at the Road infrastructure safety Training Courses in Slovenia, Croatia, Bulgaria, Bosnia and Herzegovina, Montenegro, Austria, Hungary, Czech Republic, on the Online Road Infrastructure Safety Training course as well as within the Road Infrastructure Safety Webinars on four Thematic Areas (TA1 – Safer Roads Investment Plans; TA2 – Provisions for Vulnerable Road Users (Pedestrians and Cyclists; TA3 – Intelligent Transportation Systems, Speed Management and Traffic Calming Approaches; TA4: Star Rating for Schools).



For the purpose of this analysis, we divided professions of registered participants into three categories: professionals (road safety professionals and engineers), academia (universities, faculties) and public authorities (ministries, national and local authorities). Out of 269 of unique (registered) participants on training courses, most participants were professionals (63%), followed by public authorities (26%); the lowest number of participants was among academic professions (11%).



Figure 3 Range of participants' profiles in the training courses: gender

Figure 3 shows the Range of Participants' Profiles based on their gender at the Road Infrastructure Safety Training Course as well as on the Road infrastructure Safety Online Training course and Webinars. Out of 269 of all unique registered participants on training courses, 23% or a fifth of all participants were female (63) and 77% of participants were male (206).





Figure 4 Average evaluation score in the training courses (based on the evaluation form: min 1, max 5)

Figure 4 shows the average evaluation score on training courses as well as the on online training course and four versions of webinars divided between two groups/parts. For the purpose of this analysis we will be using first webinar (Safer Roads Investment Plans – June 16, 2020) and second webinar (Provisions for Vulnerable Road Users – June 17, 2020) in category **Webinars part 1**, whereas combined third webinar (Intelligent Transportation Systems and Speed Management – June 30, 2020) and fourth webinar (Star Rating for Schools – July 02, 2020) in category **Webinars part 2**. The score is calculated based on the post-evaluation forms which were – for the physical meetings – distributed on the second and third day in all country-tailored training courses, where one is the lowest and five is the highest score. The highest evaluation score on training courses received the Road Infrastructure Safety Training Course in Montenegro (4,9), followed by the training courses in Croatia (4,8) and in Slovenia (4,7). The lowest score of a training course was received in Austria (4,2). The whole average evaluation score in all training course across the Danube area is **4,6**.

3. Training Curriculum

For the output, the curriculum presented in the table below has been developed under the output 3.1 of the WP3 of RADAR project. All the training materials can be found here: <u>http://seafile.irap.org/d/e000f9c7bef5428d9320/</u>



Table 3 Overview of the training curriculum for the 3-day in person training and 2-day online training sessions

	SESSION	ACTIVITIES
	1. Introduction	
	1.1. Introduction to RADAR and RAP Methodology (60 min.)	 Basic road safety assessment concepts Traffic accidents occurrence risk Causes of fatal and serious traffic accidents
		Examples of dangerous locations on road network
	2. Basic concepts of road safety risk ass	essment and safer road investment plan development
	2.1. Overview of Star Rating Process	 Basic Elements of Star Rating
Day 1	(60 min.)	 Project planning, Data Collection, Star Rating Calculation, Results review and analysis
	2.2. Risk Mapping and Performance tracking (30 min.)	 Input data Risk mapping methodology process Data collection and assignment Risk Map types Risk rates calculations Risk Map comparison
	2.3. SRIP and Implementation ready conceptual design layouts (60 min.)	 Creating SRIP plans SRIP economic analysis – basic concepts
	3. Discussion	
	(30 min.)	



	SESSION	ACTIVITIES	
	1. Introduction to Road survey process		
	1.1. Star Rating Survey - Video inspections (30 min.)	 Inspection Technology Example of inspection systems Examples of images collected by unaccredited and accredited road survey system Survey process planning Quality assurance 	
	2. Introduction to VIDA – iRAP online so	ftware	
	2.1. Registering and using VIDA	 ViDA registration 	
	(30 min.)	 ViDA login 	
		Using the ViDA SRS Demonstrator	
Day 2	3. Introduction to road Coding and SRS model		
	3.1. Coding process – basic concepts (45 min.)	 The coding process – Road attribute groups Star Rating Score (SRS) equations Fatality estimation equations 	
	3.2. Introduction to road attribute coding	Coding system	
	(45 min.)	 Basic principles of coding 	
		 Coding of Designs 	
	4. Practical coding Exercises		
	 4.1. Interactive exercises – coding the selected 100m road segment in ViDA Demonstrator (90 min. 	 Coding examples of different road sections 	



