

Assignment:

**"Technical Assistance for Road Safety Management Capacity Review (RSMCR) and improvements of road safety management capacity at municipality level (Local Communities)"**

## **Road Safety Management Capacity Review (RSMCR) in North Macedonia**

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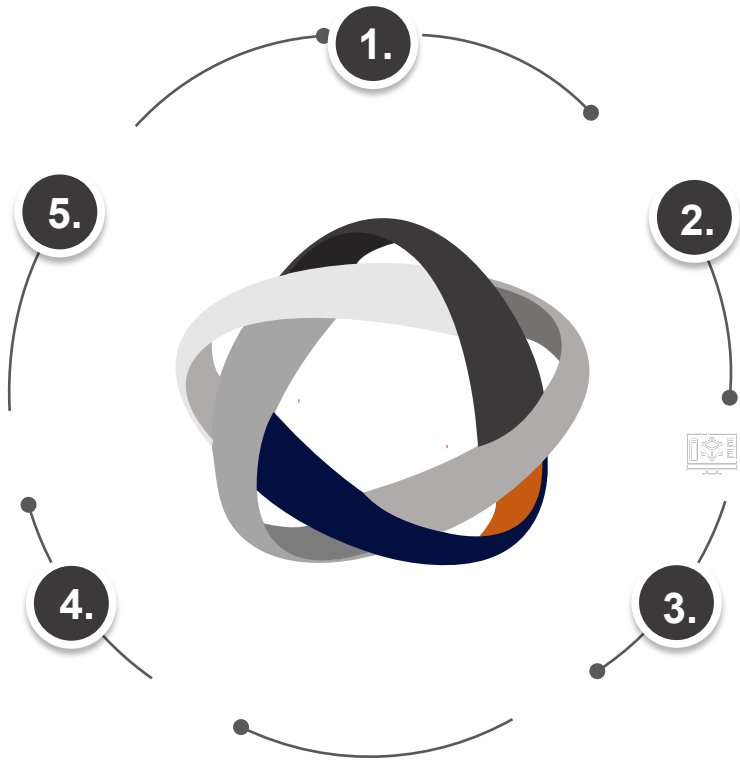
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# Content of presentation

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- 1. Overview RSMCR**
- 2. Losses and possible funding for road safety**
- 3. RSMCR – Key findings and recommendations**
- 4. Action plan**
- 5. Importance of Road Traffic Safety Agency**

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**RSMCR - Road Safety Management Capacity Review**

