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IMPROVING ROAD SAFETY IN DANUBE AREA FOR ALL ROAD USERS:

Challenges and Opportunities in the Second decade of Action for Road Safety (2021–2030)

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

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Moderator

Anja SORSAK,
European Institute for
Road Assessment (EIRA)

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Welcome note

Olivera ROZI,
LP Project Director,
European Institute for
Road Assessment (EIRA)

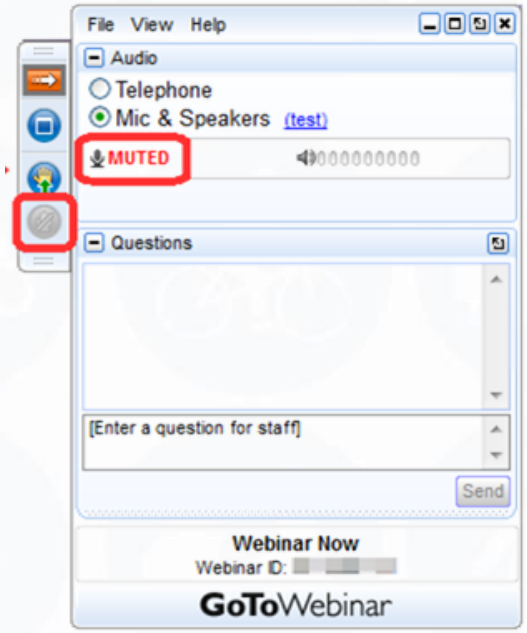
Ferdinand SMITH,
LP Board Director,
EuroRAP Chairperson

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

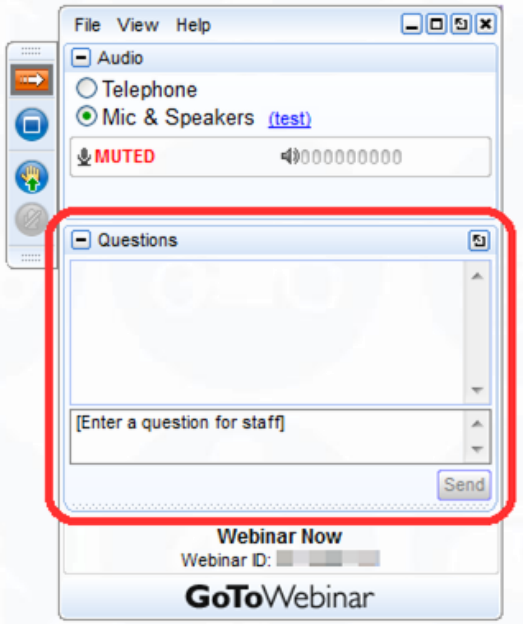
Housekeeping

Conference: 2,5 hours

Question time: 10-15 mins



Attendees' microphones are muted



Type your questions here

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Keynote speakers

Matthew BALDWIN,
EU Commission

Steve PHILLIPS,
Conference of European Directors of Roads

Franc ZEPIC,
EUSDR – PA1b: To improve mobility and multimodality

Lina KONSTANTINOPOLOU,
European Road Assessment Programme (EuroRAP)

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

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Agenda

10:30 – 11:30 a.m.*
RADAR project

Ana LEGANEL, *Danube Transnational Programme*
Danube Transnational Programme presentation

Olivera ROZI, *European Institute of Road Assessment – EuroRAP (EIRA-EuroRAP)*
Strategic project for road safety improvement in Danube area – RADAR

Jure KOSTANJŠEK, *Automobile Association of Slovenia (AMZS)*
How to target infrastructure spending with Safer Roads Investment Plans?

Bojan JOVANOVIĆ, *University of Zagreb, Faculty of Transport and Traffic Sciences (FPZ)*
What can we do for Vulnerable Road Users infrastructure safety?

Prof. Peter HOLLO and Gabor PAUER, *KTI Institute for Transport Sciences Nonprofit Ltd*
Smart Speed Management Infrastructure

Stelios EFSTATHIADIS, *Transportation Solutions*
Road Infrastructure Safety near Schools in Danube region

Franc ŽEPIČ, *European Union Strategy for Danube Region (EUSDR)* and
Marko ŠEVROVIĆ, *European Institute of Road Assessment – EuroRAP (EIRA-EuroRAP)*
Danube Region Infrastructure Improvement Strategy and EUSDR – RISM Challenge

Q&A

11:30 – 12:30 a.m.*
SABRINA project

Welcome note

Boštjan PRIMC, *Municipality of Ilirska Bistrica*
A view from municipality perspective: Challenges and needs of cycling infrastructure safety

Aleksander BUCZYŃSKI, *European Cyclists' Federation (ECF)* and
Marko ŠEVROVIĆ, *European Institute of Road Assessment - EuroRAP (EIRA-EuroRAP)*
Assessing Cycling Infrastructure Safety – current state of art

Klaus MACHATA, *Austrian Road Safety Board (KfV)*
Best Practices in cycling infrastructure – across strategic, planning and engineering levels

Olivera ROZI, *European Institute of Road Assessment - EuroRAP (EIRA-EuroRAP)*
Strategic project for safer bicycle routes in Danube area – SABRINA

Q&A

*Timings are indicative and can vary +/- 15 minutes

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Matthew BALDWIN
Deputy Director-General
EU Commission,
Department of Mobility and Transport

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

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Steve PHILLIPS
Secretary-General
Conference of European Directors of Roads

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

Conference of European Directors of Roads

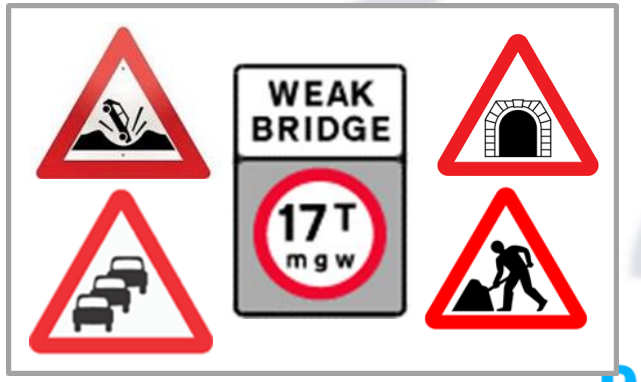
"CEDR is an organisation of European national road administrations that promotes Excellence in the Management of Roads" (CEDR Mission)

Full members:28 national road authorities

40 national road authoriities enagaged

Common NRA 'opportunities'

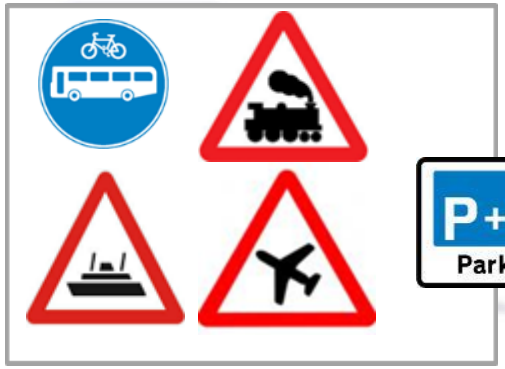
Maintenance & ageing infrastructure



Connectivity & Digitilisation

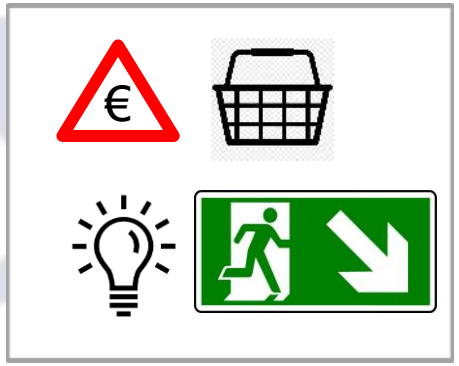
Climate change & resilience

Intermodal transport



Liveability & Health

Resources & Procurement



CEDR on Road Safety

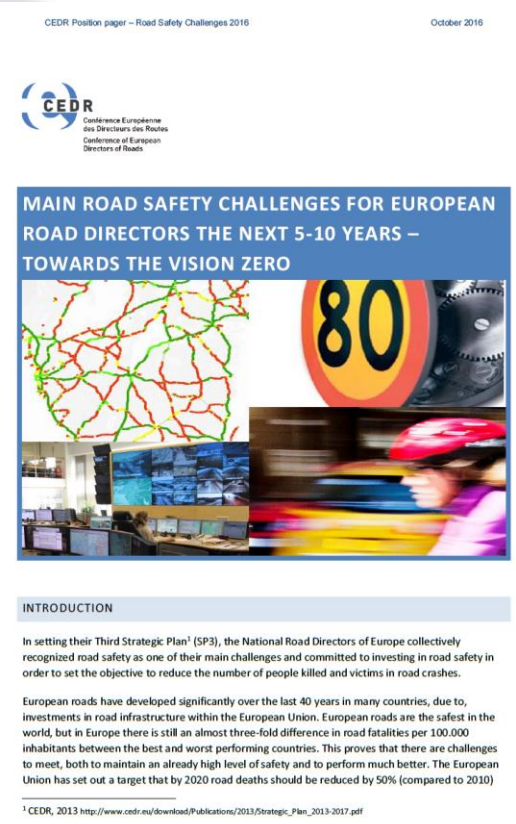
Common agenda based on 4 challenges:

1. Improve safety of THE **existing road** infrastructure

2. **Speeds** in harmony with road infrastructure

3. Improve safety of **vulnerable road users**

4. Evaluation and deployment of **intelligent transport systems**



CEDR Position pager – Road Safety Challenges 2016 October 2016

CEDR
Conférence Européenne des Directeurs des Routes
Conference of European Directors of Roads

MAIN ROAD SAFETY CHALLENGES FOR EUROPEAN ROAD DIRECTORS THE NEXT 5-10 YEARS – TOWARDS THE VISION ZERO

INTRODUCTION

In setting their Third Strategic Plan[1] (SP3), the National Road Directors of Europe collectively recognized road safety as one of their main challenges and committed to investing in road safety in order to set the objective to reduce the number of people killed and victims in road crashes.

European roads have developed significantly over the last 40 years in many countries, due to, investments in road infrastructure within the European Union. European roads are the safest in the world, but in Europe there is still an almost three-fold difference in road fatalities per 100.000 inhabitants between the best and worst performing countries. This proves that there are challenges to meet, both to maintain an already high level of safety and to perform much better. The European Union has set out a target that by 2020 road deaths should be reduced by 50% (compared to 2010)

[1] CEDR, 2013 http://www.cedr.eu/download/Publications/2013/Strategic_Plan_2013-2017.pdf

Outputs for road authorities

Some safety outputs include:

Forgiving roadsides
Self-explaining roads
Incident Management
Accident Prediction Models (APM)
Stopping Sight Distance
Tools for site visits
Road worker safety
Vehicle restraint systems
Cycling and walking

Open call on Safe Smart Highways!
(deadline 8 December)

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Franc ZEPIC

Coordinator

EUSDR – PA1b: To improve mobility and multimodality

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Lina KONSTANTINOPOLOU
Secretary General
European Road Assessment Programme (EuroRAP)

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RADAR project

10:30-11:30

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Danube Transnational Programme presentation

Ana LEGANEL

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Strategic project for road safety improvement in Danube area – RADAR

Olivera ROZI

European Institute for Road Assessment – EuroRAP (EIRA-EuroRAP)

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In this presentation I will

- Explain why RADAR strategic project is needed
- Demonstrate what has been achieved so far
- Present who we are
- Highlight what will make it success

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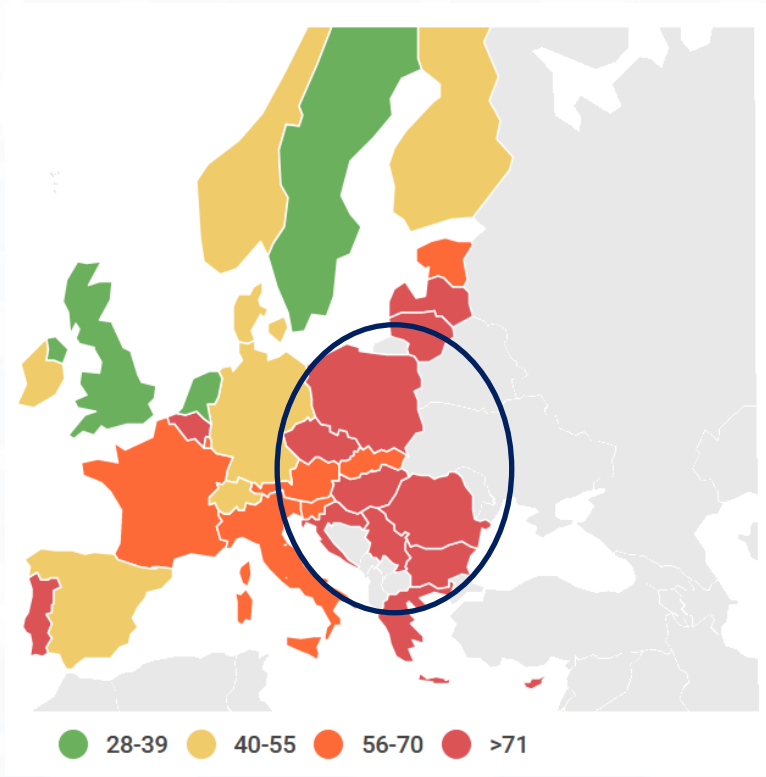
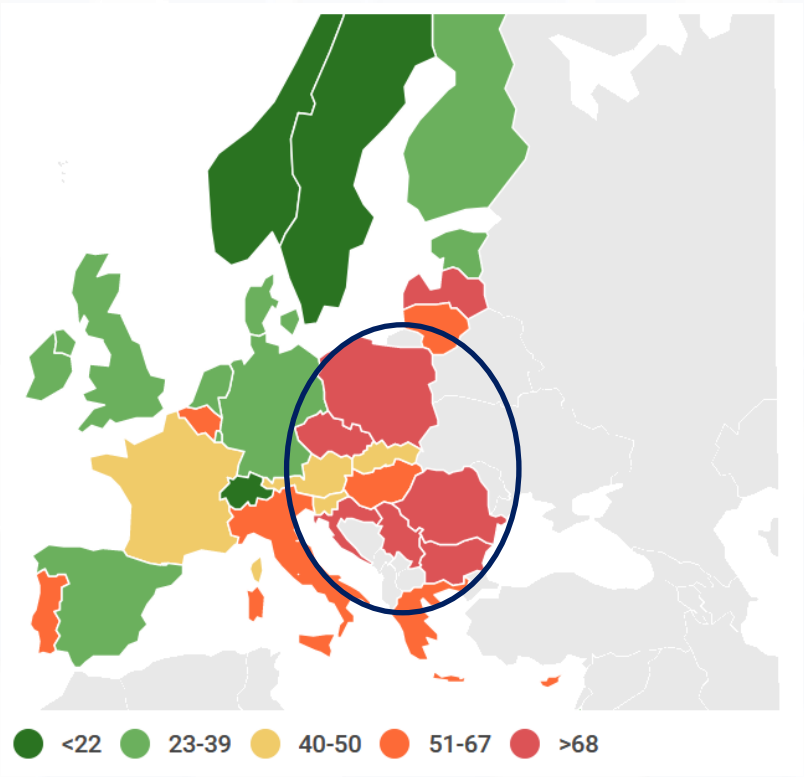
Why RADAR with one look

Road deaths per million inhabitants



2010



2019

Source: European Transport Safety Council, www.etsc.eu

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RADAR as Strategic Project

Strategic objectives

IMPROVE THE CAPACITIES TO IDENTIFY AND REDUCE RISK ON ROADS

FOSTER TRANSNATIONAL COOPERATION, EXCHANGE OF EXPERIENCE AND KNOW-HOW

DEMONSTRATION OF ROAD SAFETY LAYOUT CONCEPT SOLUTIONS

Improving Performance

- Road Safety Procedures Training Concept
- Training Courses

- Road Safety Expert Group
- Road Safety Thematic Areas Reports

- 4 pilots implementation ready design plans for road safety improvements

Danube Infrastructure Road Safety Improvement Strategy and Action Plan

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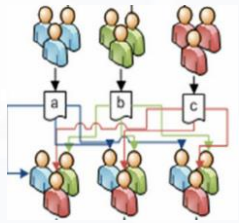
RADAR first 2 years in brief



Road Safety procedures Training Concept

- Survey on needs
- Status Report
- Training Syllabus
- All training materials and software translated to 7 principal languages of the partner countries

Training Courses

- 8 countries: 3-day live training sessions
- 4 webinars

Exchange of good practices

- 4 thematic Study Visits
  - Slovenia/Croatia – VRU
  - UK – Safer Roads Investments Plans
  - HU – Speed Management
  - AT – Safety near Schools

Road Safety Expert Group

- SAFER ROADS INVESTMENTS PLANS
- VULNERABLE ROAD USERS
- ITS AND SPEED MANAGEMENT
- ROAD SAFETY NEAR SCHOOLS

Danube Infrastructure Road Safety Improvement Strategy and Action Plans

Methodology used: EuroRAP and ViDA software

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Road Safety Procedures Training Concept

- www.interreg-danube.eu/approved-projects/radar/outputs

Training Courses

- www.interreg-danube.eu/approved-projects/radar/section/road-infrastructure-safety-training-courses

Exchange of Good Practices

- www.interreg-danube.eu/approved-projects/radar/outputs

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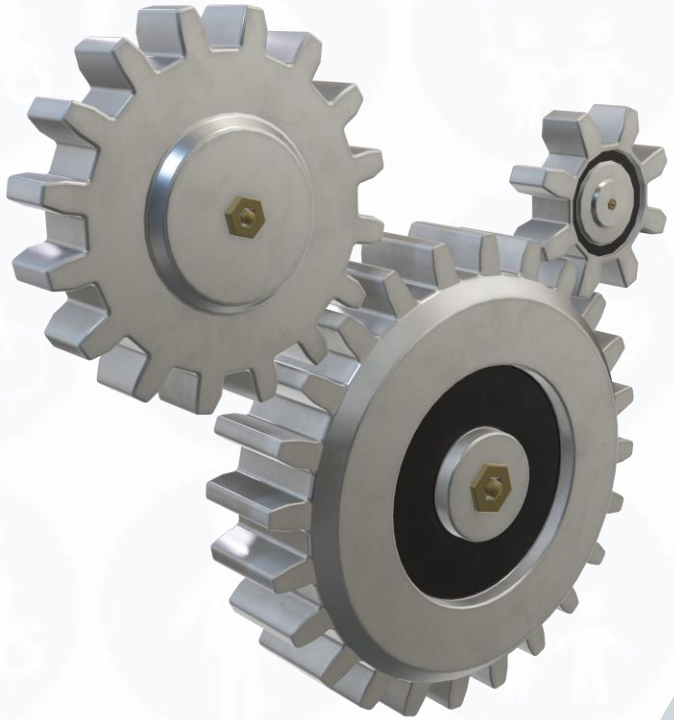
Where RADAR is going



4 Pilot Actions in 7 countries: **Implementation ready concept plans**

COMING SOON!