	SESSION	ACTIVITIES
	1. Safer Roads Investment Plans	
	 Safer Roads Investment Plans – advanced concepts (60 min.) 	 Countermeasure types Calculating the economic benefits and costs BCR ratios and prioritisation of countermeasures Using the ViDA Trigger sets Defining the economic parameters in ViDA Dataset calibration
	1.2. Quality review and interpretation of safer roads investment plans (60 min.)	 Countermeasure checks Makro and micro checks Casualty map Exploring the issues in star rating, engineering standard issues and maintenance issues
Day 3	2. Using ViDA and Interpreting results	
	2.1. Registering and using VIDA (105 min.)	 Using the SRS Demonstrator – advanced examples Data Filtering in ViDA SRS Map, SRS Table, SRS Chart, Risk worm Detailed condition Report SRIP Table, SRIP Plan and Predicted Casualty Map Using the Advanced project settings and Dataset calibration
	3. Supporting Data collection	
	3.1. Collecting and using the supporting data in the post-coding process (45 min.)	 Demographic and economic data AADT data, motorcycle, bicycle and pedestrian flow data Road traffic accidents data Operating speed data
	4. Discussion	



	 4.1. Discussion and conclusions on training stage 1 and introduction to stage 2 training (30 min.) 		
	SESSION	ACTIVITIES	
	1. Thematic Area 1 – General road safet	y and SRIP	
2 TA	1.1. Webinar – presentations on Thematic Area 1	Examples of existing sections and design files that will demonstrate how RAP tools can be used to prepare implement measures form TA1	
webinars	2. Thematic Area 3 – ITS, speed management and traffic calming approaches		
online	2.1. Webinar – presentations on Thematic Area 2	 Examples of existing sections and design files that will demonstrate how RAP tools can be used to prepare implement measures form TA2 	
	SESSION	ACTIVITIES	
	1. Thematic Area 2 – Provision for Vulne	erable Road Users	
2 TA webinars online	 Webinar – presentations on Thematic Area 3 	Examples of existing sections and design files that will demonstrate how RAP tools can be used to prepare implement measures form TA3	
	2. Thematic Area 4 – Road Safety Near S	ichools	
	2.1. Webinar – presentations on Thematic Area 4	Examples of existing sections and design files that will demonstrate how RAP tools can be used to prepare implement measures form TA4	

4. Trainings per country

The following section provides an overview of the training sessions, including four webinars, and the project training log file per country/training session can be found here:

http://seafile.irap.org/d/bcc288f6a46d47a09ce7/

4.1. Road Infrastructure Safety Training Course Slovenia

March 22, 25-26, 2019 Slovenia, Ljubljana Organised by Automobile and Motorcycle Association of Slovenia (AMZS), ERDF PP1



Figure 5 Road Infrastructure Safety Training Course in Slovenia (March 22, 25-26, 2019)

Number of participants: 22⁵

Average Score Evaluation: 4,7/5

Training Course Presenters:

- Jure Kostanjšek, AMZS
- Marko Ševrović, EIRA-EuroRAP
- Klemen Filipič, AMZS
- Nikola Galović, Rotondo

⁵ List of participants can be accessed here: <u>http://seafile.irap.org/d/79e7d2b5102d4e66b14e/</u>



4.1.1. Training Course Process Review

Course specifics: The Slovenian Chamber of Engineers 'IZS' acknowledged the RADAR three-day training course in Slovenia for licensed engineers attending the trainings to gain points for their license's renewal, gaining two credit points for each day of participation.

The training course materials can be accessed here:

http://seafile.irap.org/d/6b31bed122b44d108161/

The Road Infrastructure Safety Training Course launched in Slovenia, involving licensed road safety auditors as well as representatives of road authorities who are responsible for road design, management, and maintenance was highly accepted and successful among participants. Based on the post-evaluation forms, participants evaluated the three-day training course as **4**,**7** out of 5.