# About Road Safety Management Capacity Review

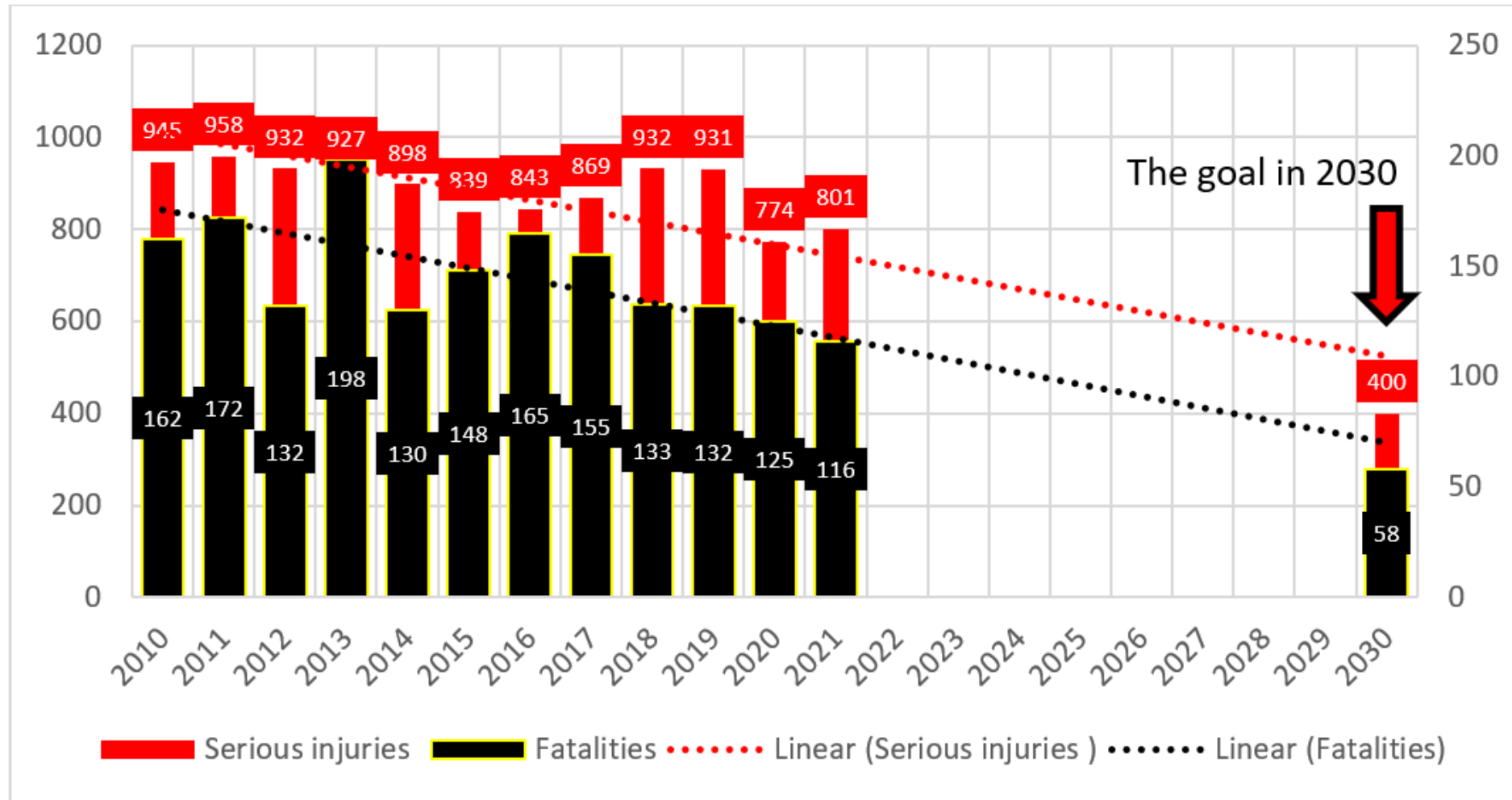


**RSS**  
**third generation**

**Project task was to support the Government of North Macedonia** and Ministry of Transport and Communications in **conducting a Road Safety Management Capacity Review.**

**RSMCR** recommendations will be used as a basis for preparation of third generation of **Road Safety Strategy and Action Plan**

# What North Macedonia want to achieve in road safety?

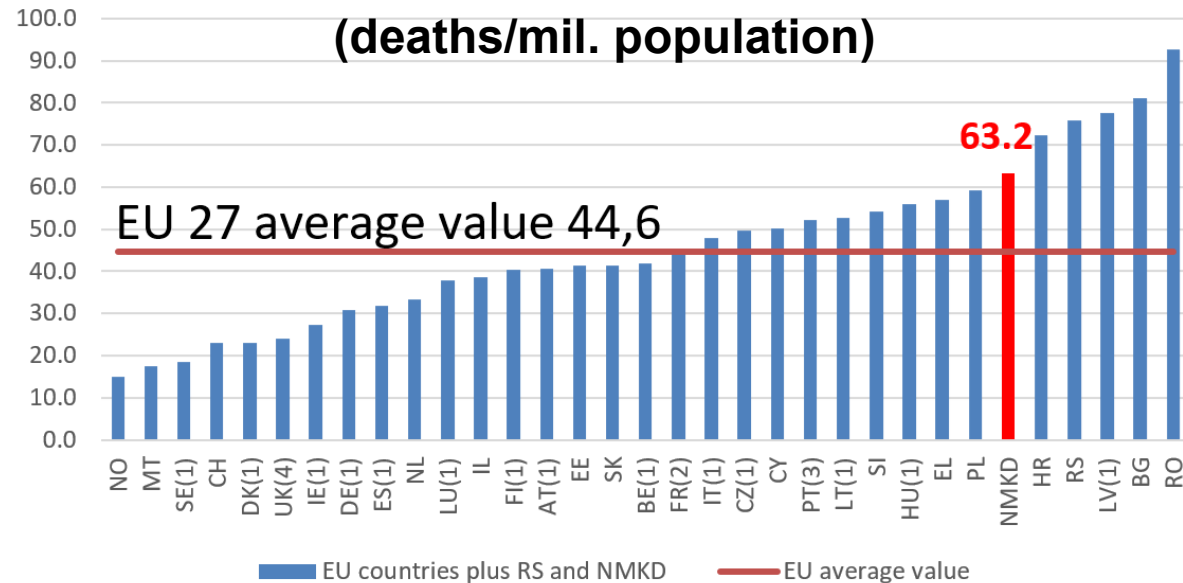


**National Transport Strategy Goal: Reduce the number of deaths and the number of seriously injured on the roads by 50% by 2030**