4 thematic areas reports and **recommendations:**

- Safer Roads Investments Plans
- Vulnerable Road Users
- ITS provisions for Speed Management
- Road Safety Near Schools

Road Infrastructure Improvement Strategy and Action Plans

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Project identity

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Who we are

Project Partners

European Institute for Road Assessment - EuroRAP, Ljubljana, Slovenia

Automobile and Motorcycle Association of Slovenia, Ljubljana, Slovenia

Road Safety Board, Vienna, Austria

Faculty of Traffic Science, Zagreb, Croatia

General Automotoclub of the Czech Republic, Prague, Czech Republic

KTI Institute for Transport Sciences Nonprofit Ltd, Budapest, Hungary

Bulgarian Association for Road Safety, Plovdiv, Bulgaria

Bosnia and Herzegovina Automobile Club, Sarajevo, BiH

Automobile Club of Moldova, Chisinau, Moldova

Associated Partners

Ministry of Infrastructure, Slovenian Infrastructure Agency, Slovenia

National Motorway Company, Ltd, Slovakia

Croatian Roads ltd, Zagreb, Croatia

The Road and Motorway Directorate of the Czech Republic

Public Company Roads of Federation of Bosnia and Herzegovina

European Union Strategy for Danube Region Priority Area 1b - Road, Rail and Air links

Ministry of Transport and Maritime Affairs, Montenegro

Road Infrastructure Agency, Bulgaria

National Company For Roads Infrastructure Administration, Romania

Ministry of Economy and Infrastructure, Moldova

iRAP, United Kingdom

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A vision and strategy
aren't enough.
The long-term key
to success is
execution.
Each day. Every day.

Richard M. Kovacevich

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How to target infrastructure spending with Safer Roads Investment Plans?

Jure KOSTANJŠEK

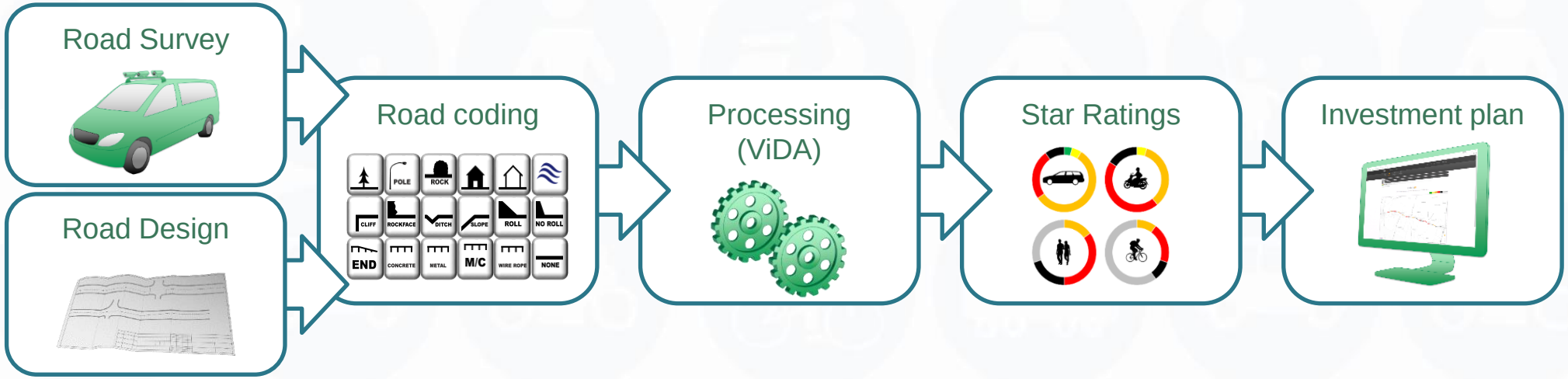
Automobile and Motorcycle Association of Slovenia (AMZS)

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

Danube Area
Infrastructure Investments State of the Art

- No dedicated road safety fund or budget in the majority of participating countries
- Where present, there is no specific report of implementation
- About half of participating countries do use EU funding for road infrastructure safety upgrades at the moment.
- Funds often distributed ad-hoc, no systematic approach, no prioritization

Safer Roads Investment plan



- SRIP - the final output of the iRAP road assessment procedures
- Benefit to cost ratio (BCR) is calculated for each countermeasure proposed
- Analysis of costs and benefits is country-specific, based on country's statistical value of life and the countermeasure costs

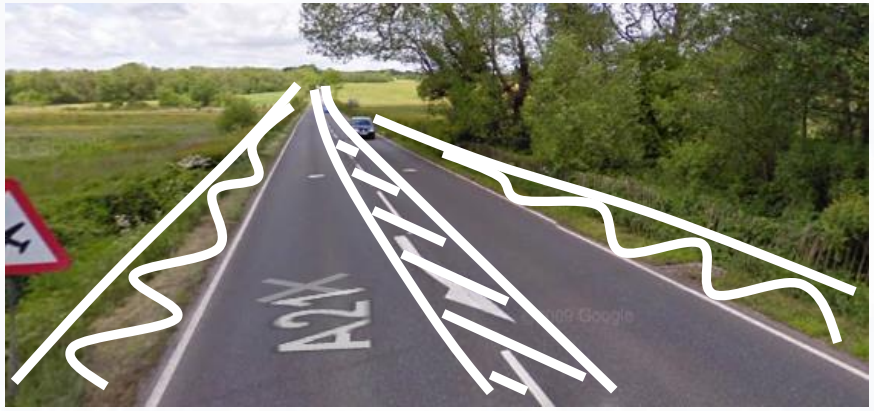
Safer Roads Investment plan

90 proven countermeasures

300+ engineering trigger sets

Calculate potential lives saved

Minimum BCR criteria set



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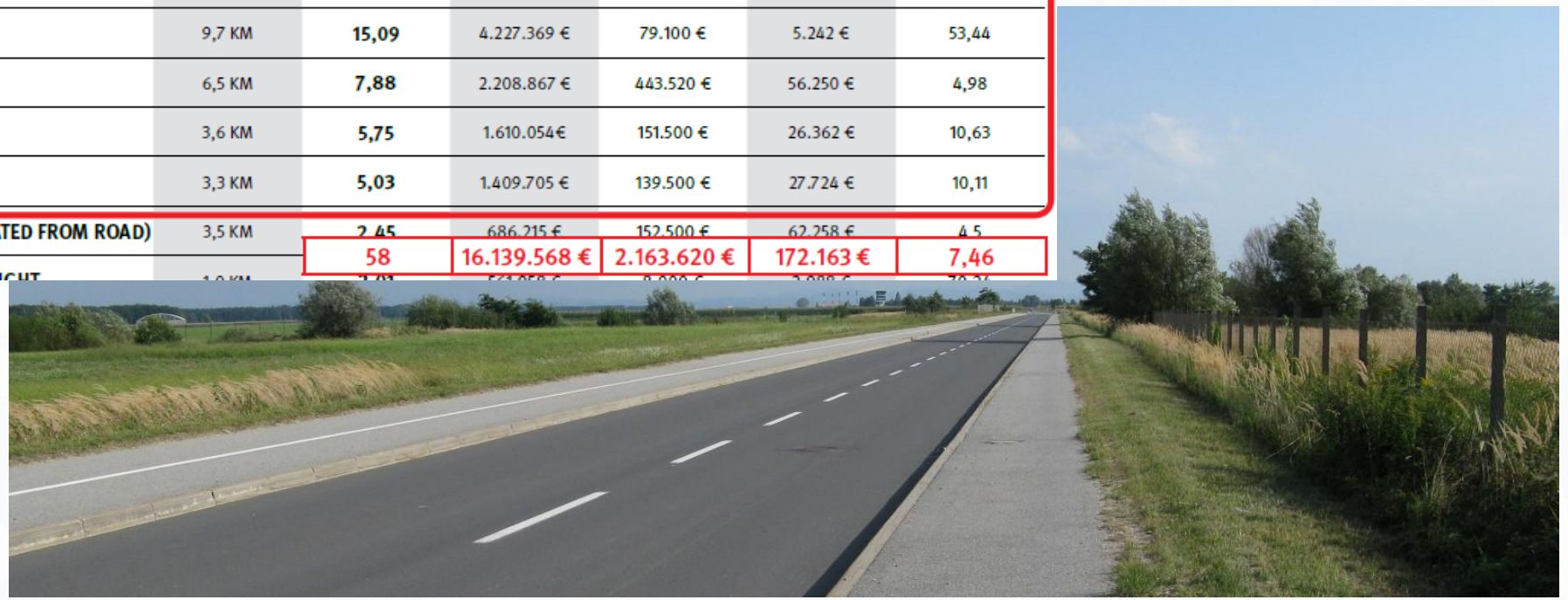
Example of Safer Roads Investment Plan

COUNTERMEASURE TYPE	LENGTH	FSI'S SAVED (20 YEARS)	PV OF SAFETY BENEFIT (20 YEARS)	ESTIMATED COST (20 YEARS)	COST PER FSI SAVED	PROGRAM BCR
ROUNDABOUT	9	23,86	6.683.573 €	1.350.000 €	56.585 €	4,95
SHOULDER SEALING (>1 M)	9,7 KM	15,09	4.227.369 €	79.100 €	5.242 €	53,44
LANE WIDENING (UP TO 0,5 M)	6,5 KM	7,88	2.208.867 €	443.520 €	56.250 €	4,98
ROADSIDE BARRIERS – RIGHT	3,6 KM	5,75	1.610.054€	151.500 €	26.362 €	10,63
ROADSIDE BARRIERS – LEFT	3,3 KM	5,03	1.409.705 €	139.500 €	27.724 €	10,11
FOOTPATH PROVISION (SEPARATED FROM ROAD)	3,5 KM	2,45	686.215 €	152.500 €	62.258 €	4,5
		58	16.139.568 €	2.163.620 €	172.163 €	7,46



Safer Roads Investment Plan enables information on:

- where the most affordable and cost-effective road improvements can be made on the network
- the number of deaths and serious injuries that would be avoided if the plans were to be implemented
- the economic benefit of the plan, in terms of the benefit-cost ratio showing returns on investment
- the cost of the plan, incorporating capital and maintenance costs
- the estimated cost per death and serious injury avoided
- the results of the plan can be displayed as the entire road network or filtered for individual road sections

Recommendations for states (governments/ministries/agencies)

- to ensure a portion of road infrastructure investments is allocated to road safety intervention
- to ensure embedding of the Safe system approach into the mainstream of road design/investment and maintenance legislation and practice
- to ensure trainings of road safety auditors
- to transfer Safe system approach to local governments and local road authorities
- to take into serious consideration also 2nd level roads, like regional roads
- make knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments

Recommendation for local governments

- to start systematic road safety data collection and analysis to plan interventions/investments on most critical locations.

Recommendations for road authorities

- to form own special road safety funds within regular or investment funds dedicated for direct investments in road safety upgrades in terms of road safety equipment and measures at locations with most effectiveness

- to follow the road safety trends and good practices to plan maintenance and upgrades of existing road network in operation,

- to use the methodologies for selecting most critical locations with highest potential savings

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Thank you for your attention!

RSEG Report on Safer Road Investment Plans:

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What can we do for Vulnerable Road Users infrastructure safety?

Bojan JOVANOVIĆ

University of Zagreb, Faculty of Transport and Traffic Sciences (FPZ)

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

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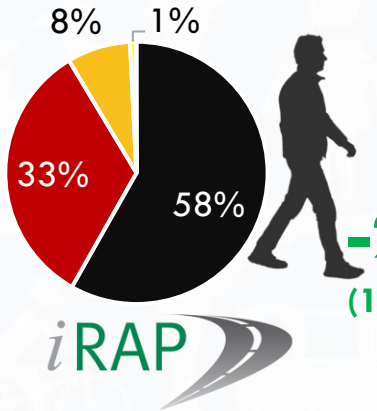
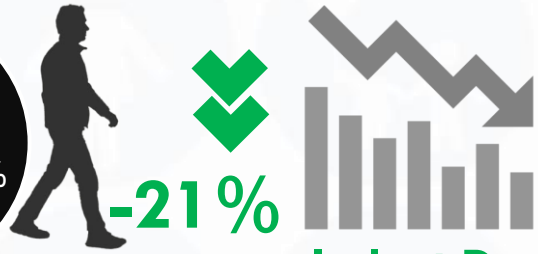
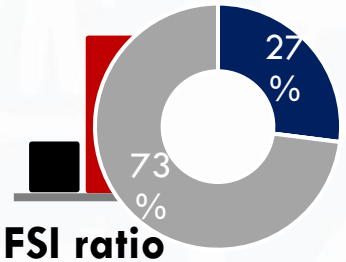
State of the art in Danube countries: Vulnerable road users' accidents characteristics

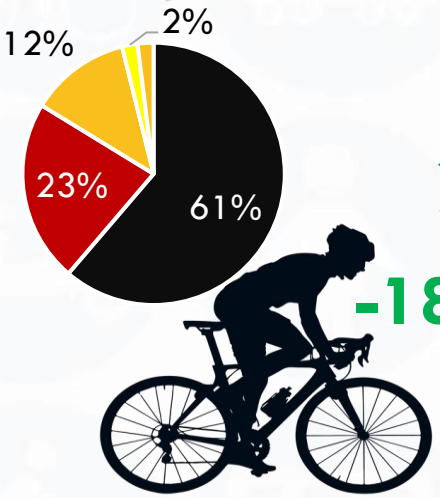




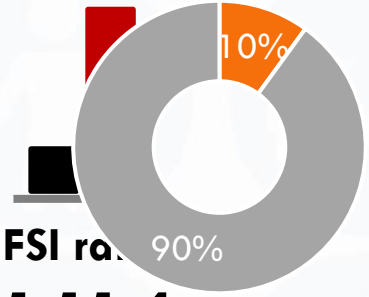
-21%
(17 to 50%) In last Decade



FSI ratio
1:8.2 (16 to 38%)

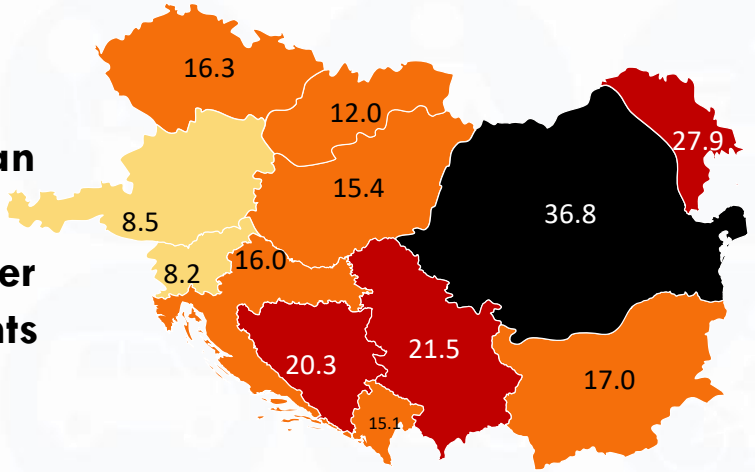


-18%
In last Decade

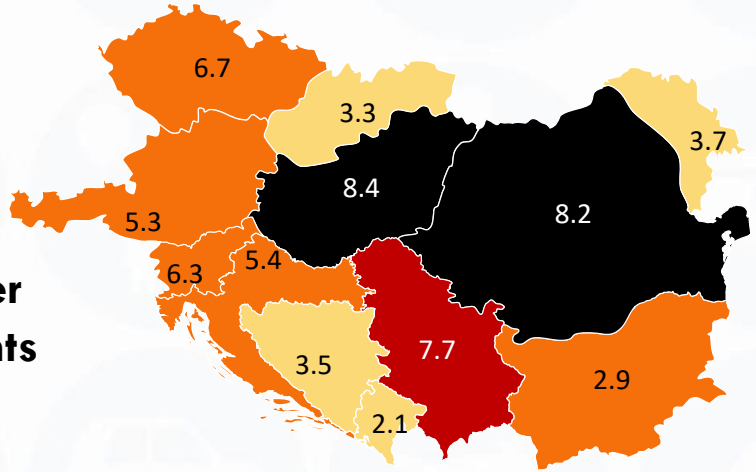


FSI ra
1:11.4 (4 to 23%)

Annual pedestrian fatality rate
8.2 to 36.8 acc per million inhabitants



Annual cyclist fatality rate
2.9 to 8.4 acc per million inhabitants



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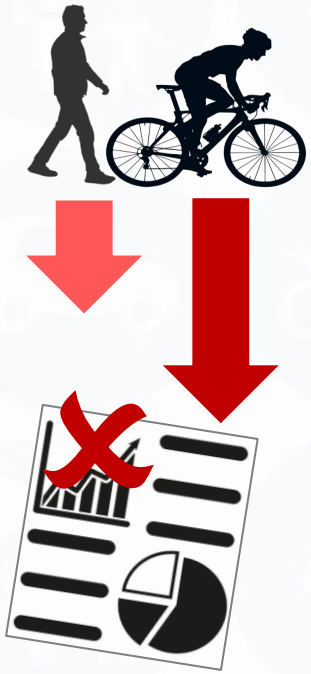
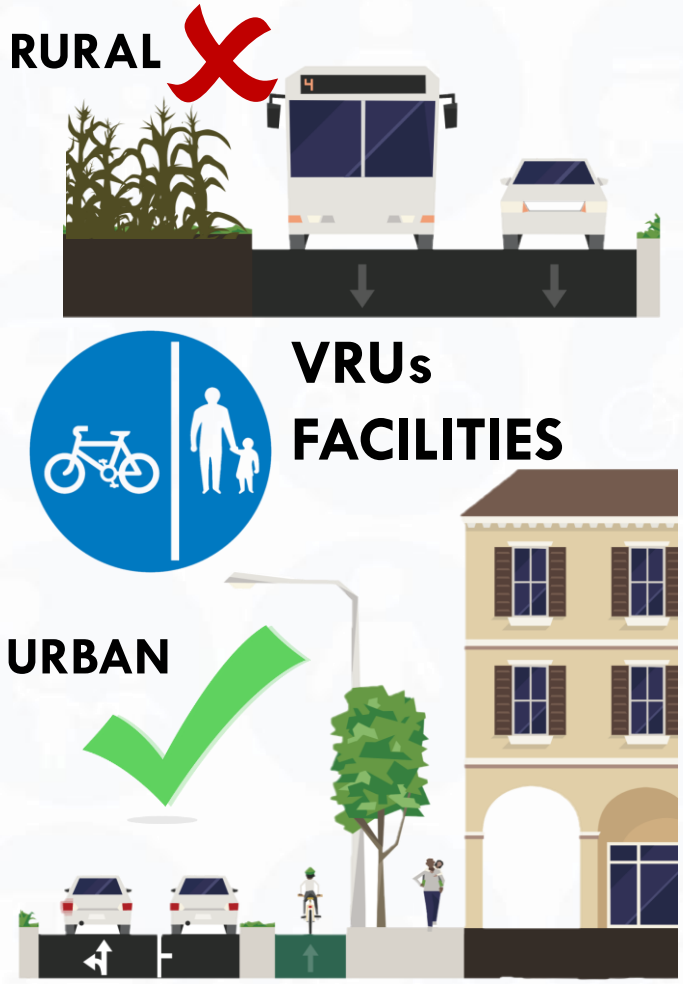
State of the art in Danube countries: Road safety performance of the Danube region roads for vulnerable road users

AREA TYPE



UNDERREPORTING

MOST INVOLVED VRUs AGE GROUPS



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Review of methods for assessing the risks for vulnerable road users

Visual Identification based on RSI and RSA

EuroRAP Star Rating procedures

Black Spot Management

Risk

Safety assessment indicator

1 Road traffic accidents and/or fatalities and serious injuries per kilometre.

2 The number of road traffic accidents and/or fatalities and serious injuries per million vehicle-kilometres travelled.

3 Road traffic accidents unit costs per kilometre of observed road network.

Municipality

National Decision

Lack off proper databases in most countries!