Figure 6 shows the range of participants' profiles in the training course in Slovenia based on their occupancies. As seen the course was attended by professionals (54%), followed by representatives of authorities (32%) and academia (14%).



Figure 6 Range of participants' profiles in the training course in Slovenia: occupation





Figure 7 Range of participants' profiles in the training course in Slovenia: gender

Figure 7 shows range of participants' profiles in the training course in Slovenia based on their gender. As seen in the figure, 86% of the participants were male, whereas 14% were female.

The successful performance of the Road Infrastructure Safety Training Course in Slovenia has been promoted on RADAR project social media channels as well as on the official RADAR project website and newsletter⁶.

The success of the training course has also been accompanied by many positive encouragements and appraisals:

Three-day RADAR training in Slovenia was a huge success, as we managed to present first day topics at the National Road Safety Agency road safety annual event, intended for licensed road safety auditors. Present were also traffic police representatives. At day 2 and 3, Chamber of engineers acknowledged RADAR trainings for licensed engineers attending the trainings to gain points for their license's renewal. Also, representatives from Ministry, University for Civil Engineering, engineering companies, road designers and licensed road safety auditors attended the trainings. Feedbacks from trainings were exceptional, also participants' interactive cooperation during trainings proved their interest.

— Jure Kostanjšek, AMZS

⁶ An article on the Road Infrastructure Safety Training Course in Slovenia has been published on the official RADAR project website. The article can be accessed here: <u>http://www.interreg-danube.eu/news-and-events/project-news/3865</u>



4.2. Road Infrastructure Safety Training Course Croatia

April 02-04, 2019 Croatia, Zagreb Organised by University of Zagreb, Faculty of Transport and Traffic Sciences (FPZ), ERDF PP2



Figure 8 Road Infrastructure Safety Training Course in Croatia (April 02-04, 2019)

Number of participants: 237

Average Score Evaluation: 4,8/5

Training Course Presenters:

- Marko Ševrović, EIRA-EuroRAP
- Sanja Leš, FPZ
- Bojan Jovanović, FPZ
- Jure Kostanjšek, AMZS

4.2.1. Training Course Process Review

Course specifics: The Road Infrastructure Safety Training Course in Croatia, involving licensed road safety auditors as well as representatives of road authorities who are responsible for road design, management, and maintenance was highly interactive and successfully scored among participants. Based on the post-evaluation forms, participants evaluated the three-day training course as **4**,**8** out of 5.

The training course materials can be accessed here:

http://seafile.irap.org/d/e4f7a2b04e58407b81d2/

⁷ List of participants can be accessed here: <u>http://seafile.irap.org/d/8290ae6cd27e41848ad2/</u>



Figure 9 shows the range of participants' profiles in the training course in Croatia based on their occupancies. As seen the course was attended by professionals (78%), followed by representatives of authorities (18%) and academia (4%).



Figure 9 Range of participants' profiles in the training course in Croatia: occupation





Figure 10 Range of participants' profiles in the training course in Croatia: gender

Figure 10 shows range of participants' profiles in the training course in Croatia based on their gender. As seen in the figure, 91% of the participants were male, whereas 9% were females.

The successful performance of the Road Infrastructure Safety Training Course in Croatia has been promoted on RADAR project social media channels as well as on the official RADAR project website and newsletter⁸.

The success of the training course has also been accompanied by many positive encouragements and appraisals:

Interactivity and discussions on relevant road safety issues is proving to be a great formula for raising awareness on latest trends in road safety, which RADAR aims to promote on all levels of the Danube region.

— **Sanja Leš**, FPZ

4.3. Road Infrastructure Safety Training Course Bulgaria

June 11-13, 2019 Sofia, Bulgaria Organised by Bulgarian Association for Road Safety (BBARS), ERDF PP5

⁸ An article on the Road Infrastructure Safety Training Course in Croatia has been published on the official RADAR project website. The article can be accessed here: <u>http://www.interreg-danube.eu/news-and-events/project-news/3929</u>





Figure 11 Road Infrastructure Safety Training Course in Bulgaria (June 11-13, 2019)

Number of participants: 219

Average Score Evaluation: 4,6/5

Training Course Presenters:

- Marko Ševrović, EIRA-EuroRAP
- Sanja Leš, FPZ

4.3.1. Training Course Process Review

Course specifics: The Road Infrastructure Safety Training Course in Bulgaria, involving licensed road safety auditors as well as representatives of road authorities who are responsible for road design, management, and maintenance was highly interactive and successfully scored among participants. Based on the post-evaluation forms, participants evaluated the three-day training course as **4**,**6** out of 5.