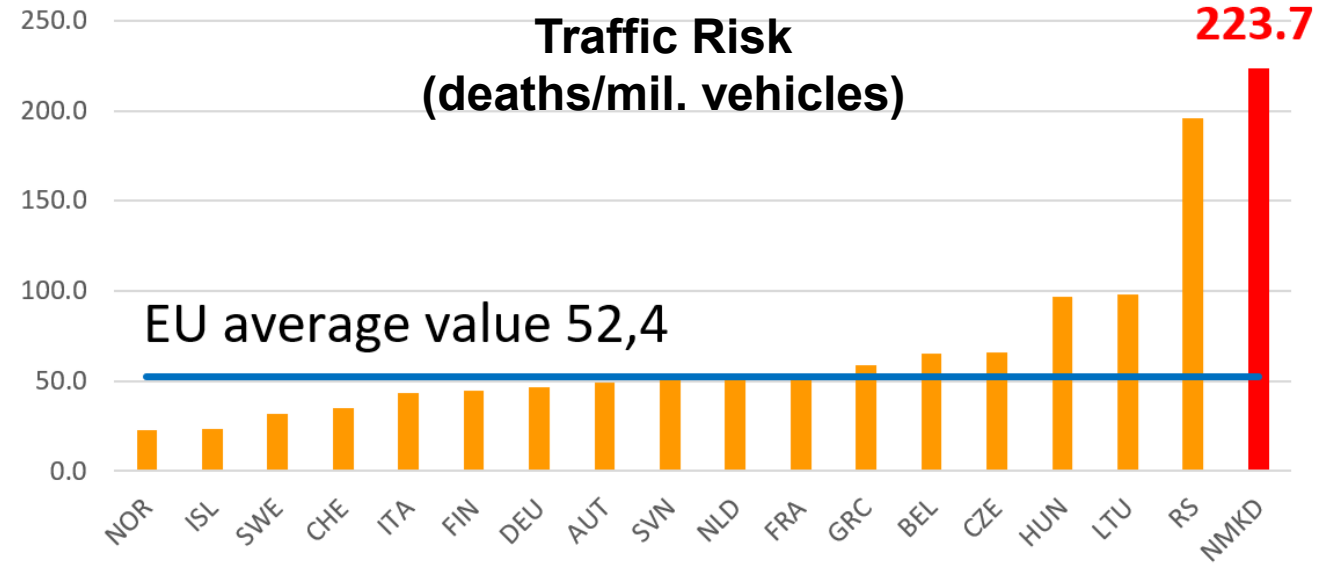
# What do North Macedonia want to achieve in road safety?

Comparison with EU countries

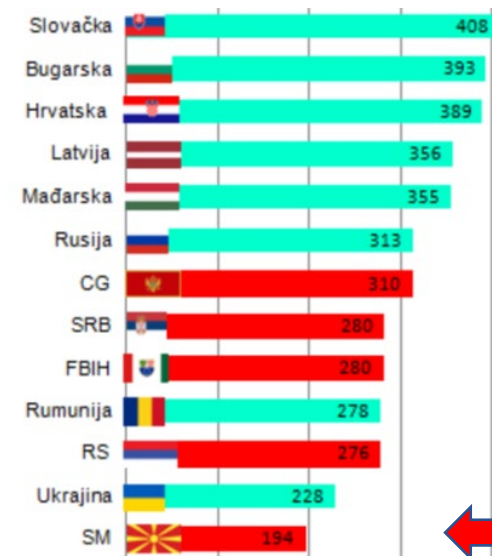
**Pubic Risk**  
(deaths/mil. population)



**Traffic Risk**  
(deaths/mil. vehicles)



EU countries plus RS and NMKD (orange bars), EU average value (blue line)