EXISTING VRUs DATABASES

Usually managed by the Ministry of Interior.

Accessible only for the road safety stakeholders via internet.

Data on pedestrian/cyclist peak-hour flow volume not directly used for assessing the VRUs risks.

Majority of countries in the Danube area lack relavant data on characteristics of accidents involving vunerable users.

Precise exposure data in terms of the number of walked and cycled kilometres does not exist

19.000 km

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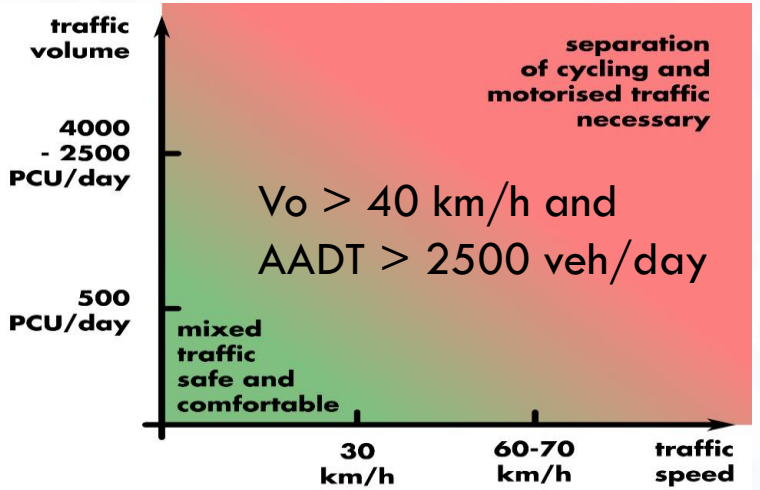
State of the art in Danube countries: Selection and prioritisation of countermeasures for vulnerable road users

VARIOUS POLITICAL AND LEGAL BARRIERS!

NO OFFICIAL METHODOLOGY!

- Field investigations by road survey team at critical locations
- Guidelines for pedestrian and cyclist infrastructure planning
- Statistical analysis of relevant road traffic accidents characteristics
- Decision of road owner
- Proposals from other stakeholders
- Subjective criteria
- Cost-Benefit analysis usually performed only for large projects



UNKNOWN DATA

- **Unit costs of VRUs accidents and**
- **Unit costs of countermeasures**

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

 Safe system concepts (multilateral approach)	Relevant legislation	Road planning, design, construction and maintenance	Road safety audits, assessments and projects	VRUs countermeasures selection criteria
 Harmonise and align legislation	Remove legal barriers	National laws	In-country regulations	Sub-normative acts and ordinances
 Unified protocol for VRUs risk assessment	Official, standardised methodology	Objective road safety indicators	Defined minimal threshold values for road safety indicators	Comparable results
 Standardised countermeasures implementation process	Objective criteria	Considers AADT, peak-hour VRUs flows and Vo	Defined threshold values of Vo and AADT for segregation	CBA, tactical urbanism, space-wise planning and stakeholder inputs
 Develop or restructure and link relevant databases	Periodically collect supporting data	Link police database with hospital data	Develop new analytical software	Provide free and easy access to all stakeholders
 Improve traffic culture and public awareness	Trainings for children in kindergartens and schools	National campaigns and conferences for VRUs	Disseminating information to the public by various media sources	

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RSEG Report on Provisions for Vulnerable Road Users:

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Smart Speed Management Infrastructure

Gabor PAUER

KTI Institute for Transport Sciences Nonprofit Ltd

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

Speeding and speed limits

- Absolute speeding
- Relative speeding

- Speed has a direct influence on crash occurrence

	Built-up areas	Rural roads	Motor roads	Motorways
Austria	50	100	100	130
Montenegro	50	80	100	130
Greece	50	90	110	130
Romania	50	90	100	130
Slovenia	50	90	110	130
Bosnia and Herzegovina	50	80	100	130
Bulgaria	50	90	120	140
Croatia	50	90	110	130
Hungary	50	90	110	130

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

TA3 – ITS and other techniques for speed management

- Speed management techniques
  - Advisory speed posting
  - Vehicle activated speed display signs
  - Variable speed limits
  - Traffic calming techniques
  - Speed enforcement

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

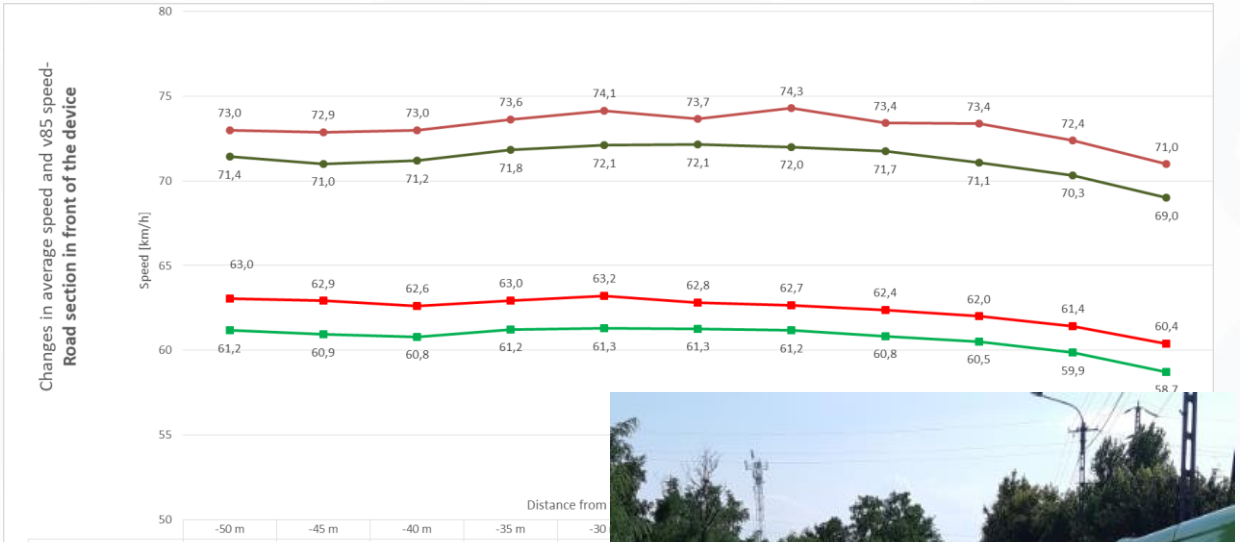
Pilot Action in Hungary – effects of speed management

- Vehicle activated digital speed/speed limit displays

  8-18% speed reduction

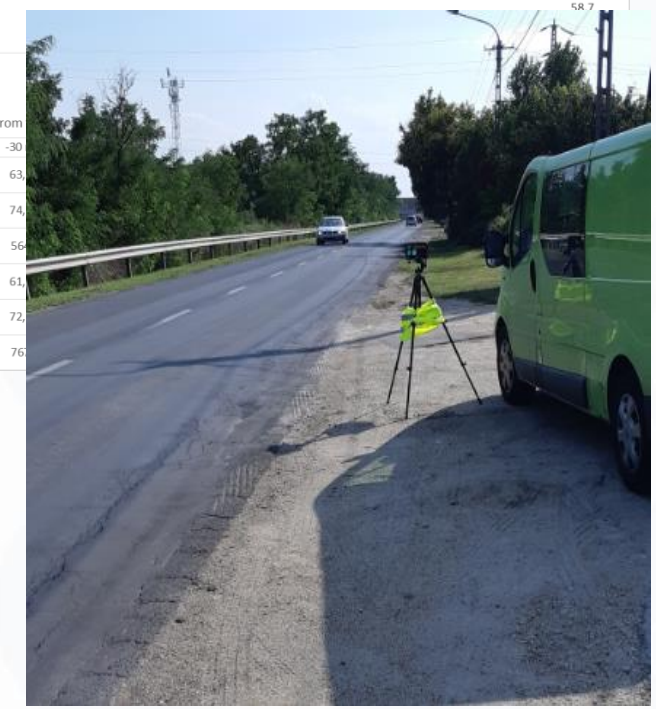
- Fix speed cameras

  18-20% speed reduction



Distance from

	-50 m	-45 m	-40 m	-35 m	-30
average speed - device is not operating	63,0	62,9	62,6	63,0	63,
v85 speed - device is not operating	73,0	72,9	73,0	73,6	74,
num of vehicles - device is not operating	388	426	467	508	56
average speed - device is operating	61,2	60,9	60,8	61,2	61,
v85 speed - device is operating	71,4	71,0	71,2	71,8	72,
num of vehicles - device is operating	485	542	626	703	76



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

Recommendations for state governments/ministries/agencies

- To define – at least on long run - a national minimal standard for the safety of existing and new roads based on one of the internationally recognized methodologies. To elaborate guidelines for Intelligent Transportation System, speed management and traffic calming approaches;
- To ensure certain portion of road infrastructure investments is allocated to road safety intervention;
- To ensure embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice;
- To ensure trainings of road safety auditors;
- To transfer Safe system approach to local governments and local road authorities;
- To take into serious consideration also 2nd level roads, like regional roads;
- Make knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments.

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

Recommendations for local governments

- To start systematic road safety data collection and analysis to plan interventions/investments on most critical locations.
- New ideas and recommendations:
  - Speed-activated warning signs (e.g. “Slow down” in the approach of bends and other dangerous locations);
  - Variable speed limit signs on high-level roads (traffic and/or weather-dependent);
  - Time-dependent speed limits, e.g. in the vicinity of schools during opening hours;
  - Transversal rumble strips in the approach of junctions or sharp bends;
  - Efficiency of administration of fines from automatic speed enforcement;
  - Lack of resources among authorities tasked with the issuing of fines;
  - Different degrees of automation (centralized & nearly full automation in France. Inefficient manual processing in other countries).

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

Recommendations for road authorities

- Speed limits setting: elaboration and continuous revision of guidelines & systematic implementation;
- Speed limits consistency: differentiated speed limits depending on the function, alignment, volume and structure of traffic must be defined, in accordance with the reasonable local speed limits;
- Speed enforcement: implementation of section control, minimization of the obstacles in violation, processing procedures;
- Speed data collection and analysis: systematic collection of speed data development of anonymized speed database. Further development of the methodology of analysis (for example speed development by road types, etc.)

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

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RSEG Report on Smart Speed Management Infrastructure:

www.interreg-danube.eu/approved-projects/radar/outputs

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Road Infrastructure Safety near Schools in Danube region

Stelios EFSTATHIADIS

Transportation Solutions

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

Infrastructure engineering strategies

- Speed Management
- Warning Signs
- Parking Management
- Road Crossing
- Bicycle Safety

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

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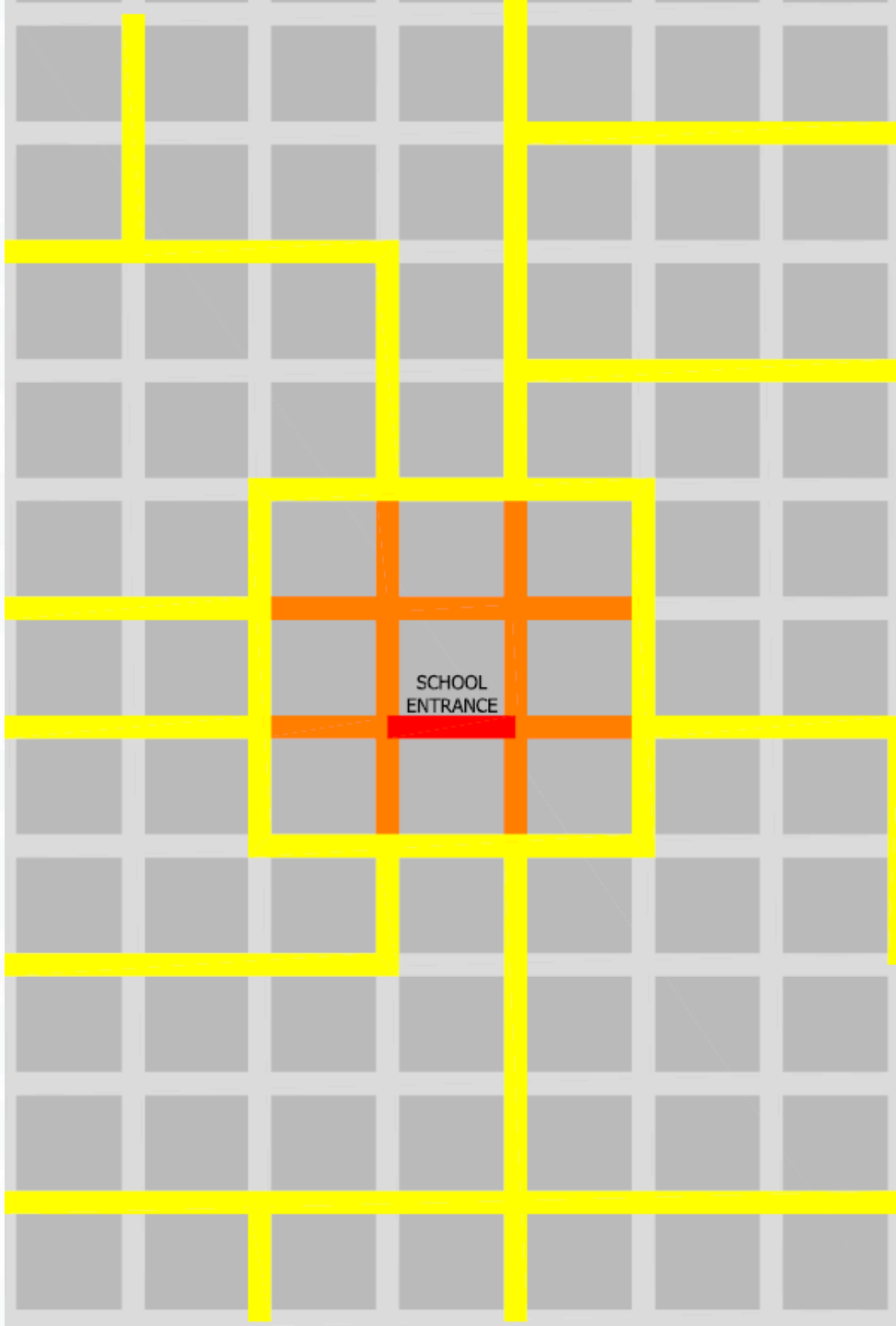
Safety features application

- **Point / Route / Area:**
  - School entrance
  - Direct school area
  - Surrounding area
- **Students' age:**
  - Kindergarten (0-5y, 3-6y)
  - Primary / Elementary school (6-11y)
  - Secondary / High school (12-17y)



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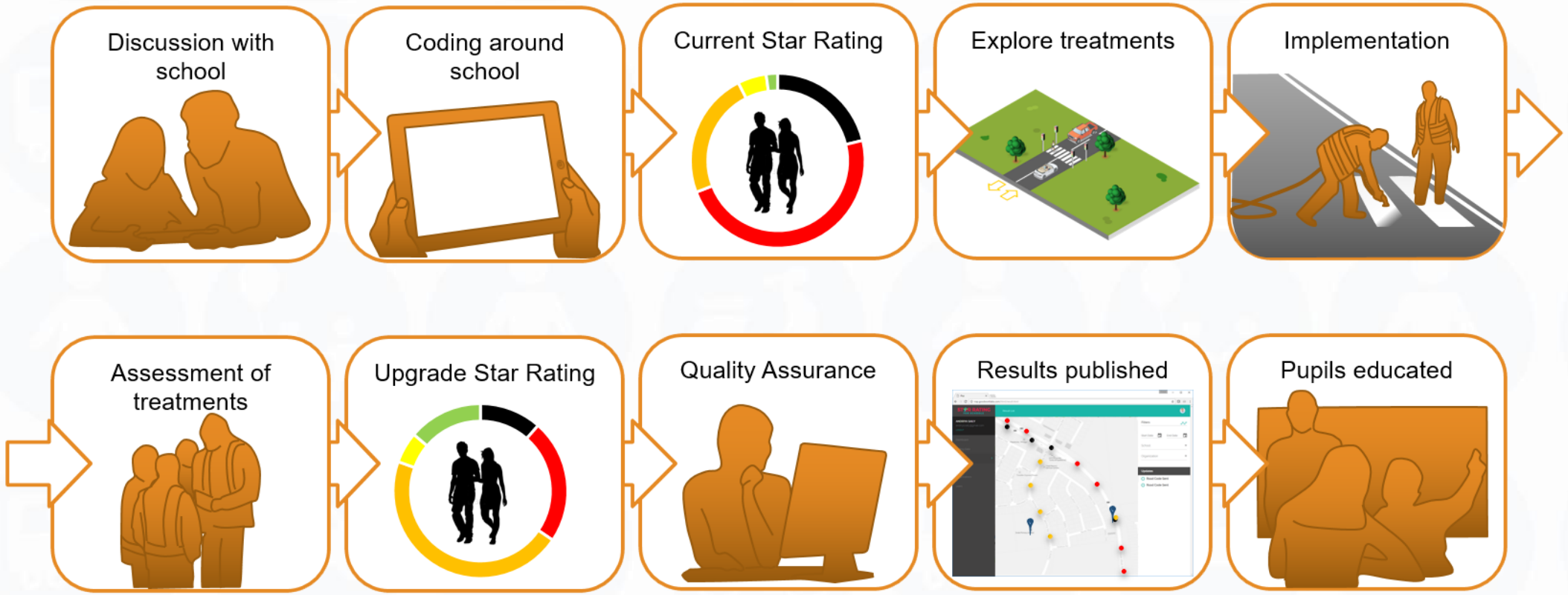
SaferWay to School, Slovenia

Project co-funded by European

Star Rating for Schools (SR4S)

- A free to use tool for treatment support and infrastructure assessment www.starratingforschools.org



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

Recommendations for state authorities

- Develop and support specific design guidelines for road sections in the vicinity of schools,
- Define in the Road Traffic Code special speed limits to be applied on road sections in the vicinity of schools,
- Ensure adequate funding for road safety interventions in primary roads in the vicinity of schools,
- Ensure embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice,
- Start systematic collection of data on road crashes near schools and related casualties,
- Systematically estimate and publish key performance indicators on the road network around schools,
- Transfer Safe system approach to local governments and local road authorities,
- Support knowledge transfer with demonstrations of good practices and approaches towards road authorities and regional/ local governments.

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

Recommendations for local governments

- Ensure adequate funding for road safety interventions in local roads in the vicinity of schools,
- Start systematic collection of data on road crashes near schools and related casualties,
- Organize educational campaigns to promote safer transport to/ from schools.