The training course materials can be accessed here:

http://seafile.irap.org/d/4eb2ab4f742946aa84a5/

Figure 12 shows the range of participants' profiles in the training course in Bulgaria based on their occupancies. As seen, the course was attended by professionals (81%), followed by representatives of authorities (19%); there were however no participants of academic profession.

⁹ List of participants can be accessed here: <u>http://seafile.irap.org/d/ca4e67d7b0594301b9e3/</u>





Figure 12 Range of participants' profiles in the training course in Bulgaria: occupation



Figure 13 Range of participants' profiles in the training course in Bulgaria: gender



Figure 13 shows the range of participants' profiles in the training course in Bulgaria based on their gender. As seen in the figure, 67% of the participants were male, whereas 33% were females.

The successful performance of the Road Infrastructure Safety Training Course in Bulgaria has been promoted on RADAR project social media channels as well as on the official RADAR project website and newsletter¹⁰.

4.4. Road Infrastructure Safety Training Course Bosnia and Herzegovina

June 17-19, 2019 Sarajevo, Bosnia and Herzegovina Organised by Bosnia and Herzegovina Automobile Club (BIHAMK), IPA PP1



Figure 14 Road Infrastructure Safety Training Course in Bosnia and Herzegovina (June 17-19, 2019)

Number of participants: 2111

Average Score Evaluation: 4,5/5

Training Course Presenters:

- Marko Ševrović, EIRA-EuroRAP
- Sanja Leš, FPZ
- Bojan Jovanović, FPZ

¹⁰ An article on the Road Infrastructure Safety Training Course in Bosnia and Herzegovina has been published on the official RADAR project website. The article can be accessed here: <u>http://www.interreg-danube.eu/news-and-events/project-news/4202</u>

¹¹ List of participants can be accessed here: <u>http://seafile.irap.org/d/d92a128573204cdcbd90/</u>



4.4.1. Training Course Process Review

Course specifics: The Road Infrastructure Safety Training Course in Bosnia and Herzegovina, involving licensed road safety auditors as well as representatives of road authorities who are responsible for road design, management, and maintenance was highly interactive and successfully scored among participants. Based on the post-evaluation forms, participants evaluated the three-day training course as **4**,**5** out of 5.

The training course materials can be accessed here:

http://seafile.irap.org/d/a05d63dfc6bb4c7db799/

Figure 15 shows the range of participants' profiles in the training course in Bulgaria based on their occupancies. As seen, the course was attended by professionals (62%), followed by representatives of authorities (29%) and academia (9%).



Figure 15 Range of participants' profiles in the training course in Bosnia and Herzegovina: occupation





Figure 16 Range of participants' profiles in the training course Bosnia and Herzegovina: gender

Figure 16 shows range of participants' profiles in the training course in Bosnia and Herzegovina based on their gender. As seen in the figure, 62% of the participants were male, whereas 38% were female.

The successful performance of the Road Infrastructure Safety Training Course in Bosnia and Herzegovina has been promoted on RADAR project social media channels as well as on the official RADAR project website and newsletter¹².

4.5. Road Infrastructure Safety Training Course Montenegro

June 25-27, 2019 Podgorica, Montenegro Organised by Ministry of Transport and Maritime Affairs (MTMA), ASP

¹² An Article on the Road Infrastructure Safety Training Course in Bosnia and Herzegovina has been published on the official RADAR project website. The article can be accessed here: <u>http://www.interreg-danube.eu/news-and-events/project-news/4202</u>





Figure 17 Road Infrastructure Safety Training Courses in Montenegro (June 25-27, 2019)

Number of participants: 1313

Average Score Evaluation: 4,9/5

Training Course Presenters:

- Olivera Rozi, EIRA-EuroRAP
- Nikola Galović, Rotondo

4.5.1. Training Course Process Review

Course specifics: The Road Infrastructure Safety Training Course in Montenegro, involving licensed road safety auditors as well as representatives of road authorities who are responsible for road design, management, and maintenance was highly interactive and successfully scored among participants. Based on the post-evaluation forms, participants evaluated the three-day training course as **4**,**9** out of 5.