Motorization level

North Macedonia



# Losses and possible funding for road safety

	Lower		Central		Upper	
	iRAP value	N. Macedonia estimate	iRAP value	N. Macedonia estimate	iRAP value	N. Macedonia estimate
Value of fatalities	60*GDP/ Capita	US\$ 44,160,000	70*GDP/ Capita	US\$ 51,520,000	80*GDP/ Capita	US\$ 58,880,000
Value of serious injury	12*GDP/ Capita	US\$ 88,320,000	17*GDP/ Capita	US\$ 125,120,000	24*GDP/ Capita	US\$ 176,640,000
Total		US\$ <b>132,480,000</b>		US\$ <b>176,640,000</b>		US\$ <b>235,520,000</b>
% of GDP		<b>1.08</b>		<b>1.44</b>		<b>1.92</b>

Estimated cost of road crashes in North Macedonia Road Assessment Program - **iRAP** economic appraisal model

**2% = US\$ 240 mil.**

Note: Data for 2020: GDP: 12.27 billion US\$; GDP/Capita: 5,888 US\$; Fatalities: 125; Estimated Serious Injury: 1,250

	North Macedonia estimate (US\$)
Value of fatalities	425,112,991
Value of serious injury	647,414,181
Value of slight injuries	172,966,374
<b>Total:</b>	<b>1,245,546</b>
<b>% of GDP</b>	<b>10.37</b>

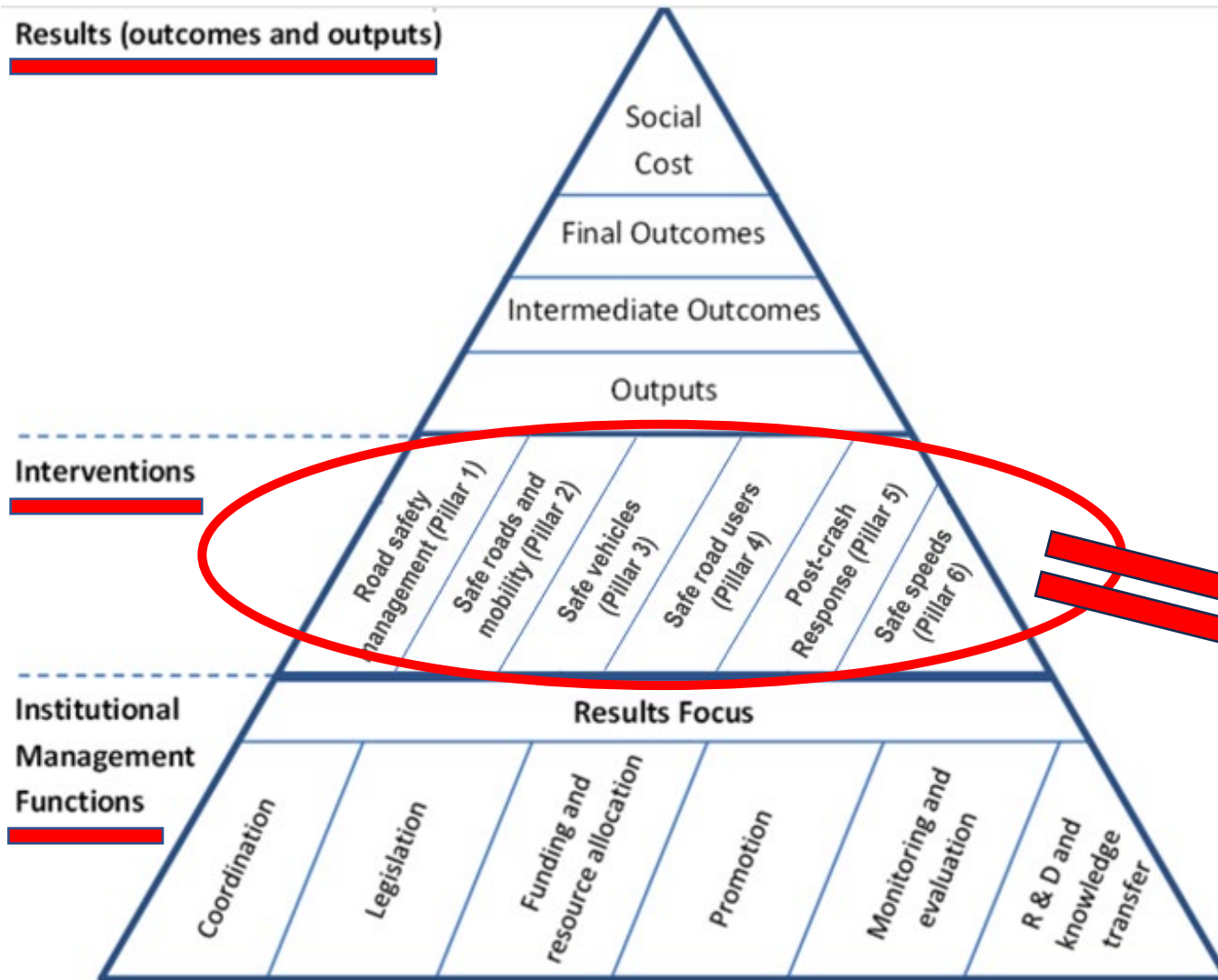
Estimated cost of road crashes in North Macedonia using **EU model** (SafetyCube 2017)  
Euro transferred into US\$