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

Recommendations for road authorities

- Form own special road safety funds within regular or investment funds dedicated for direct investments in road safety, to implement upgrades in the vicinity of schools
- Follow the road safety trends and good practices to plan maintenance and upgrade of existing road network in the vicinity of schools,
- Use appropriate methodologies to identify hazardous locations near schools and the causes of road safety problems, identify intervention priorities and implement countermeasures,
- Conduct "before and after" studies to evaluate the road safety effect of implemented interventions.

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

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RSEG Report on Road Safety Near Schools:

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Danube Region Infrastructure Improvement Strategy and EUSDR – Revised RISM directive challenge

Marko ŠEVROVIĆ

European Institute for Road Assessment – EuroRAP (EIRA-EuroRAP)

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

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EUSDR Strategy

Country Participation

Pillars and Priority Areas

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Priority Area 1B "To improve mobility and intermodality – rail, road and air"

- Support efficient freight railway services and improved travel times for competitive railway passenger connections between major cities in the Danube Region (DR) by 2030.
- **Support fully functional multi-modal TEN-T Core Network Corridors by 2030.**
- Support the development of efficient multimodal terminals at sea, river and dry ports in the Danube Region and ensure their connectivity and access through the integration of all modes of transport and efficient logistics services by 2030.
- Support improvement of the regional air connectivity and the implementation of the Single European Sky initiative.
- **Facilitate the improvement of secondary and tertiary roads in the DR.**
- **Support safe and sustainable transport and mobility in the Danube Region.**

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

No speed – no mobility

Speed → large impact on safety

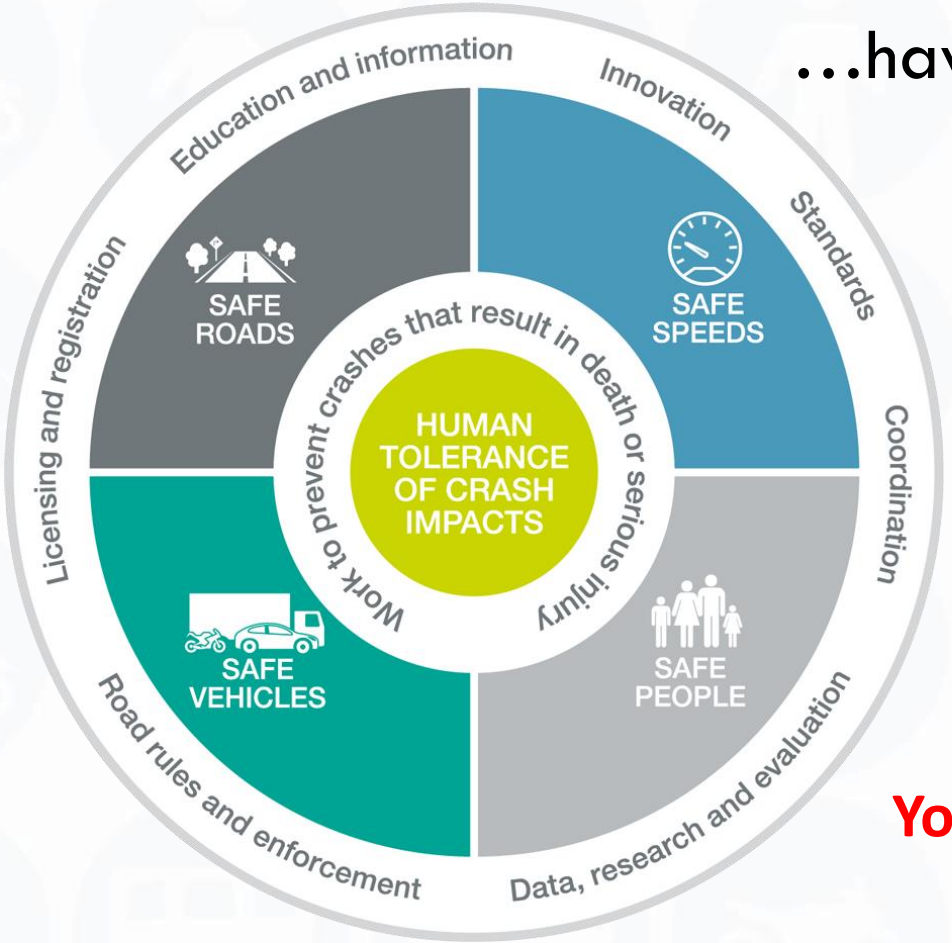
Which speed limits are appropriate?

Efficient and effective transport system

→ Fast and safe movement of people and goods!

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

From origin to destination – RADAR is..



…having Safe System Approach at its heart:

- 5* drivers
- 5* cars
- 5* roads

Your Infrastructure is on our RADAR

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

Revised RISM Directive Challenge

Systematic follow-up of the findings of **RISM** procedures is crucial to achieve the road infrastructure safety improvements necessary for **meeting the Union's road safety objectives**. To this end, prioritised action plans should ensure that the necessary interventions are implemented as soon as possible. In particular, the findings of the **network-wide road safety assessment** should be followed up either by **targeted road safety inspections** or, if possible and **cost-efficient**, by **direct remedial action** aimed at **eliminating or reducing** the **road safety risks** without imposing an undue administrative burden

Publication of the results of network-wide road safety assessments **should allow** the level of road infrastructure safety **to be compared across the Union**.

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

NWRSA

Network-wide road safety assessments shall evaluate accident and impact severity risk, **based on:**

- (a)primarily, a **visual** examination, either on site or by electronic means, of the **design characteristics of the road (in-built safety)**; and
- (b) an analysis of sections of the road network which have been in operation for more **than three years** and upon which **a large number of serious accidents in proportion to the traffic flow** have occurred.

Member States shall ensure that the first network-wide road safety assessment is carried out **by 2024** at the latest. Subsequent network-wide road safety assessments shall be **sufficiently frequent** in order to ensure adequate safety levels, but in any case shall be carried out at **least every five years**.

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

How RADAR fits into the strategy ?

- TA1: General road sections safety and maintenance upgrading using Safer Roads Investment Plans
- TA2: Provision for vulnerable road users (pedestrians and cyclists)
- TA3: ITS, speed management and traffic calming approaches
- TA4: Infrastructure safety of roads passing or in the neighbourhood of schools

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Questions?

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Welcome to SABRINA project

11:30-12:30

Source: www.slovenia.info, Photo: Jošt Gantar

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

Agenda

11:30 – 12:30 a.m.*

SABRINA project

Welcome note

Boštjan PRIMC, *Municipality of Ilirska Bistrica*
A view from municipality perspective: Challenges and needs of cycling infrastructure safety

Aleksander BUCZYŃSKI, *European Cyclists' Federation (ECF)* and
Marko ŠEVROVIĆ, *European Institute of Road Assessment - EuroRAP (EIRA-EuroRAP)*
Assessing Cycling Infrastructure Safety – current state of art

Klaus MACHATA, *Austrian Road Safety Board (KfV)*
Best Practices in cycling infrastructure – across strategic, planning and engineering levels

Olivera ROZI, *European Institute of Road Assessment - EuroRAP (EIRA-EuroRAP)*
Strategic project for safer bicycle routes in Danube area – SABRINA

Q&A

*Timings are indicative and can vary +/- 15 minutes

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SABRINA Project Partners Study Visit

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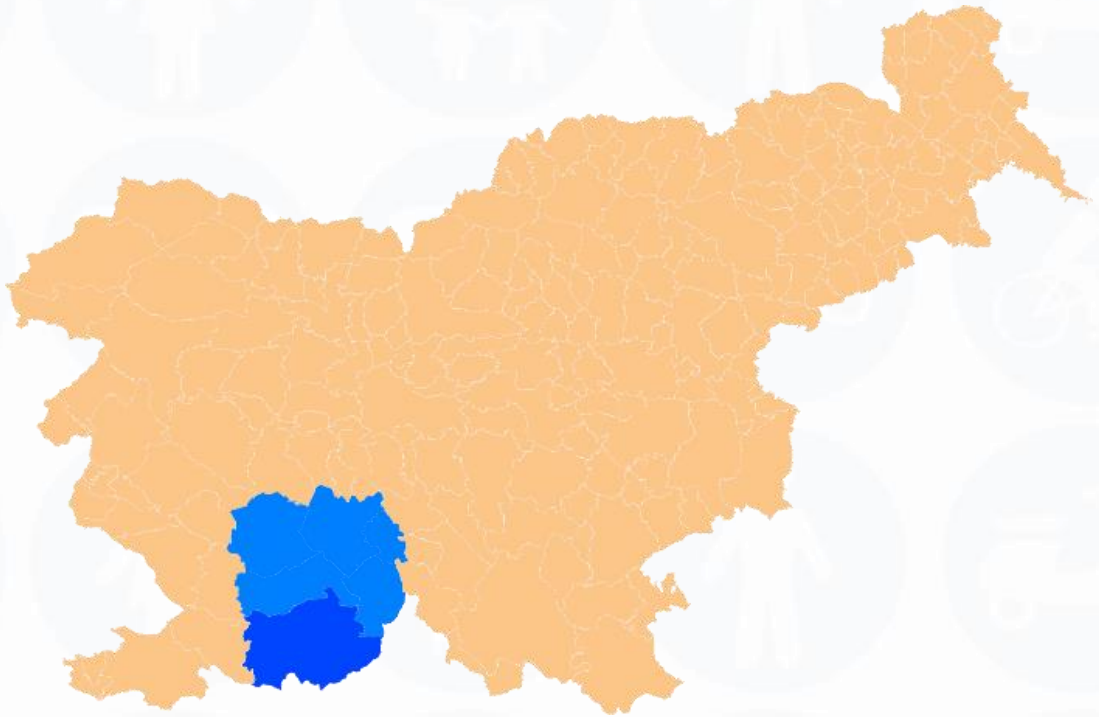
Challenges and needs of cycling infrastructure safety: Municipality perspective

Boštjan PRIMC

Municipality of Ilirska Bistrica

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

Municipality Ilirska Bistrica



- 480 km^2 – 2nd largest municipality by territory
- Approx. 13.300 inhabitants (28 persons /km)
- 64 settlements
- The capital Ilirska Bistrica with 4.500 inhabitants

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

Traffic factors

Main transport corridors

- G1-6 Postojna – Jelšane
- G1-7 Kozina - Starod
- R2-404 Knežak - Ilirska Bistrica – Podgrad

Railway

- E 65 Pivka – Ilirska Bistrica

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

Key challenges of traffic management in Ilirska Bistrica

- Traffic is tied mainly to use of passenger car
- Transit traffic through the town center
- Long-term parking in in the center of Ilirska Bistrica
- Lack of good connections with public transport
- Insufficient public transport connections with regional centers
- Too few people walk and bike in settlements - dangerous walking and cycling

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

Measures taken to promote sustainable mobility

- 2015 Construction of a city bypass
- 2016 Commencement of public discussions for production of SUMP
- 2016 Establishment of municipal coordination for the placement of long-distance cycling connections
- 2017 Confirmation of SUMP at the municipal council
- 2017 Speed reduction measures in Ilirska Bistrica
- 2019 Establishment of a bicycle lane in the town of Ilirska Bistrica

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Principles of cycling network planning

- Network connectivity
- Directness of connections
- Safety
- Convenience
- Attractiveness

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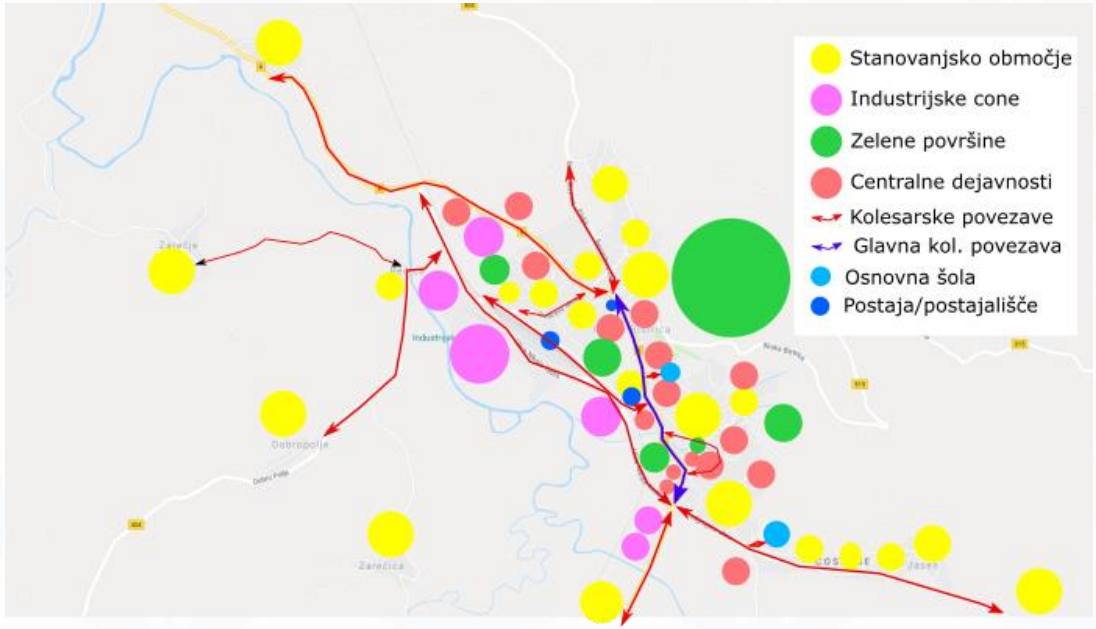
Cycling network in municipality Ilirska Bistrica



- Main route is set trough the town center for quick connection between (sub) centres and districts
- Main crossings are organized as small roundabouts, where cycles travel together with other traffic
- Local routes are connected to the main route

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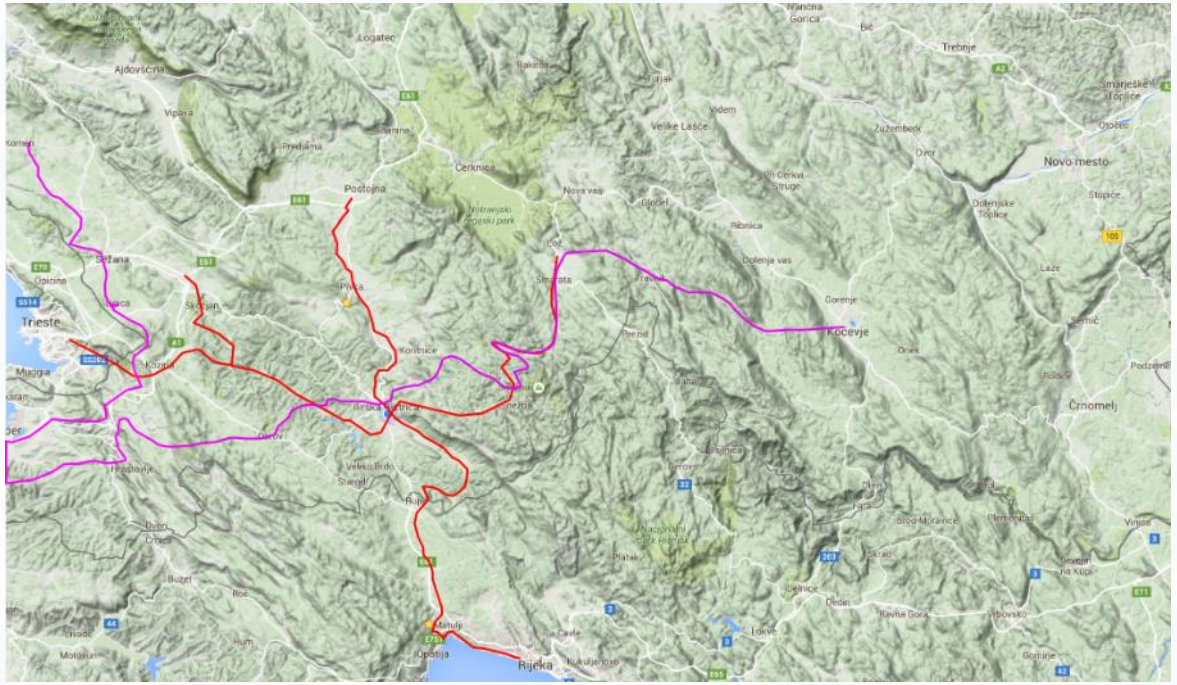
Long distance cycle routes



- Long distance cycling network is in development phase
- The municipalities have coordinated the course of bicycle connections
- the connections run through the town and thus serve as connections for daily commute to the city

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

Main challenges of cycling infrastructure building

- Land constraints when placing new cycling infrastructure
- Limited resources for infrastructure building
- Long coordination procedures with the state
- Long-term spatial planning and land acquisition procedures
- Lack of knowledge of cyclists' needs in cycling infrastructure design

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Assessing Cycling Infrastructure Safety – current state of the art

Aleksander BUCZYŃSKI

European Cyclists' Federation (ECF)

Marko ŠEVROVIĆ

European Institute for Road Assessment – EuroRAP (EIRA-EuroRAP)

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

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EuroVelo European Certification Standard

Aleksander BUCZYŃSKI

European Cyclists' Federation (ECF)