The training course materials can be accessed here:

http://seafile.irap.org/d/b8eb17d71b0a4045ae3d/

Figure 18 shows the range of participants' profiles in the training course in Montenegro based on their occupancies. As seen, the course was attended by representatives of authorities (61%), followed by professionals (31%) and academia (8%).

¹³ List of participants can be accessed here: <u>http://seafile.irap.org/d/4570237ecd41422baa9b/</u>





Figure 18 Range of participants' profiles in the training course in Montenegro: occupation



Figure 19 Range of participants' profiles in the training course in Montenegro: gender



Figure 19 shows range of participants' profiles in the training course in Montenegro based on their gender. As seen in the figure, 60% of the participants were male, whereas 40% were females.

The successful performance of the Road Infrastructure Safety Training Course in Montenegro has been promoted on RADAR project social media channels as well as on the official RADAR project website and newsletter¹⁴.

4.6. Road Infrastructure Safety Training Course Austria

September 16-18, 2019 Vienna, Austria Organised by Austrian Road Safety Board (KFV), ERDF PP6



Figure 20 Road Infrastructure Safety Training Course in Austria (September 16-18,2019)

Number of participants: 2515

Average Score Evaluation: 4,2/5

Training Course Presenters:

- Marko Ševrović, EIRA-EuroRAP
- Jure Kostanjšek, AMZS,
- Bojan Jovanović, FPZ

¹⁴ Article on Road Infrastructure Safety Training Course in Montenegro has been published on RADAR project official website. The article can be accessed here: <u>http://www.interreg-danube.eu/news-and-events/project-news/4511</u>

¹⁵ List of participants can be accessed here: <u>http://seafile.irap.org/d/37c562b2331144ef8038/</u>



4.6.1. Training Course Process Review

Course specifics: The Road infrastructure safety Training Course in Austria, involving licensed road safety auditors, as well as representatives of road authorities, who are responsible for road design, management, and maintenance was highly interactive and successfully scored among participants. Based on the post-evaluation forms, participants evaluated the three-day training course as **4**,**2** out of 5.

The training course materials can be accessed here:

http://seafile.irap.org/d/db96a5a6df7641bcae7c/

Figure 21 shows the range of participants' profiles in the training course in Austria based on their occupancies. As seen the course was attended by professionals (56%), followed by representatives of authorities (40%) and academia (4%).



Figure 21 Range of participants' profiles in the training course in Austria: occupation





Figure 22 Range of participants' profiles in the training course in Austria: gender

Figure 22 shows range of participants' profiles in the training course in Austria based on their gender. As seen in the figure, 80% of the participants were male, whereas 20% were female.

The successful performance of the Road Infrastructure Safety Training Course in Austria has been promoted on RADAR project social media channels as well as on the official RADAR project website and newsletter¹⁶.

The success of the training course has been also accompanied by many positive encouragements and appraisals:

We had a good training – three very interesting days. We learned a lot. I was not aware of how complex and comprehensive the whole machinery and road assessment programme of EuroRAP is. Many road safety experts contributed to discussion – even though it was in English. I am glad to have had that training in Austria.

— Klaus Machata, Austrian Road Safety Boards (KFV)

The training course in Austria was probably the best one we have had so far – that is in terms of the quality of the presentations. The big part of that is we probably had more experience by then. Of course, the whole concept is a quite a complicated thing and maybe 3-days is quite a short period for actually people getting the full confidence in using the system. But this gives us a lot of inputs on how we should structure the webinar. A lot of things that were not covered in this training, can be presented in the webinars.