## The GRSF Road Safety Country Profiles

estimated cost of fatalities and serious Injuries for 2016 of **US\$ 229 million, or 2.1 percent of GDP**

Note: Data for 2020: Fatalities: 125; Estimated Serious injury: 1,250; Estimates Slight injuries: 4491.

# Concept of Road Safety Management Capacity Review

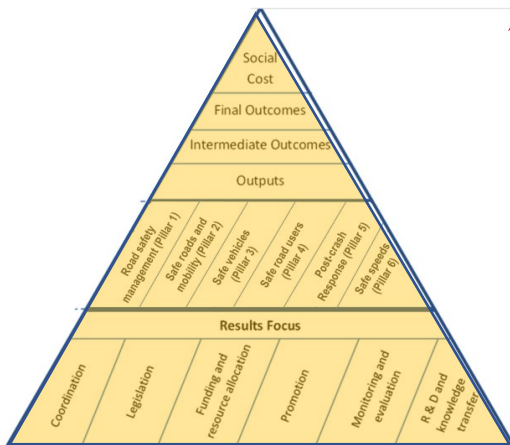


**The Road Safety Management System**  
(Modified approach based on Bliss and Breen 2009)

1. Appraise results' focus at **system level**
2. Appraise results focus at **interventional** and **institutional** level
3. Assess **lead agency** role and identify capacity strengthening priorities



# RSMCR - Key findings and recommendations - System level



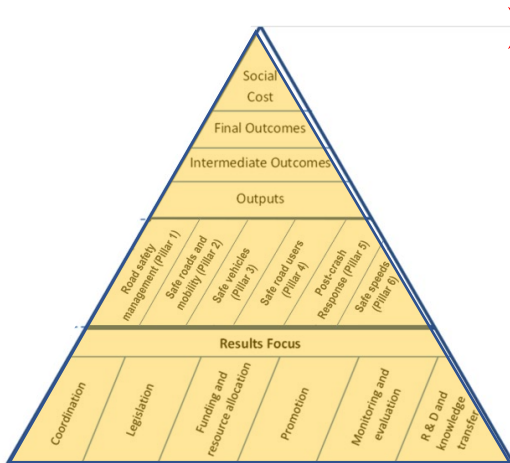
## ➤ Review of existing practices:

- ROAD SAFETY (RS) VISION/GOAL EXISTS (WITHIN NATIONAL TRANSPORT STRATEGY)
- NO CURRENT ROAD SAFETY STRATEGY OR NATIONAL RS TARGETS
- LEAD ROAD SAFETY AGENCY UNDER ESTABLISHMENT (ONGOING PROCESS),
- DATA ON ROAD DEATHS/INJURIES ARE READILY AVAILABLE, BUT NO OTHER IMPORTANT DATA FOR MONITORING OF RS (including KPIs)
- NO ESTIMATES OF TOTAL SOCIAL COSTS OF CRASHES AVAILABLE,
- ...

## 1. Gap Analysis - Findings System Level



# RSMCR - Key findings and recommendations - System level

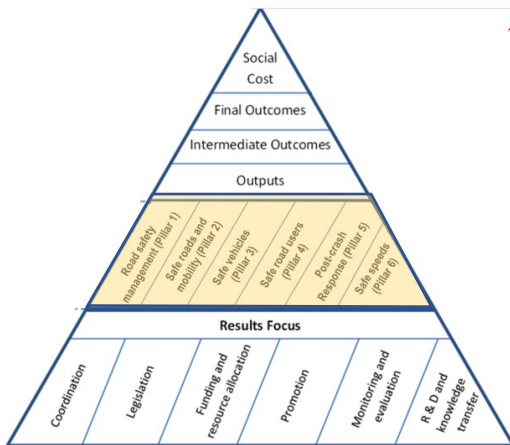


## 2. Proposals System Level

### ➤ Recommended new practices:

- Prepare **Road Safety Strategy and Action Plan**
- Continue efforts to establish **Road Traffic Safety Agency** with accompanying coordination arrangements (with deadlines) and **local road safety councils** (Local Road safety coordination body)
- Improve existing **crash database** (CADAs) and establish **National integrated database**
- Perform **survey of RS performance indicators** and **total socio-economic costs** of road crashes
- Establish **regular monitoring of KPIs, reporting,**
- ...