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

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EuroVelo network

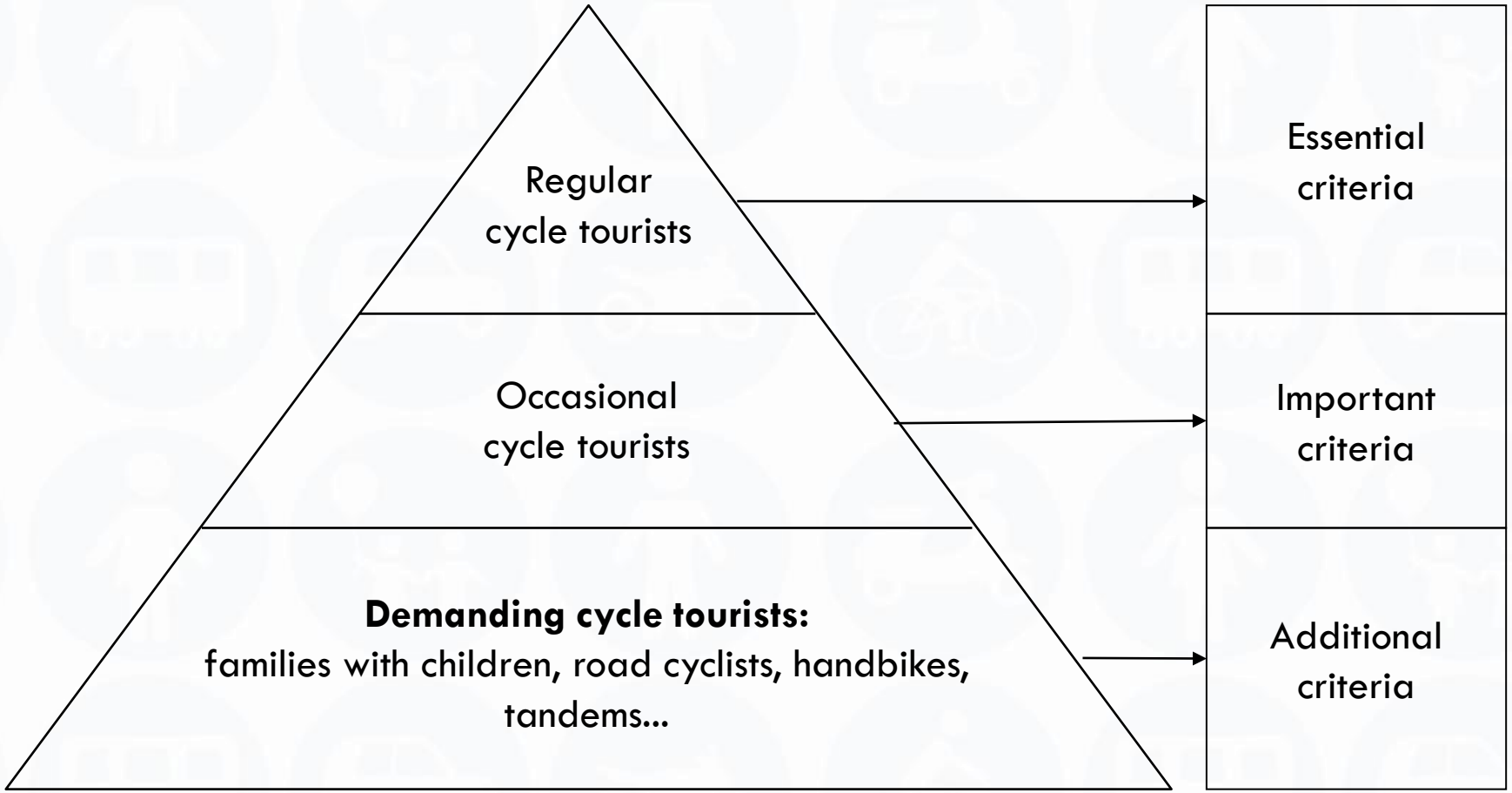
- 17 routes
- 90 000 km
- 21 000 km across 26 countries surveyed using the European Certification Standard methodology

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


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


GR 91 CTA

Target groups and criteria levels



ECS Criteria

I. INFRASTRUCTURE
II. SERVICES
III. PROMOTION

1. Continuity
2. Route components
3. Surface and width
4. Gradients

Road safety

5. Attractiveness
6. Signing
7. Public transport

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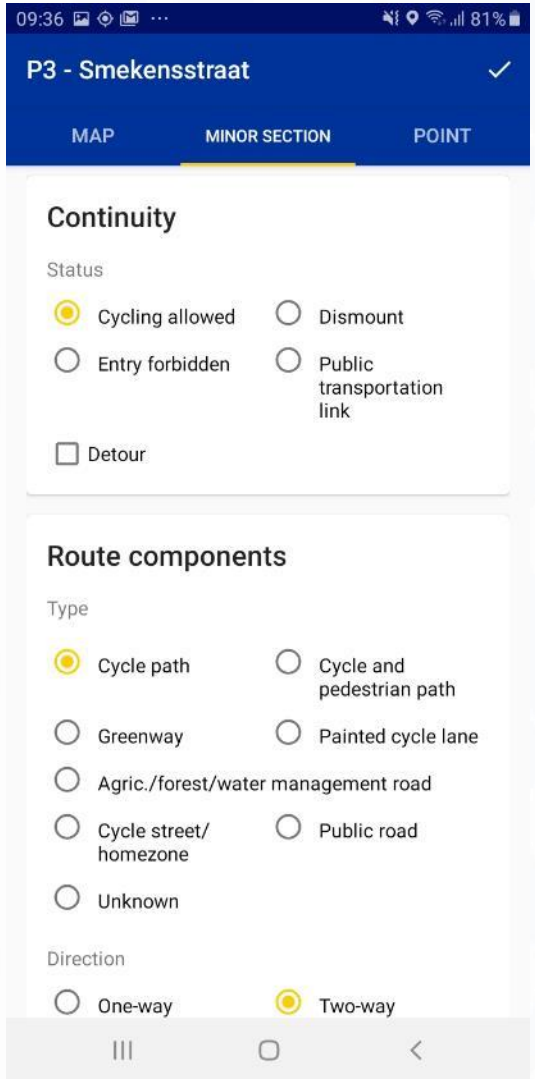
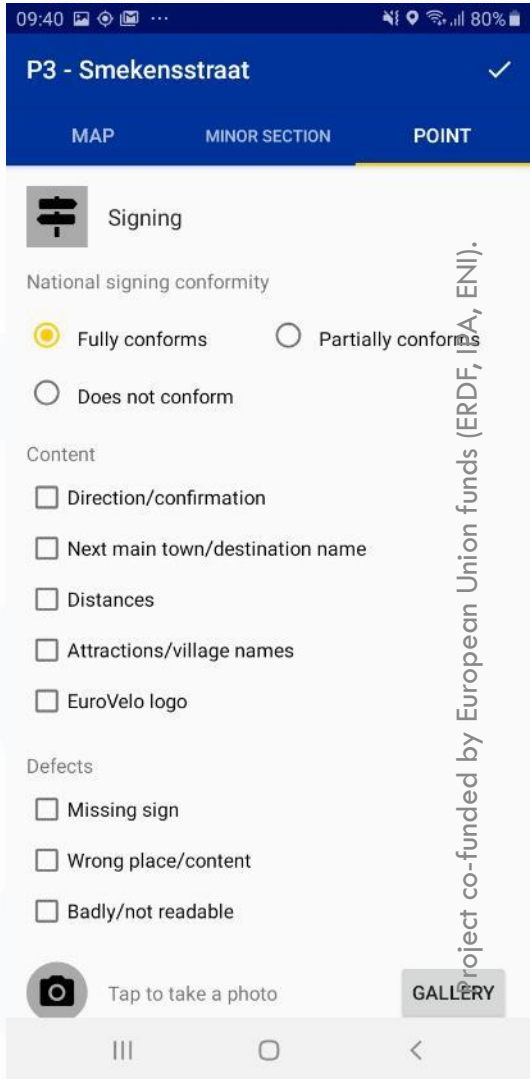
Route surveys

60 parameters registered:

- route component type,
- traffic volume
- traffic speed,
- surface material,
- surface quality,
- width,
- chicanes, poles, other obstacles,
- …





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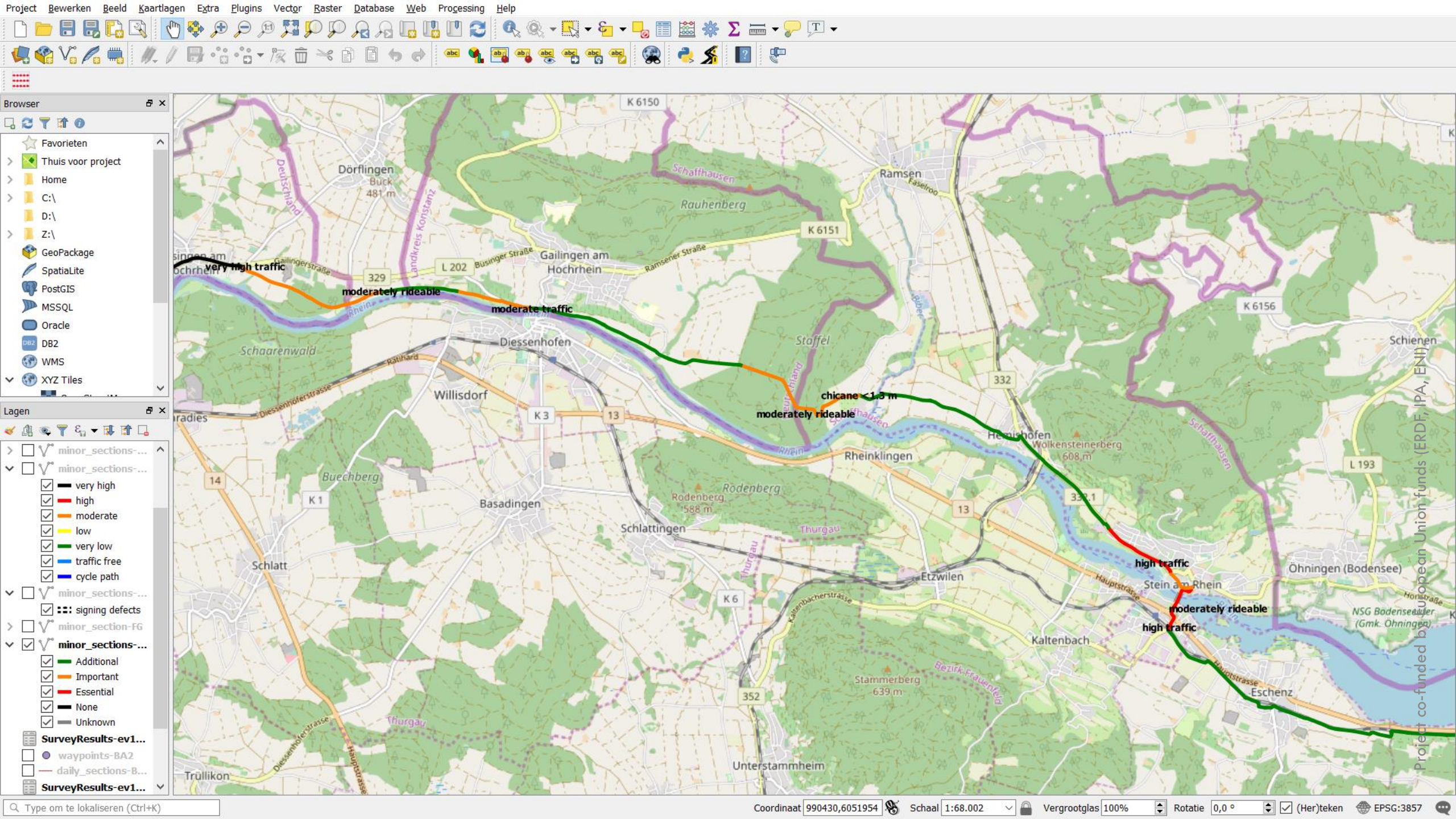
Project
Bewerken
Beeld
Kaartlagen
Extra
Plugins
Vector
Raster
Database
Web
Processing
Help
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C:\
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GeoPackage
SpatiaLite
PostGIS
MSSQL
Oracle
DB2
WMS
XYZ Tiles
Lagen
minor_sections-...
very high
high
moderate
low
very low
traffic free
cycle path
signing defects
minor_section-FG
minor_sections-...
Additional
Important
Essential
None
Unknown
SurveyResults-ev1...
waypoints-BA2
daily_sections-B...
SurveyResults-ev1...
very high traffic
moderately rideable
moderate traffic
chicane <1.3 m
moderately rideable
high traffic
moderately rideable
high traffic
Dörflingen
Buck
481 m
Gailingen am
Hochrhein
Ramsen
Rauhenberg
Schaarenwald
Diessenhofen
Willisdorf
Stoffel
Rheinklingen
Wolkensteinerberg
608 m
Schienen
Buechberg
Basadingen
Rodenberg
588 m
Schlattingen
Schlatt
Etzwilen
Stein am Rhein
Öhningen (Bodensee)
Kaltenbach
Stammerberg
639 m
Eschenz
Unterstammheim
Trüllikon
K 6150
K 6151
K 6156
L 202
329
332
K 3
13
14
K 1
K 6
352
L 193
Project co-funded by European Union funds (ERDF, IPA, ENI)
Type om te lokaliseren (Ctrl+K)
Coordinaat
990430,6051954
Schaal
1:68.002
Vergrootglas
100%
Rotatie
0,0 °
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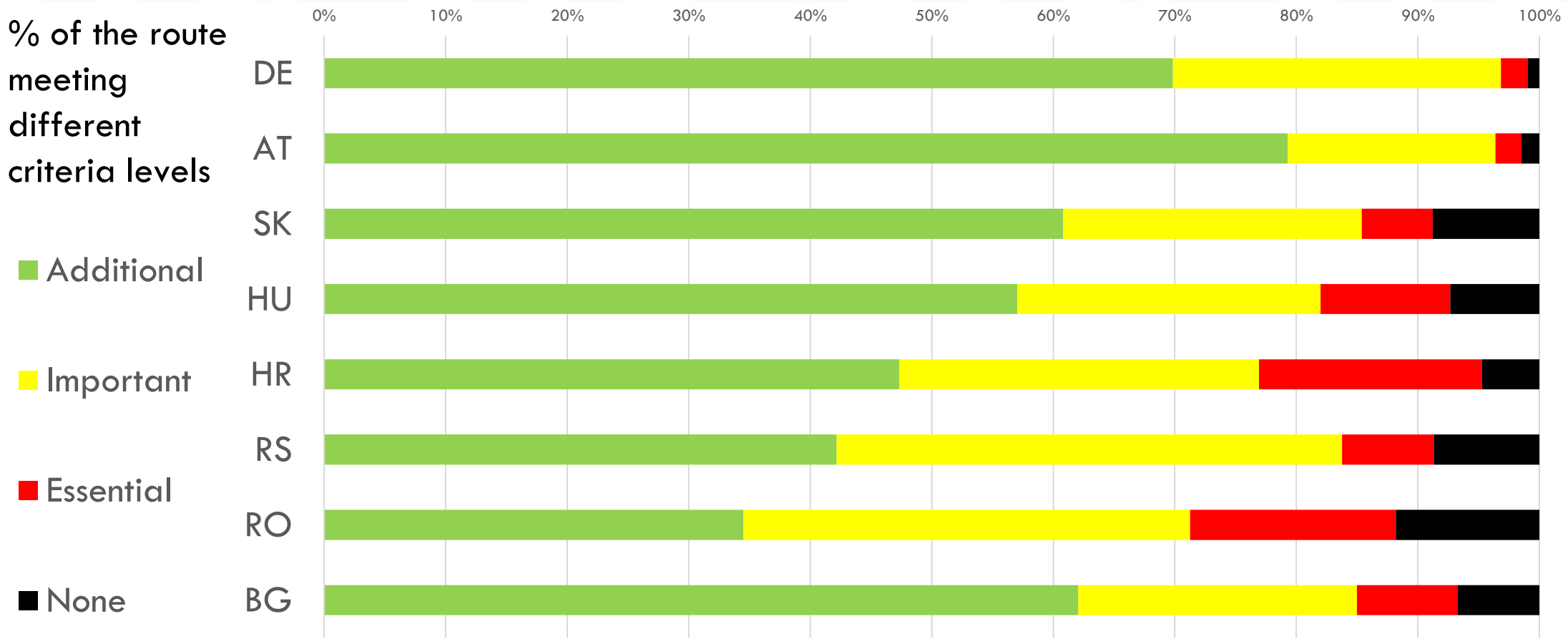
EPSG:3857

EuroVelo 6 – Danube cycle route



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

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Assessing cycling infrastructure Safety

Marko ŠEVROVIĆ Ph.D.

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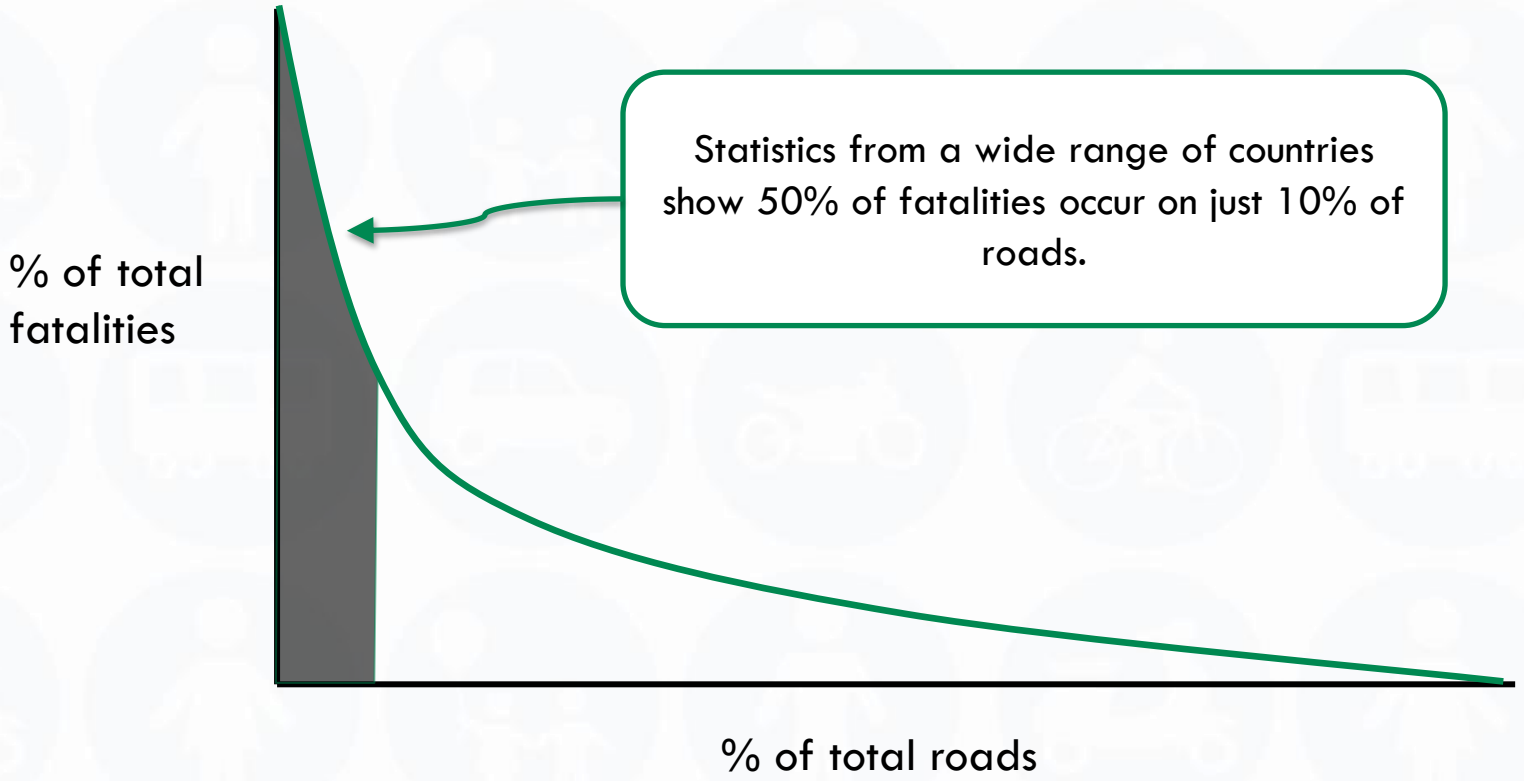
University of Zagreb
Faculty of Transport and Traffic Sciences (FPZ)
Department of Transport planning

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

How we asses road infrastructure?



- Excessive and inappropriate speed - > number one road safety problem in many countries
- 1/3 of fatal accidents
- Factor in all accidents

Not all roads carry the same risk. Examining the distribution of road fatalities across the roads in a typical country gives some insights.