— Marko Ševrović (EIRA-EuroRAP)

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¹⁶ Article on Road Infrastructure Safety Training Course in Austria has been published on RADAR project official website. The article can be accessed here: <u>http://www.interreg-danube.eu/news-and-events/project-news/4752</u>



4.7. Road Infrastructure Safety Training Course Hungary

November 5-7, 2019 Budapest, Hungary Organised by KTI Institute for Transport Sciences Nonprofit Ltd (KTI), ERDF PP3



Figure 23 Road Infrastructure Safety Training Courses in Hungary (November 5-7,2019)

Number of participants: 1817

Average Score Evaluation: 4,5/5

Training Course Presenters:

- Jure Kostanjšek, AMZS
- Bojan Jovanović, FPZ

4.7.1. Training Course Process Review

Course specifics: The Road Infrastructure Safety Training Course in Hungary, involving licensed road safety auditors as well as representatives of road authorities who are responsible for road design, management, and maintenance was highly interactive and successfully scored among participants. Based on the post-evaluation forms, participants evaluated the three-day training course as **4**,**5** out of 5.

The training course materials can be accessed here: http://seafile.irap.org/d/3c9a0fde562a4e97afa8/

¹⁷ List of participants can be accessed here: <u>http://seafile.irap.org/d/9928cc00a2d34dbeaae4/</u>



Figure 23 shows the range of participants' profiles in the training course in Hungary based on their occupancies. As seen, the course was attended by professionals (56%), followed by representatives of authorities (33%) and academia (11%).



Figure 24 Range of participants' profiles in the training course in Hungary: occupation





Figure 25 Range of participants' profiles in the training course in Hungary: gender

Figure 25 shows range of participants' profiles in the training course in Hungary based on their gender. As seen in the figure, 61% of the participants were male, whereas 39% were female.

The successful performance of the Road Infrastructure Safety Training Course in Hungary has been promoted on RADAR project social media channels as well as on the official RADAR project website and newsletter¹⁸.

¹⁸ Article on Road Infrastructure Safety Training Course in Hungary has been published on RADAR project official website. The article can be accessed here: <u>http://www.interreg-danube.eu/news-and-events/project-news/4876</u>



4.8. Road Infrastructure Safety Training Course in Czech Republic

November 26-28, 2019 Prague, Czech Republic Organised by General Automotoclub of the Czech Republic (UAMK), ERDF PP4



Figure 26 Road Infrastructure Safety Training Courses in Czech Republic (November 26-28,2019)

Number of participants: 1619

Average Score Evaluation: 4,4/5

Training Course Presenters:

- Klemen Filipič, AMZS
- Jure Kostanjšek, AMZS
- **Bojan Jovanović**, FPZ
- Jiří Landa, UAMK

4.8.1. Training Course Process Review

Course specifics: The Road Infrastructure Safety Training Course in Czech Republic, involving licensed road safety auditors as well as representatives of road authorities who are responsible for road design, management, and maintenance was highly interactive and successfully scored among participants. Based on the post-evaluation forms, participants evaluated the three-day training course as **4**,**4** out of 5.

The training course materials can be accessed here:

http://seafile.irap.org/d/e1e95b92fd8946f6bedb/

¹⁹ List of participants can be accessed here: <u>http://seafile.irap.org/d/7d4cad4bbe0547748d58/</u>



Figure 27 shows the range of participants' profiles in the training course in Czech Republic based on their occupancies. As seen the course was attended by professionals (50%), followed by representatives of authorities (38%) and academia (12%).



Figure 27 Range of participants' profiles in the training course in the Czech Republic: occupation





Figure 28 Range of participants' profiles in the training course in the Czech Republic: gender

Figure 28 shows range of participants' profiles in the training course in the Czech Republic based on their gender. As seen in the figure, 75% of the participants were male, whereas 25% were female.

The successful performance of the Road Infrastructure Safety Training Course in Czech Republic has been promoted on RADAR project social media channels as well as on the official RADAR project website and newsletter²⁰.

²⁰ An article on the Road Infrastructure Safety Training Course in the Czech Republic has been published on the official RADAR project website. The article can be accessed here: <u>http://www.interreg-danube.eu/news-and-events/project-news/4948</u>



4.9. Online Road Infrastructure Safety Training Course (Moldova)

May 11-13, 2020

Online

Organised by European Institute of Road Assessment – EuroRAP (EIRA-EURORAP), LP, and Automobile Club of Moldova (ACM), ENI MD PP1



Figure 29 Road Infrastructure Safety Online Training Courses (May 11-13,2020)

Number of participants: 44 (from 21 countries)

Average Score Evaluation: 4,6/5



Training Course Presenters:

- Jure Kostanjšek, AMZS
- Marko Ševrović, EIRA-EuroRAP
- Olivera Rozi, EIRA-EuroRAP
- Bojan Jovanović, FPZ

4.9.1. Training Course Process Review

Course specifics: The Road Infrastructure Safety Online Training Course, involving licensed road safety auditors as well as representatives of road authorities who are responsible for road design, management, and maintenance was highly interactive and successfully scored among participants. Based on the post-evaluation forms, participants evaluated the three-day training course as **4**,**6** out of 5.