# RSMCR - Key recommendations - Interventions level

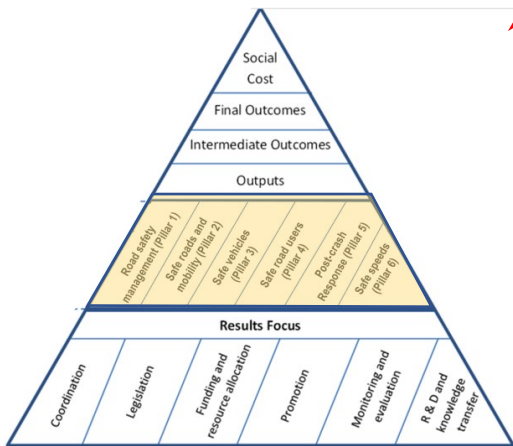


## ➤ Recommended new practices – Proposals 1/2:

- Improvement of road design **standards and guidelines** in accordance with International best practice (safe road design) and SSA
- Improve the quality/safety of existing/new **infrastructure** and begin to **implement RISM procedures/tools** as well as **speed management treatments** (traffic calming measures) & vehicle restraint systems in accordance with EN 1317 at regular base + **training and licensing of road infrastructure safety specialists/staff**
- Establish the **Central Register of Vehicles**, in accordance with expert recommendation and EU practice
- Establish independent market vehicle **surveillance body** in accordance with EU regulation
- The **driver's license strategy** should be developed to graduated driver's license (GDL) strategy

## 2. Proposals Interventions Level

# RSMCR - Key recommendations - Interventions level

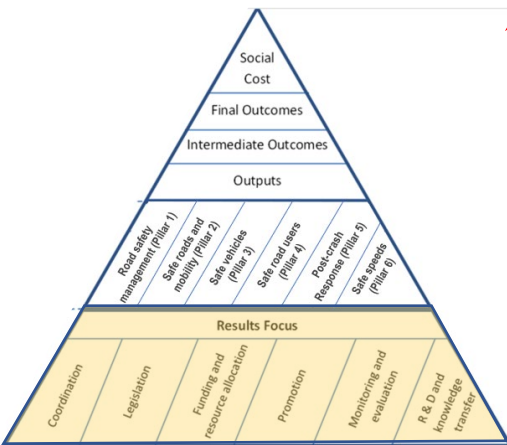


## ➤ Recommended new practices – Proposals 2/2:

- Develop and implement **system of measures for risky road users**
- Improve the **work of 112 Centre** and **data exchange** among rescue services
- Establish **monitoring of data indicators related to the EMS**, including of time responses by emergency services
- Establish the practice of **training of representatives of emergency services** and **joint training**
- Start preparation for **introduction of MAIS3+ injury scale for serious injuries** with Pilot Project
- Introduce **speed management system**
- Introduce **average speed control** and improve the use of automatic speed cameras
- Intensive **police speed enforcement based on automatic control**<sup>11</sup>

## 2. Proposals Interventions Level

# RSMCR - Key recommendations – IMF level

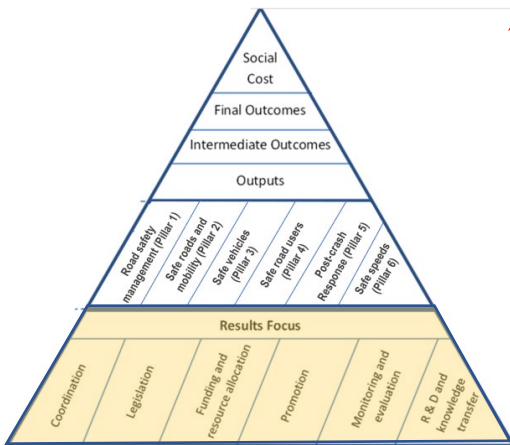


## ➤ Recommended new practices – Proposals 1/2:

- Re-establish of the work of the **National Coordination Body** for improvement of road safety and establish, establish **RTSA** and **local RS councils**
- Establish **official coordination & cooperation** between RTSA & local RS councils (**vertical coordination**)
- Adopt the **Law on Road Traffic Safety Agency** (already in procedure)
- **Amend** the law on road safety/Law on roads/Law on vehicles, ..., as well as **prepare missing and improve existing Rulebooks** (proposals are party prepared under previous EU/WB road safety projects)
- Develop and adopt the model of **sufficient and sustainable funding of RS**
- Define/regulate exact **model of resource allocations** at state and local level and as accurately as possible determine the **purpose of the RS funds**
- Establish a **reporting** process, **supervision** and **effective control** of the use of RS funds