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

We Know How People Are Being Killed

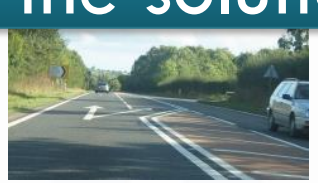
Vehicles	Motorcycles	Pedestrians	Bicyclists
Run off road	Run off road	Travelling along road	Travelling along road
Head on	Head on	Crossing the road	At intersection
Intersections	Intersections		





And the solutions!



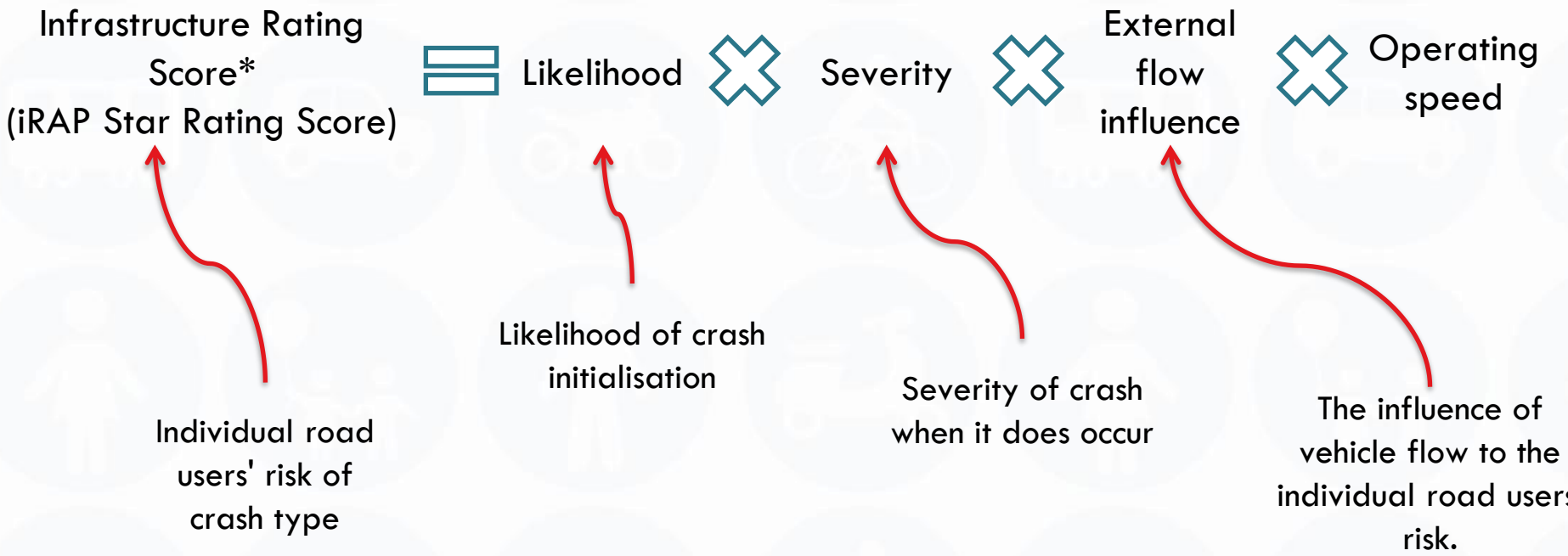


Vehicles	Motorcycles	Pedestrians	Bicyclists
Safe roadsides	Safe roadsides	Footpaths	Bicycle lanes
Median barriers	Motorcycle lanes	Pedestrian crossings	Bicycle facilities
Roundabouts	Median barriers	Speed Management	Speed Management

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

The building blocks of infrastructure risk models

For each user group and crash type the equation* is:

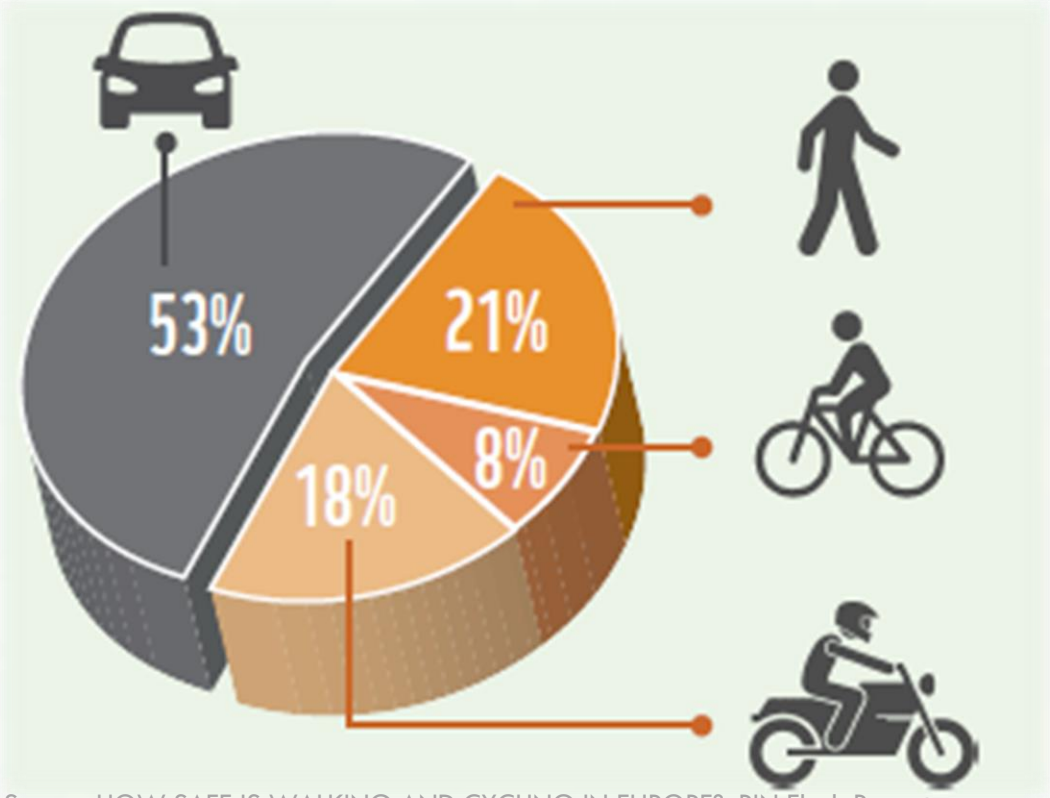


Project co-funded by European Union funds (ERDF, IPA, ENI).

How cycling becomes more and more important?

Within EU, 2160 cyclists are killed each year, which translates to 8% of total road traffic fatalities.

262,000 cyclists sustained serious road traffic injuries over the period 2010-2018



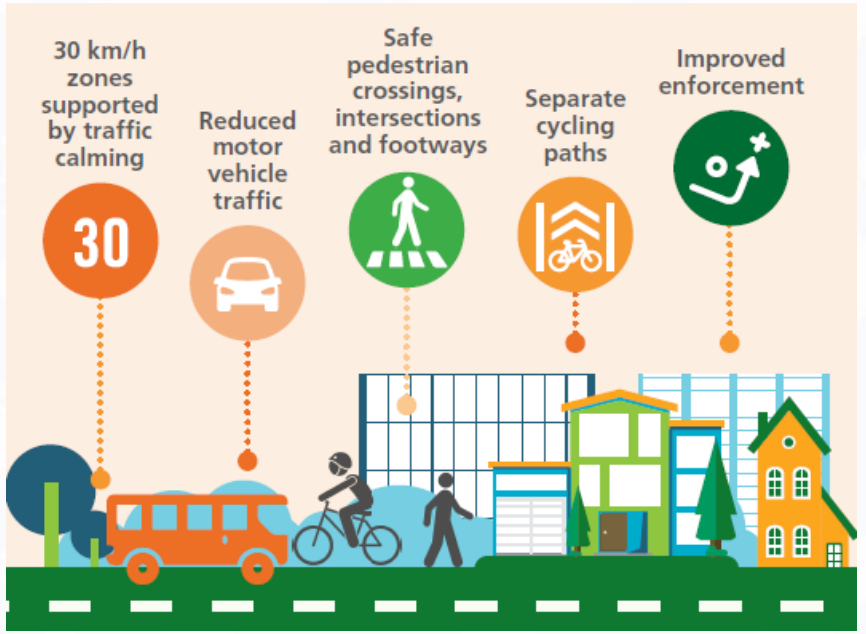
Source: HOW SAFE IS WALKING AND CYCLING IN EUROPE?, PIN Flash Report 38, January 2020

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

How cycling becomes more and more important?

Part of the current problem is that in many EU Member States the road system, with notable exceptions, has not been designed with cyclists in mind.

However, most of the countries recognized the problem, started addressing the growing need for cycling infrastructure, and are attempting to implement adequate measures.

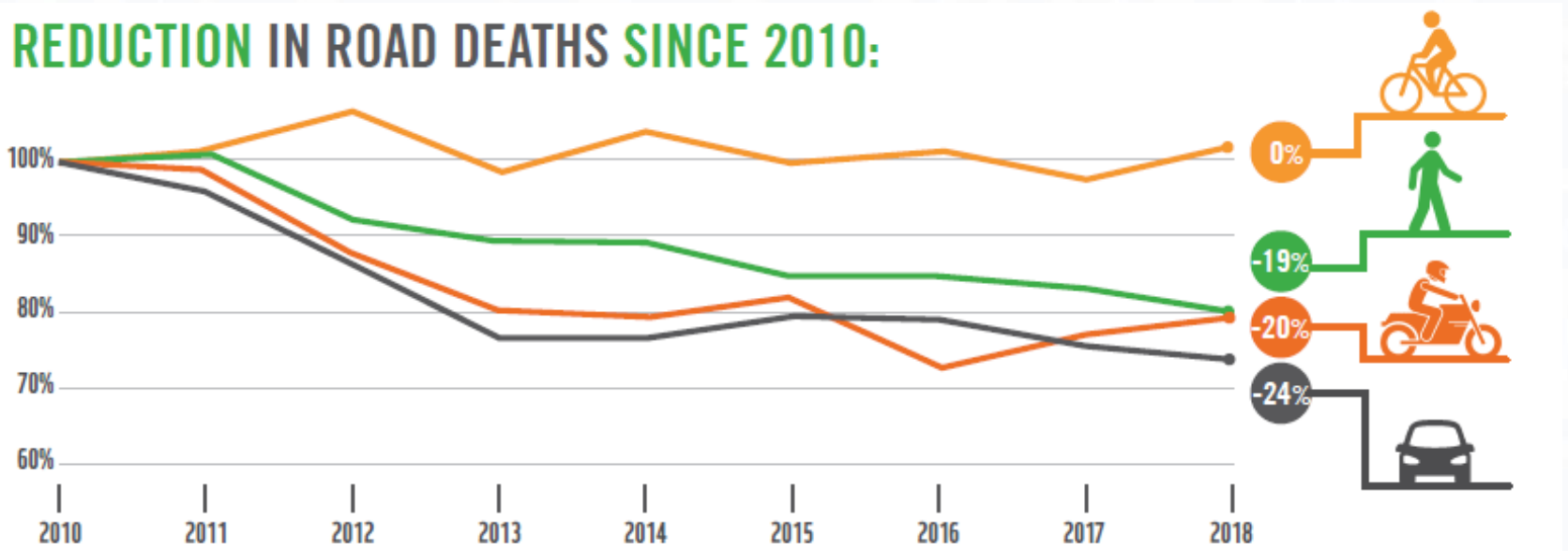


Source: HOW SAFE IS WALKING AND CYCLING IN EUROPE?, PIN Flash Report 38, January 2020

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

How cycling becomes more and more important?

When considering road death reduction per road user group, cyclists are the only stagnating road user group, where little to no progress is recorded.

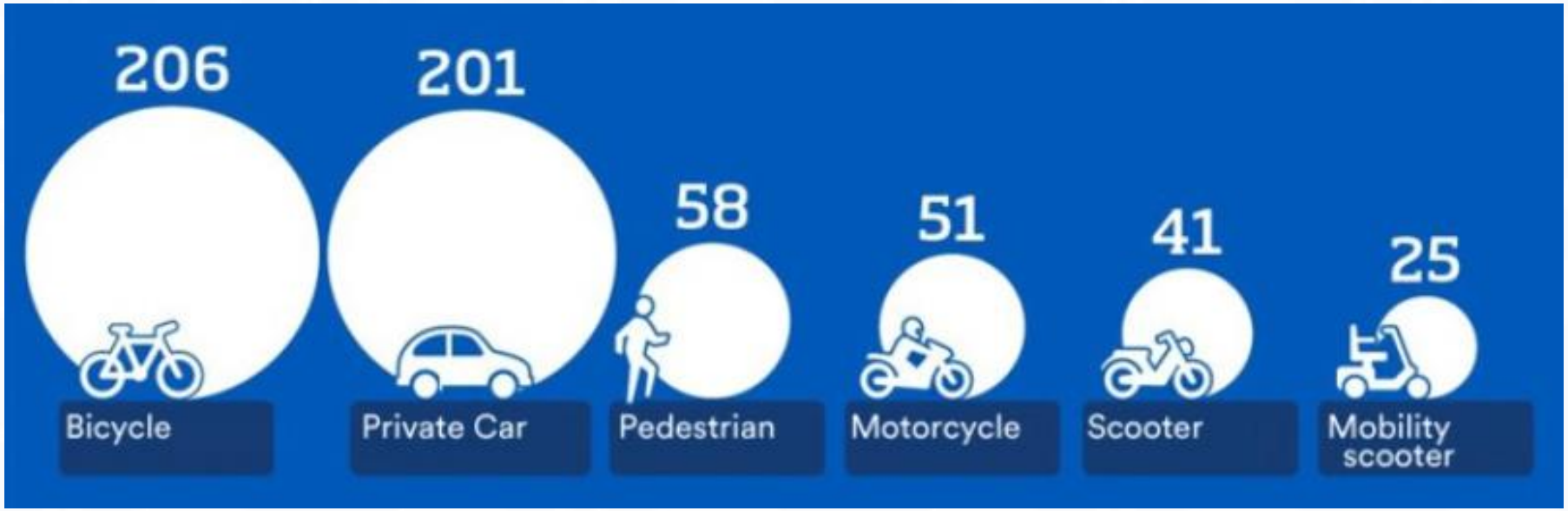


Source: HOW SAFE IS WALKING AND CYCLING IN EUROPE?, PIN Flash Report 38, January 2020

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

How cycling becomes more and more important?

Shocking facts are coming even from developed countries (i.e. NL) where in 2017 more people were killed and seriously injured on bicycles than in cars.



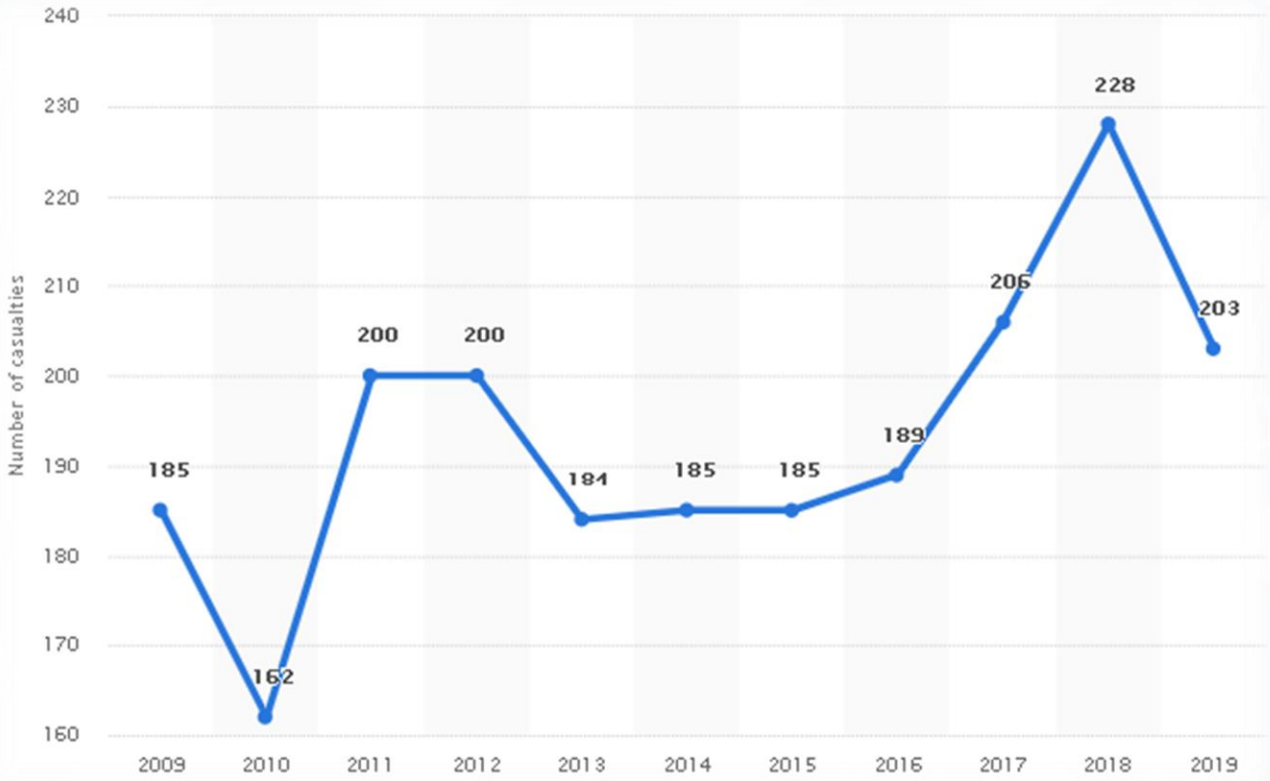
Source: More cycling fatalities than deaths in cars - article https://bicycledutch.wordpress.com/2018/04/25/more-cycling-fatalities-than-deaths-in-cars/

Two-thirds of the deaths were people over 65 years of age, while only cycling 3% of the total distance cycled.

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

How cycling becomes more and more important?

Compared to the past annual reports in Netherlands, a worrying fact is that cyclist road deaths are still on significant rise trend.