The training course materials can be accessed here:

http://seafile.irap.org/d/ccab5e2ff76946fc965e/

Figure 30 shows the range of participants' profiles on the online training course based on their occupancies. As seen the course was attended by professionals (68%), followed by representatives of authorities (16%) and academia (16%).



Figure 30 Range of participants' profiles in the online training course: occupation





Figure 31 Range of participants' profiles in the online training course: gender

Figure 31 shows range of participants' profiles in the online training course based on their gender. As seen in the figure, 77% of the participants were male, whereas 23% were females.

The successful performance of the online Road Infrastructure Safety Training Course has been promoted on RADAR project social media channels as well as on the official RADAR project website and newsletter²¹.

The success of the training course has also been accompanied by many positive encouragements and appraisals:

Although the Road Infrastructure Safety Course was planned to be held just for Moldovan interested stakeholders and specialists in road infrastructure safety inperson, and despite the tough times due to Covid-19, the RADAR project team managed to organize a wonderful and professional ONLINE training with the participation of not only Moldova but also other countries! We welcome such an inspiration and interest to learn more about making roads safe!"

— Tatiana Mihailova, Automobile Club of Moldova

²¹ An article on Online Road Infrastructure Safety Training Course has been published on the official RADAR project website. The article can be accessed here: <u>http://www.interreg-danube.eu/news-and-events/project-news/5234</u>



4.10. Road Infrastructure Safety Webinars on Safer Roads Investment Plans and Provisions for Vulnerable Road Users (Pedestrians and Cyclists)

June 16-17, 2020 Online Organised by European Institute of Road Assessment – EuroRAP (EIRA-EURORAP), LP



Figure 32 Road Infrastructure Safety Webinars on SRIP and Provisions for VRUs (June 16-17,2020)

Number of registered participants: 62 Number of participated: 26

Average Score Evaluation: 4,6/5

Webinar Presenters:

- Jure Kostanjšek, AMZS
- Marko Ševrović, EIRA-EuroRAP
- Olivera Rozi, EIRA-EuroRAP
- Bojan Jovanović, FPZ

4.10.1. Webinar Process Review

Webinar specifics: Webinars on Safer Roads Investment Plans an Provisions for Vulnerable Roads Users (Pedestrians and Cyclists) under the Road Infrastructure Safety Webinar part 1 had been announced during the three-day Road Infrastructure Safety Training Courses in each



country and are primarily intended for those who have already participated in any of the training courses to complete the RADAR project courses concept by participating in altogether four webinars which were divided between two parts.

The webinars materials can be accessed here: http://seafile.irap.org/d/53acc870719f4841b10e/

The Road Infrastructure Safety Webinars on Safer Roads Investment Plans and Provisions for Vulnerable Road Users (Pedestrians and Cyclists), involving licensed road safety auditors as well as representatives of road authorities who are responsible for road design, management, and maintenance were highly interactive and successfully scored among participants. Based on the post-evaluation forms, participants evaluated the webinars as **4,6** out of 5.

Figure 33shows the range of participants' profiles based on their occupancies. The webinars were attended by professionals (54%), followed by representative of academic professions (27%) and representatives of authorities (19%).



Figure 33 Range of participants' profiles in webinars part 1: occupation





Figure 34 Range of participants' profiles in webinars part 2: gender

Figure 34 shows range of participants' profiles in the webinars based on their gender. As seen in the figure, 85% of the participants were male, whereas 15% were female. The successful performance of the Road Infrastructure Safety Webinars has been promoted on RADAR project social media channels as well as on the official RADAR project website and newsletter²².