## 2. Proposals Institutional Management Functions

# RSMCR - Key recommendations – IMF level



## ➤ Recommended new practices – Proposals 2/2:

- Developing/performing official analysis of **total socio-economic costs** of road crashes,
- **Promote improved road safety management**
- **Perform road safety campaigns and evaluate them**
- Improving the **road crash database** and aligning it with the CADaS
- Establish and perform **regular surveys of RS performance indicators**
- Establishing open and easily accessible national **integrated RS database**
- Perform and **evaluate RS measures for improvement of safety** of high-risk road users
- **Improve cooperation** between EU and domestic researchers and institutions
- Establish and implement national road safety **research program** in RS

## 2. Proposals Institutional Management Functions

# Action Plan

## Content of action plan:

1. ROAD SAFETY MANAGEMENT							
No.	Activity	Time period for the implementation of activity	Description of activity	Institution/s/organization/s responsible for the activity and cooperation		Estimated budget * / Source	Expected outcome/ Indicator
				Responsible for the activity	Cooperation		

## Outline of proposed action plan:

no	Activity – Road safety management	2023	2024	2025	2026	2027
1	Adopting the Law on Road Traffic Safety Agency of the Republic of North Macedonia					
2	Establishing a Road Traffic Safety Agency					
3	Re-established of the work of the National Coordination Body for road safety					
4	Developing and adopting the Amendments and Supplements to the Law on Road Safety					
5	Establishing local road safety councils in larger cities and municipalities					
6	Developing and adopting of National Road Safety Strategy for the period of at least five years					
7	Developing and adopting of Road safety Action Plan for the period of at least three years					
8	Developing methodology and perform calculation of total socio-economic costs of road crashes					
9	Developing and adopting the model of sustainable funding of road safety					
10	Improving the road crash database of the Police and aligning it with the EC CADaS recommendations					
11	Establishing a national integrated road safety database					
12	Developing methodology of measuring road safety performance indicators and perform the first survey of KPIs					

no	Activity – Safe roads and mobility	2023	2024	2025	2026	2027
1	Developing and adopting the Amendments and Supplements to the Law on Public Roads					
2	Developing and adopting by-laws to regulate more closely the implementation of RISM tools					
3	Improving of the road safety work of road managers at national/local level (RSIA, RSI, RSA, RM, BSM)					
4	Establishing a center for licensing road safety auditors and inspectors					
5	Targeted infrastructure improvements based on implementation of modern Road Infrastructure Safety Management - RISM tools (RSIA, RSI, RSA, RM, BSM, NSM, ...).					
6	Review and proposal of update of road design standards					
7	Identifying the high-risk sections of state and local roads to address observed issues with the road infrastructure					
8	Preparation of ITS study/methodology for implementation of enforcement oriented ITS, with implementation of system on motorways and highways/main roads					
9	Improving regular maintenance by implementation of Road Weather Information System on Core and Comprehensive Road network					

# Action Plan

no	Activity – Safe speed	2023	2024	2025	2026	2027
1	Preparation of Safe Speed study/methodology for aligning of speeds with SSA for implementation of motorways and state roads					

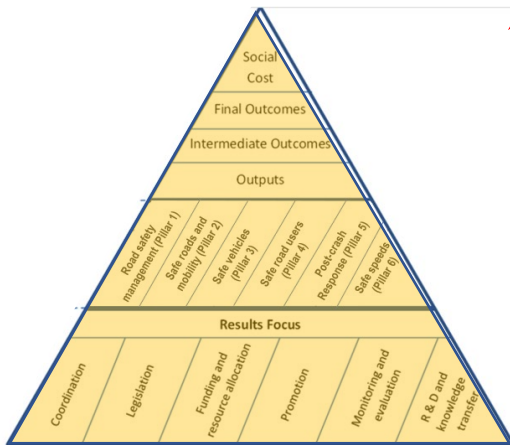
no	Activity – Safer vehicles	2023	2024	2025	2026	2027
1	Developing and adopting the Amendments and Supplements to the Law on Vehicles					
2	Developing and establishing Central vehicle register					
3	Establishing Independent market vehicle surveillance body & raising the level of quality and norms related to the import vehicles					