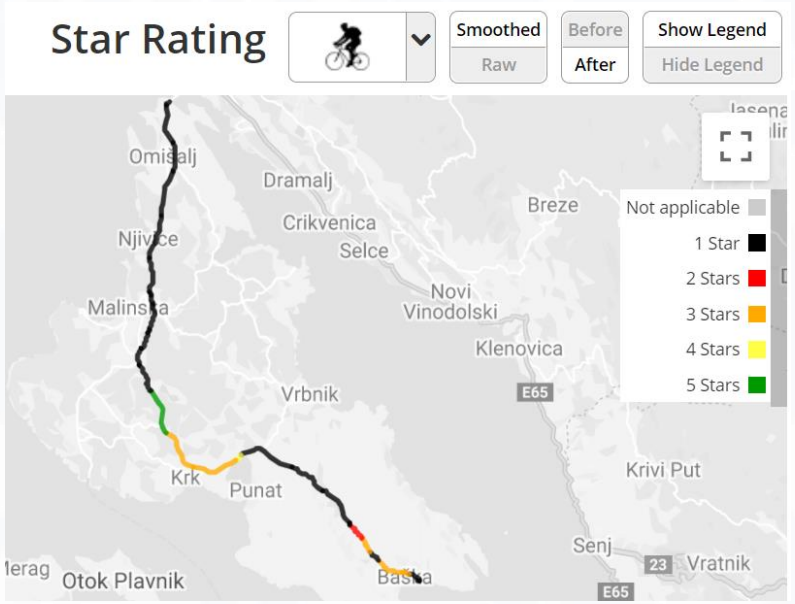
Source: Number of cyclist road fatalities in the Netherlands 2009-201, https://www.statista.com/statistics/523310/netherlands-number-of-cyclist-road-fatalities/

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

Assessing cycling infrastructure – iRAP method

- iRAP assessment model gives an insight on the state of infrastructure safety, presented in an easy to understand format, i.e. Star Rating. Alongside Risk maps, it is a valuable tool for targeted infrastructure investment

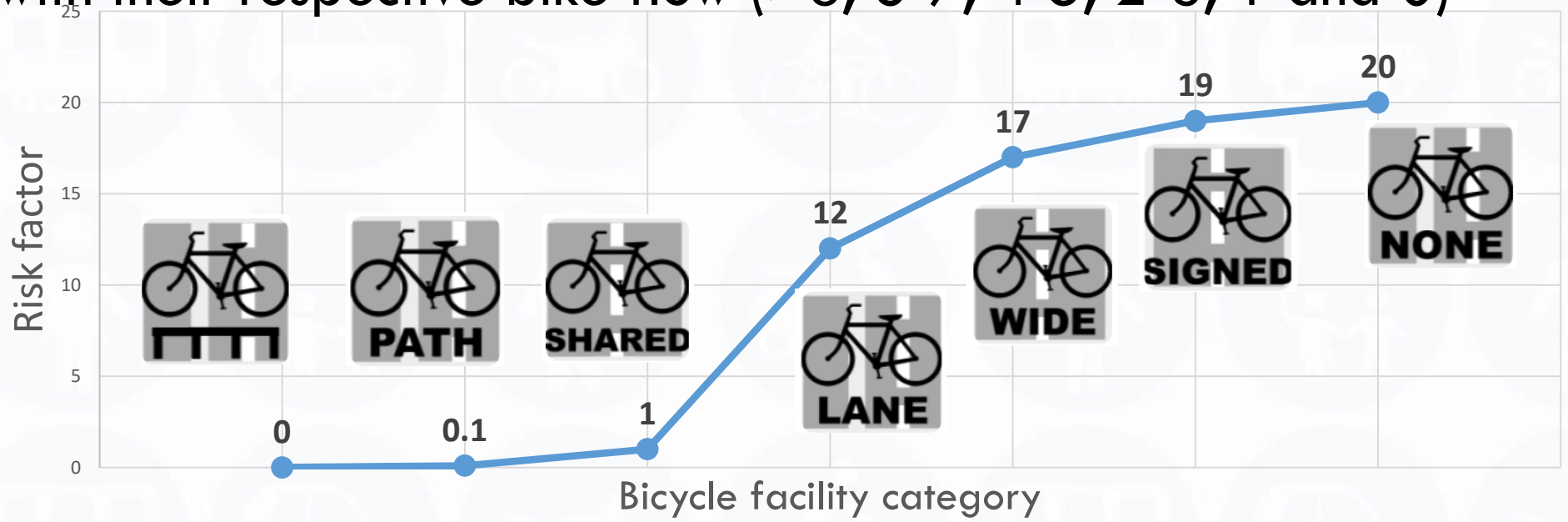
5 Stars	★★★★★
4 Stars	★★★★☆
3 Stars	★★★☆☆
2 Stars	★★☆☆☆
1 Star	★☆☆☆☆



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

Assessing cycling infrastructure – iRAP method

- iRAP methodology considers only purpose-built facilities for bicyclists, grouped in 7 categories (none, signed shared roadway, extra wide outside ≥4.2m, dedicated bicycle lane on roadway, shared use path, segregated bicycle path and segregated bicycle path with barrier) with their respective bike flow (>8, 6-7, 4-5, 2-3, 1 and 0)



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

The CycleRAP model: Where does it fit?

City-wide ‘screening’ of bicyclist safety

Helps cities focus on where safe bicycling infrastructure is needed

Driven from big data sources

Gives city reliable metrics about traffic speed and flow, and single, relevant attributes

Focuses on the safety issues connected to roads, traffic and accessibility

Outcome is heat map of high risk vs low risk

Can be used for the promotion of improved bicycling conditions and mode shift

‘iRAP light’ assessment

A large network assessment based on fewer attributes (compared to a regular Star Rating)

May or may not contain details on where bicycle facilities are or what they are

Focuses on the safety of vehicle-bicycle interactions

Outcome is a Star Rating

Can be used to pinpoint and address high risk areas

Full iRAP assessment

A comprehensive assessment on a selected network or corridor

Produces a Safer Road Investment Plan

Identifies facility type and location

Remains focused on the safety of vehicle-bicycle interactions

Outcome is a bicyclist Star Rating

Can be used to upgrade bicycling facilities connected to roads

CycleRAP assessment

A detailed assessment of bicycling facilities

Encompasses all risk present to bicycle facility users (not just vehicle-bicycle)

Caters for a range of light mobility users – not just bicyclists

Can help inform improved design of facilities and better inform policy and regulation around their use

Primary purpose is to improve safety of existing facilities and reduce a range of crash types causing serious injuries and fatalities

Can be used to identify and address all types of crash risk on facilities (regardless of the presence of a road or other vehicles)

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

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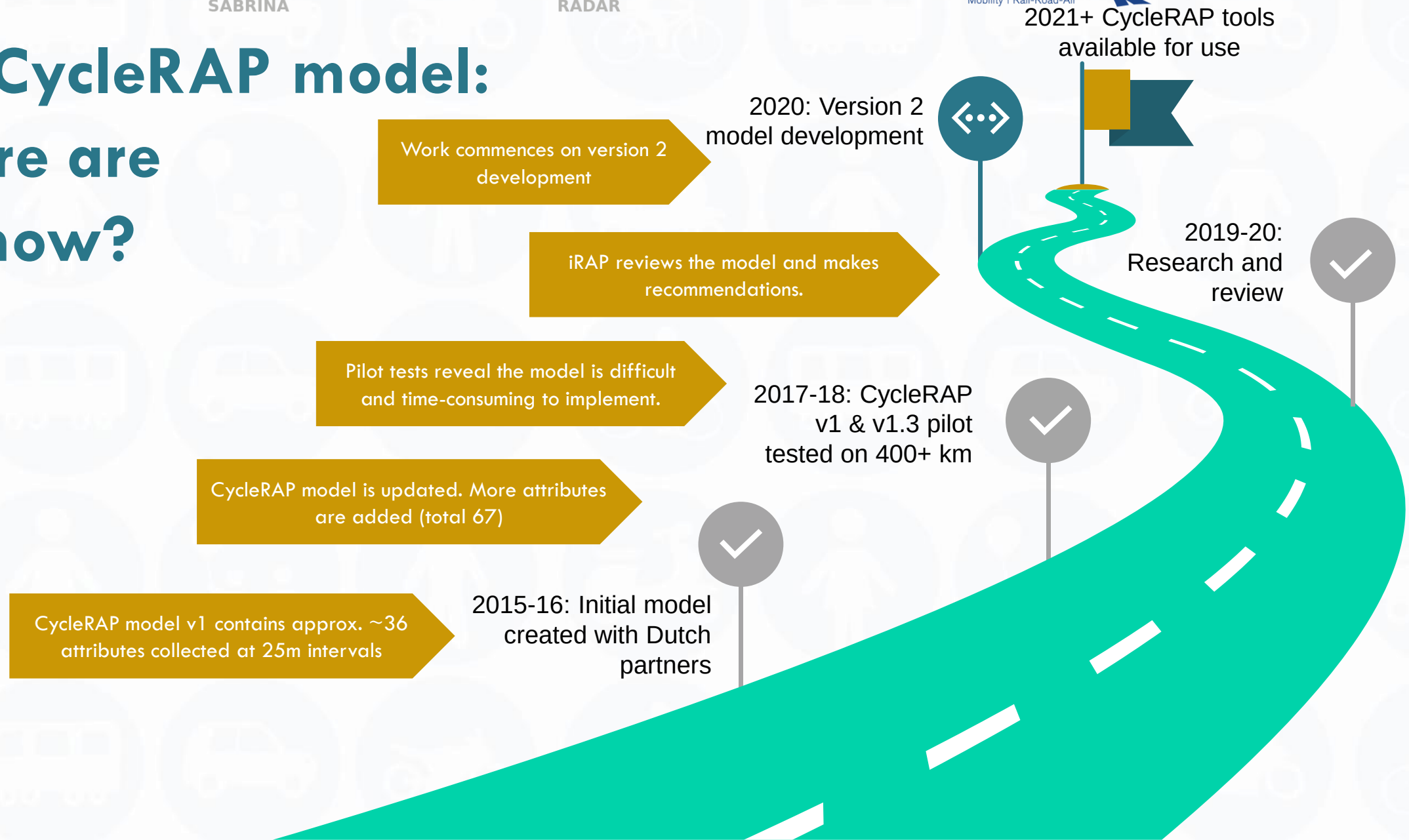
The CycleRAP model: Where are we now?



The CycleRAP model: Where are we now?

CycleRAP **vision**:

To able to identify and address cyclist-specific infrastructure risk, regardless of road or facility type.

To evaluate risk for all bicycle facilities, regardless of whether that facility is attached to a roadway.

To evaluate risk for the users of such facilities, including a range of micro-mobility vehicles and pedestrians.

CycleRAP 'v2' **model objectives**:

To ensure that the model is based on research and evidence available.

To ensure the model can be suitably applied in any location and city, and meet the needs of local authorities to identify and address key areas of risk on the network.

To ensure the model effectively evaluates risk of both crashes involving vehicles and crashes not involving vehicles.

To have an easy to understand structure and logic.

CycleRAP **tools and software**:

To be intuitive, cost-effective and easy to use.

To produce results which are useful to local authorities and which provide clear direction on treatment of safety risks.

To enable enhanced analysis, such as 'layering' CycleRAP results with other relevant data (e.g. Star Ratings, speed and volume data).

To be provided by a network of suppliers which can tailor the end-user tools and services to local needs.

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

The CycleRAP model: targeted groups

CycleRAP target problems to solve:

Conflicts with vehicles

Conflicts between bicycles and/or light mobility vehicles

Conflicts with pedestrians

Crashes which do not involve others

Who could use CycleRAP:

Transport and urban planners, infrastructure and transport investors

Bike share and micro mobility sharing service providers, bicycle courier and food delivery companies

School communities

Policy makers and advocates for the environment, climate change and sustainability, mapping and navigation providers

Health services and insurance providers

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

Future development

- Besides comprehensive Risk Mapping on cycle routes, SABRINA will integrate two existing assessment methodologies (EuroVelo ECS and EuroRAP) and deliver integrated bicycle infrastructure risk assessment methodology for future use.

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

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Best Practices in cycling infrastructure – across strategic, planning and engineering levels

Klaus MACHATA

Austrian Road Safety Board (KfV)

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

Can there be *Best* Practice?





- … there could always be a better one (in the future)

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

How to identify Best / Good / Promising Practice?

- Problem solving capacity
  - Intervention has shown (or has great potential) to solve an issue, to bring about improvement in a sustainable way, with good public and political acceptance, in a cost-efficient way.
- Transferability
  - … to other settings, regions, countries, jurisdictions – usually with modifications. Hence, good practices are more than a blueprint to copy & paste!
- Documentation
  - EU project reports, scientific literature, national grey literature, so that others can build on this knowledge for their individual settings

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

Hands-on descriptions: make it relatable!

- **Problem** that was solved?
- **What** is the good practice **about**?
- What **triggered** the improvement?
- Who were main **actors**?
- Political / public **barriers**?
- Positive **impacts**? **Costs**?
- **References, contacts**?

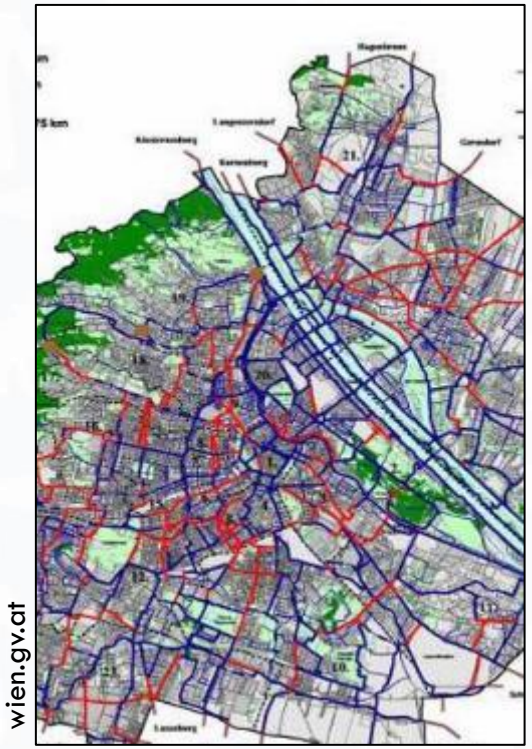
Mariahilfer Straße, Vienna

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

Three levels of activities

Austria RVS 03.02.13

1 Infrastructure / Engineering



wien.gv.at

2 Planning

klimaaktiv.at / Austrian Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology

3 Strategic

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

1 Infrastructure / Engineering level

- Design principles
- Concrete measures
- Maintenance
- Assessment of cycling infrastructure safety

KFV


ECF


Transport for London


ECF


Austria RVS 03.02.13


Cambridge Cycling Campaign


copenhagenize.com


Austria RVS 03.02.13


Austria RVS 03.02.13


bicycledutch.wordpress.com


bicycledutch.wordpress.com

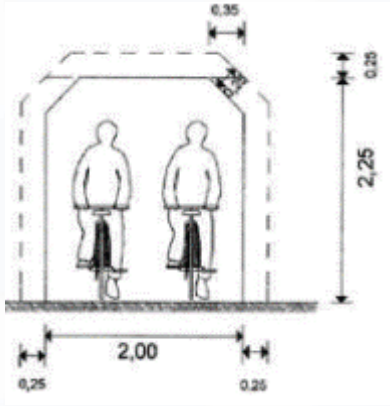
Project co-funded by European Union funds (ERDF, IPA, ENI).

2 Planning level

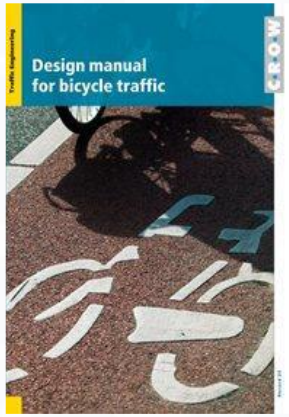
- Planning & design guidelines:
  cohesion, directness, safety, comfort and *attractiveness*
- Implementation of regional & local bicycle networks

bicy.it – BP in cycling

EuroVelo 13 - ECF



Austria RVS 03.02.13



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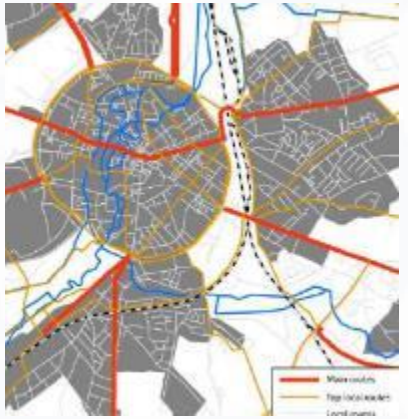

presto-cycling.eu

EuroVelo - ECF

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

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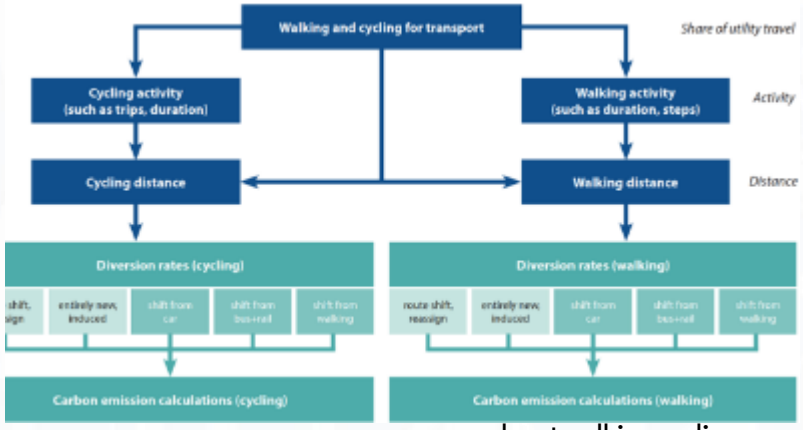
3 Strategic level

- National / regional / local and international strategies
- Promotion and awareness
- Legal precautions
- Seamless intermodality
- Health and environmental impact
- Policy Development and Evaluation Tools

INTERREG / ELTIS

bta4bikes.org

ÖBB



heatwalkingcycling.org

presto

Promoting Cycling for Everyone as a Daily Transport Mode

presto-cycling.eu

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

Thank you for the attention …

… and looking forward to a great cooperation & exercise!

Klaus Machata
KFV (Kuratorium für Verkehrssicherheit – Austrian Road Safety Board)
Schleiergasse 18 | A-1100 Wien
Tel: +43-(0)5 77 0 77- 1230

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

Strategic project for safer bicycle routes in Danube area – SABRINA

Olivera ROZI

European Institute for Road Assessment – EuroRAP (EIRA-EuroRAP)

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

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SABRINA: Safer Bicycle Routes in Danube Area

Project duration:
1 July 2020–31 December 2022

Project budget:
Overall: 2,086,019.00 €
ERDF Contribution: 1,701,992.40 €
ENI Contribution: 71,123.75 €

Priority:
Better connected and energy responsible Danube region.

Specific objective:
Support environmentally friendly and safe transport systems and balanced accessibility of urban and rural areas.

Source: www.slovenia.info, Photo: Tomo Jeseničnik

www.interreg-danube.eu/SABRINA

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

SABRINA in a nutshell

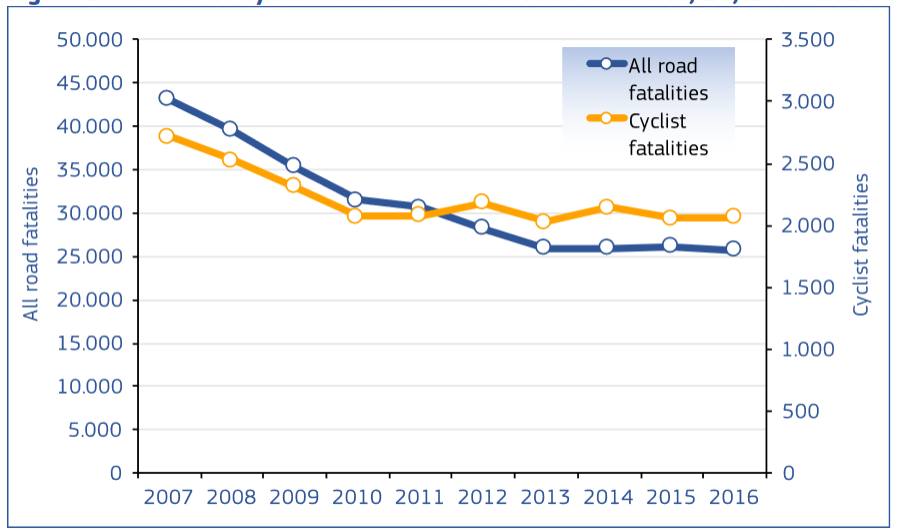
Maps infrastructure risks on existing Danube region EuroVelo routes and provides a strategic decision-making toolkit that will:

- increase stakeholders' capacity in all stages of decision making,
- build up knowledge and cooperation at different levels,
- prevent the development of killer cycling infrastructure in early stages of development.