4.11. Road Infrastructure Safety Webinars on Intelligent Transportation Systems and Speed Management as well as Star Rating for Schools

June 30 and July 02, 2020 Online Organised by European Institute of Road Assessment – EuroRAP (EIRA-EURORAP), LP

²² Articles on the Road Infrastructure Safety Webinar have been published on the official RADAR project website. The articles can be accessed here: <u>http://www.interreg-danube.eu/news-and-events/project-news/5294</u> (Safer Roads Investment Plans) and <u>http://www.interreg-danube.eu/news-and-events/project-news/5301</u> (Provisions for Vulnerable Road Users).





Figure 35 Road Infrastructure Safety Webinars on ITS, Speed Management and Star Rating for Schools (June 30, July 02, 2020)

Number of registered participants: 84 Number of participated: 40

Average Score Evaluation: 4,5/5

Webinar Presenters:

- Gábor Pauer, KTI
- Holló Péter, KTI
- Marko Ševrović, EIRA-EuroRAP
- Olivera Rozi, EIRA-EuroRAP
- Rafaela Machado, RS4S Global coordinator, iRAP
- Julio Urzúa, Regional Director, the Americas, iRAP

4.11.1. Webinar Process Review

Webinars specifics: Webinars on Intelligent Transportations Systems and Speed Managements as well as Star Rating for Schools under the Road Infrastructure Safety Webinar part 2 had been announced during the three-day Road Infrastructure Safety Training Courses in each country and are primarily intended for those who have already participated in any of the training courses to complete the RADAR project courses concept by participating in altogether four webinars which were divided between two parts. the two webinars.



The webinars materials can be accessed here: http://seafile.irap.org/d/99e0ef8cb0a9418b9a2f/

The Road Infrastructure Safety Webinars on Intelligent Transportation Systems and Speed Management as well as Star Rating for Schools, involving licensed road safety auditors as well as representatives of road authorities who are responsible for road design, management, and maintenance were highly interactive and successfully scored among participants. Based on the post-evaluation forms, participants evaluated the Webinars as **4,5** out of 5.

*Figure 36*shows the range of participants' profiles on the online training course based on their occupancies. As seen, the course was attended by professionals (73%), followed by representatives of authorities (17%) and academia (10%).



Figure 36 Range of participants' profiles in webinars part 2: occupation





Figure 37 Range of participants' profiles in the webinars part 2: gender

Figure 37 shows range of participants' profiles in the webinar based on their gender. As seen in the figure, 83% of the participants were male, whereas 17% were female. The successful performance of the Road Infrastructure Safety Webinars has been promoted on RADAR project social media channels as well as on the official RADAR project website and newsletter²³.

5. Final Remarks

The high value of the training courses organised under RADAR project WP3 has been demonstrated by the overall satisfaction of participants with the trainings that reached the average score of 4.6/5.

The year 2020 and the COVID-19 outbreak in Europe and elsewhere has forced the project team to adapt to new circumstances with restricted travelling and a ban of physical gatherings for events that were in force for most of 2020 in all countries. Therefore, an online training session and webinars have been delivered instead of in-person trainings. This experience has provided valuable evidence in comparing trade-offs between physical and online events. The provision of online events has enlarged the participants base both from the perspective of target groups as well as from the perspective of participating countries. By that, the RADAR project has benefitted from the opportunity to disseminate its output to a much wider public with bigger geographical spread. However, some part of valuable exchange of knowledge and discussion/comparison on existing national schemes, real hands-on experience that can be observed in in-person trainings has been difficult to achieve in online session. Therefore, these

²³ Articles on the Road Infrastructure Safety Webinar have been published on the official RADAR project website. The articles can be accessed here: <u>http://www.interreg-danube.eu/news-and-events/project-news/5325</u> (Intelligent Transportation Systems and Speed Management) and <u>http://www.interreg-danube.eu/news-and-events/project-news/5332</u> (Star Rating for Schools).



differences should be considered for future planning of training courses with benefits and disadvantages of each approach considered in planning stage.

In addition to that, new developments that took place during the project implementation, such as the new Directive on Road Infrastructure Safety Management 2019/1936, should in future projects drive the update of the Road Safety Training Concept and thus Training Courses to include a special section on provisions of the directive and how/which of these can be addressed by methodologies proposed in RADAR.