no	Activity – Post crash care response	2023	2024	2025	2026	2027
1	Improving police work in the area of road crash investigations, securing the crash site and collecting data at the crash site					
2	Improving and modernizing the equipment of emergency service units deployed in the process of rendering medical aid to the injured					
3	Improvement of First aid, Rescue and Police equipment and training					
4	Conducting a pilot activity/ project for introduction of MAIS3+ injury scale and exchange of data among medical institutions and traffic police					
5	Implementation of "Golden hour"					
6	Enable transit time from crash location to the hospitals within 15-30 minutes					
7	Improvement of hospital trauma care					
8	Road crash rehabilitation scheme					
9	Improvement of the coordination of emergency services at crash site					

no	Activity – Safer road users	2023	2024	2025	2026	2027
1	Performing comprehensive survey of road safety to analyze and comprehensive understanding of the road safety problems					
2	Performing comprehensive national road safety campaign aimed to improve awareness of scope and type of road safety problems (target groups are decision makers and main stakeholders)					
3	Developing methodology of survey of social attitudes of risk in road traffic and perform the first survey of the attitudes					
4	Performing an analysis and defining priority measures for improvement of safety of vulnerable road users, in largest cities and municipalities and incorporate of more specific content related to traffic safety into the school's program					
5	Re-examining the operation/work of the centers for driver training and taking tests for driver license with suggestions for measures for improvement, including the amendment of legislation and modernizing the process of obtaining driver licenses					
6	Re-examining the operation/work of the centers for professional driver training, including the process of obtaining and renewing professional driver licenses					
7	Conducting national campaigns with the aim to raise publicity and awareness and to supporting police enforcement programs targeting unsafe behaviors					

# Future role of Road Traffic Safety Agency (RTSA)

## ➤ Recommended new practices - Proposals:



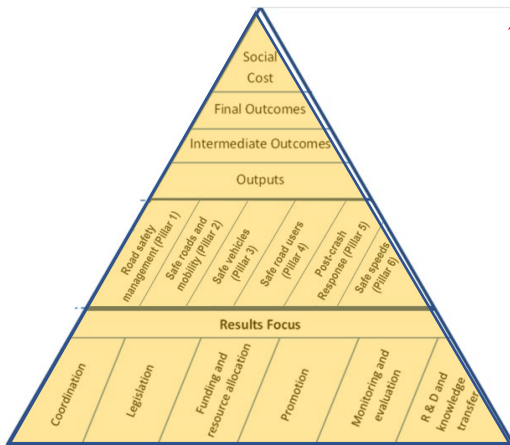
## 2. *Proposals of RTSA*

- Establish Road Traffic Safety Agency and provide funding to the Agency
- Establish important activities that have not been carried out by any institution
- Initiates and coordinates the process of preparation of the National Road traffic safety strategy and action plan
- Establish foreseen activities in accordance with proposals from previous EU projects



# Future role of Road Traffic Safety Agency (RTSA)

## ➤ Recommended new practices - Proposals:



## 2. Proposals of RTSA

### Operational Support

#### Lead Agency (RTSA)

Operational activities + Secretariat for National Coordination Body

*Recommended: Establishment of new lead agency (RTSA)*

### Decision making

#### National Coordination Body (Establish under the Government)

Government/Ministerial consideration of major policy recommendations, high-level monitoring of implementation progress, providing of horizontal and vertical coordination as well as political support to road safety activities.

*Recommended members: MoTC, MoI, MoH, MoE, MoES, MoF, MoJ, MoLSG, RTSA and PESR.*

#### Coordination Working Group

Implementing coordination and monitoring conclusions of National Coordination Body.

*Recommended members: High level/senior managers from MoTC, MoI, MoH, MoE, MoES, MoF, MoJ, MoLSG, RTSA, PESR, University, independent road safety experts etc.*

### Advice

#### Advisory Group

Consultation and liaison group of different organisations that are providing advices to the National Coordination Body

*Recommended members: road safety experts, academia/university researchers, NGO representatives, local level council members, etc.*

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**Thank you for your time!**