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

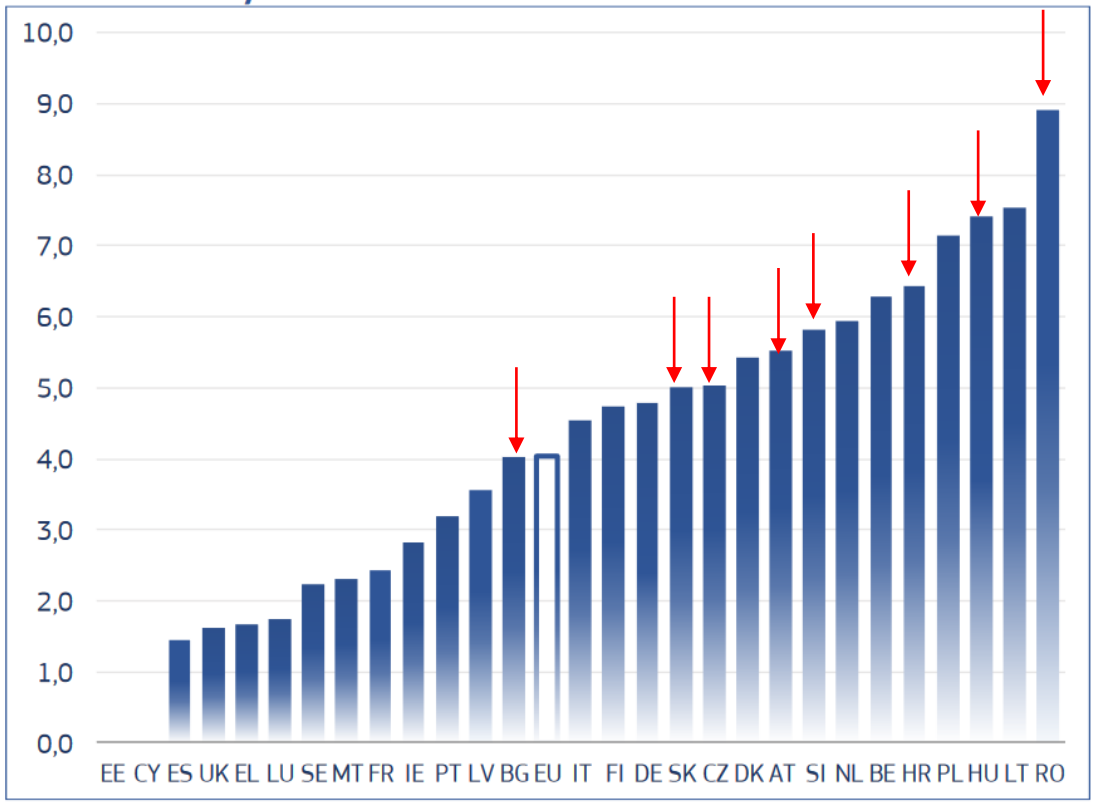
Some statistics

Figure 1: Number of cyclist fatalities and all road fatalities, EU, 2007-2016



Source: CARE database, data available in May 2018

Figure 3: Cyclist fatality rates per million population by country, 2016 or latest available year



Sources: CARE database (EUROSTAT for population data), data available in May 2018

European Commission, Traffic Safety Basic Facts on Cyclists, European Commission, Directorate General for Transport, June 2018.

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

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

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Projects component parts

- Inspection and Safety Ratings of bicycle Routes
- Good Practice Analysis
- Strategic Decision-Making Toolkit
- Pilots and Trainings

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

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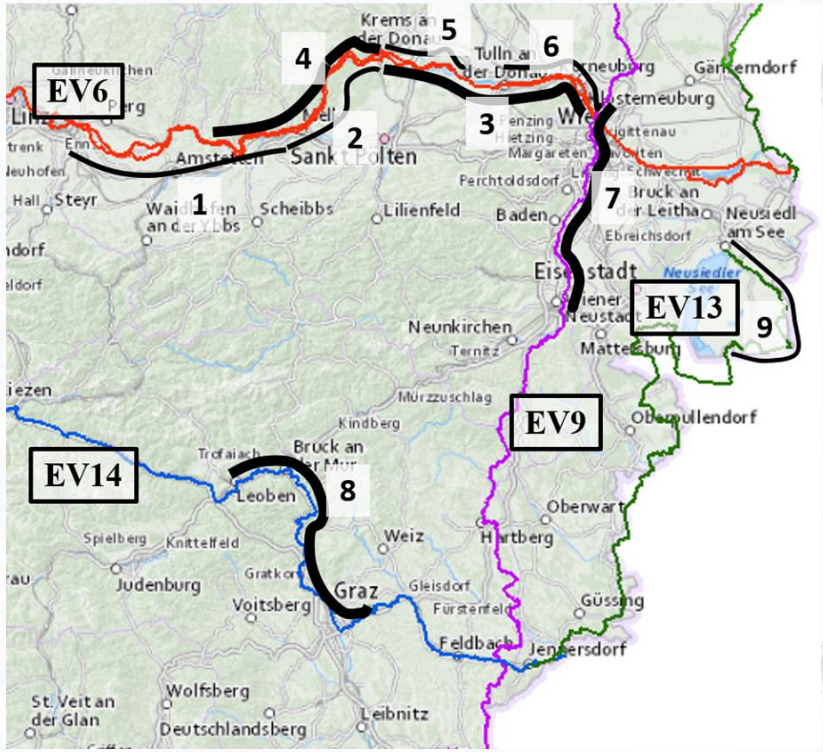
T1: Inspection and Safety Ratings of Bicycle Routes



- Network Definition
- Maps
- Inspections and Coding
- Analysis reporting and Safety Ratings
- Methodologies Capitalisation

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

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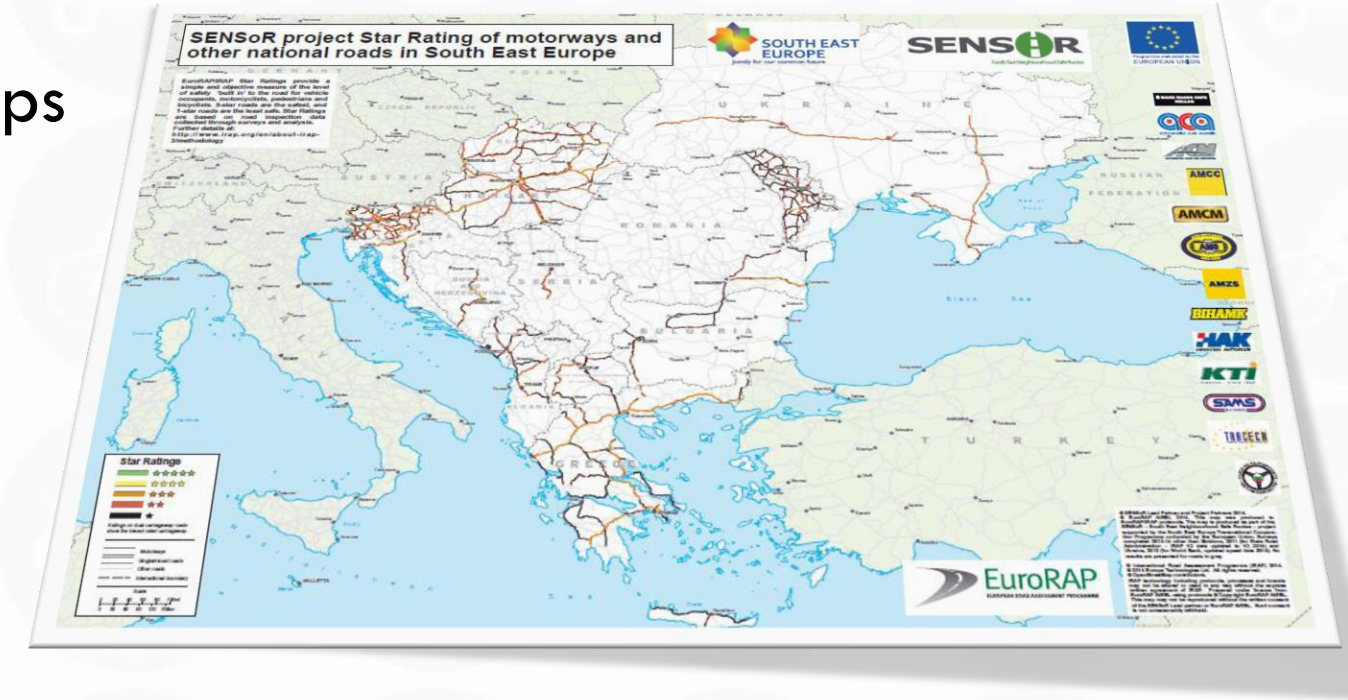
T1: Inspection and Safety Ratings of Bicycle Routes- Outputs

- Infrastructure Star Rating Maps
- Inspection database



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

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T2: Good Practice Analysis

Analysis of data collected during surveys

Desk research

Stakeholders Consultations

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

T2 Good Practices Analysis Outputs

- Best practice bicycle safety improvement fact sheets
- Recommendation for implementation of best practices
- National Consultations Report

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

T3: Strategic Decision-Making Toolkit

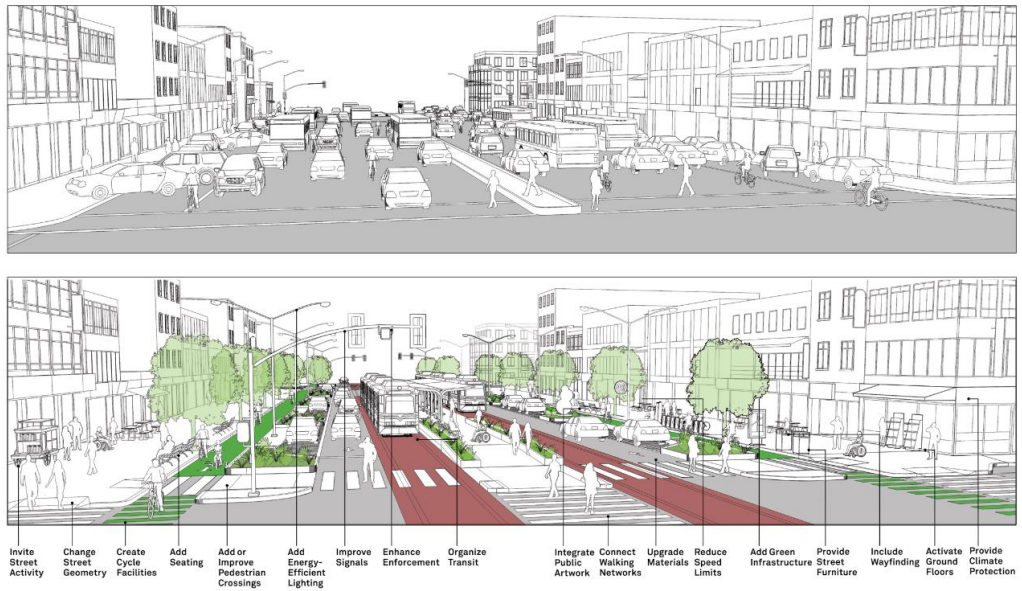


Photo: RAP Star Ratings of NACTO-GDCI's Global Street Design Guide

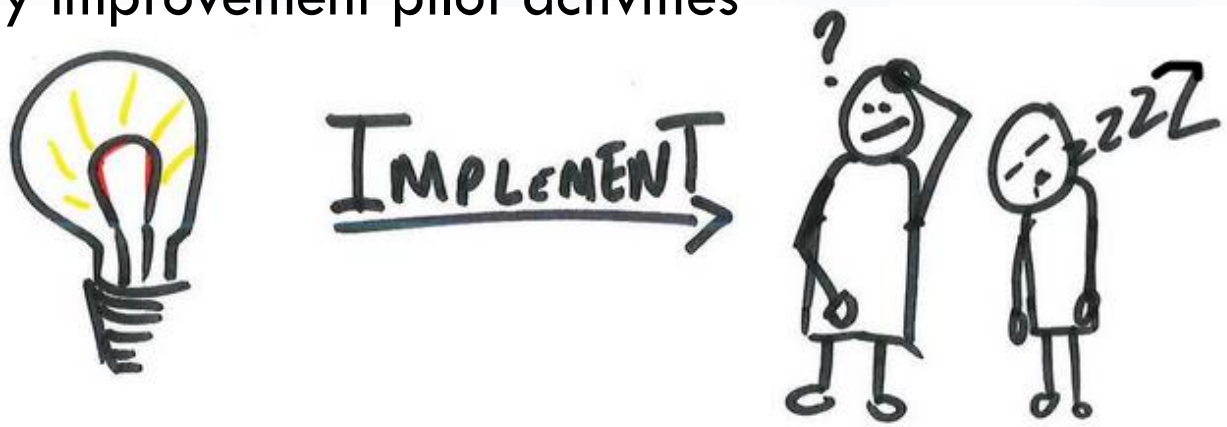
- AIM: To provide **users of cycling infrastructure and road safety authorities** and stakeholders with interactive web platform **Safe Cycling Routes Toolkit – SCRT** that will enable users to select recommended strategies and countermeasures for bicycle road safety improvements

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

T4: Pilots and Trainings

Learning activities will combine trainings and pilot actions to demonstrate use of Safe Cycling Routes Toolkit

- Training course concept on improving bicycle road safety
- Training courses
- Cycling infrastructure safety improvement pilot activities
  - Missing link planning
  - Star rating of design
  - Safer cycling infrastructure



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

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Project Partners

B.1 List of Project Partners

Role	Name	Acronym	Country
LP	The European Institute of Road Assessment - EuroRAP	EIRA - EuroRAP	SI, SLOVENIJA
PP	University of Zagreb, Faculty of Transport and Traffic Sciences	FPZ	HR, HRVATSKA
PP	Austrian Road Safety Board	KfV	AT, ÖSTERREICH
PP	West Pannon Regional and Economic Development Public Nonprofit Ltd.	WPRED	HU, MAGYARORSZÁG
PP	Partnership for Urban Mobility	PUM	CZ, ČESKÁ REPUBLIKA
PP	Green Revolution Association	GRA	RO, ROMÂNIA
PP	Municipality Ilirska Bistrica	OIB	SI, SLOVENIJA
PP	AGILE TRANSPORT ANALYSIS S.R.L	ATA	RO, ROMÂNIA
PP	Automobile Club of Moldova	ACM	MD, MOLDOVA
PP	Club “Sustainable Development of Civil Society”	CSDCS	BG, БЪЛГАРИЯ (BULGARIA)
PP	Ekopolis Foundation	Ekopolis	SK, SLOVENSKO
AP	Ministry of the sea, transport and infrastructure		HR, HRVATSKA
AP	Minsitry of Regional Development CZ		CZ, ČESKÁ REPUBLIKA
AP	Ministry of Transport		CZ, ČESKÁ REPUBLIKA
AP	Ministry of Infrastructure of the Republic of Slovenia		SI, SLOVENIJA

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Interreg
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SABRINA

Interreg
Danube Transnational Programme
RADAR

DANUBE REGION strategy
Mobility | Rail-Road-Air

SABRINA project

No fears about safety on two wheels.

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

Interreg
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RADAR

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Questions?

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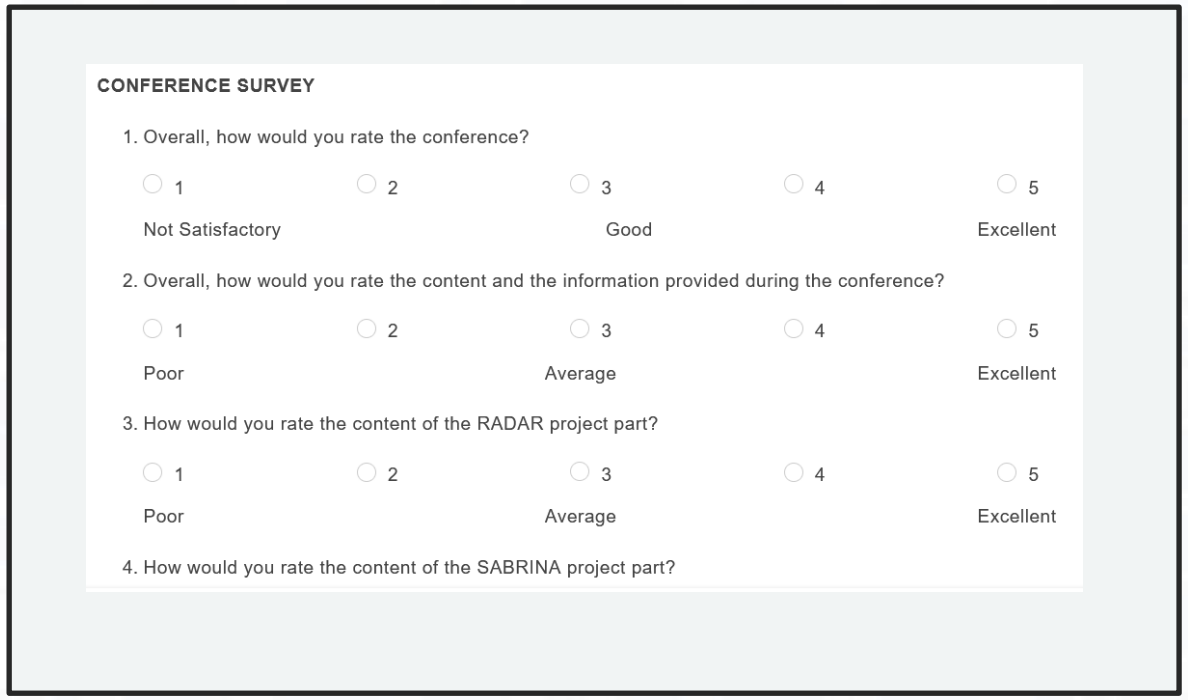
Interreg Danube Transnational Programme SABRINA

Interreg Danube Transnational Programme RADAR

DANUBE REGION strategy Mobility | Rail-Road-Air



CONFERENCE SURVEY

1. Overall, how would you rate the conference?

1	2	3	4	5
Not Satisfactory		Good		Excellent

2. Overall, how would you rate the content and the information provided during the conference?

1	2	3	4	5
Poor		Average		Excellent

3. How would you rate the content of the RADAR project part?

1	2	3	4	5
Poor		Average		Excellent

4. How would you rate the content of the SABRINA project part?

Please stay on the line…

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Contacts and links

RADAR project

www.interreg-danube.eu/RADAR

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Your Road Safety is on our RADAR.

SABRINA project

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