



# Interreg



## Danube Transnational Programme RADAR

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



**Your Road Safety is on our  
RADAR.**

## **National Infrastructure Road Safety Improvement Action Plans**

**RADAR OUTPUT 4.2**



**RADAR – Risk Assessment on Danube Area Roads**



**<https://www.interreg-danube.eu/radar>**

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## 1. Introduction and purpose of this document

The RADAR project (Risk Assessment on Danube Area Roads) aims at fostering infrastructure-based safety assessments of roads and at bringing about improved safety levels in the Danube region. One of RADAR's ultimate objectives is to put forward country-specific Danube Infrastructure Road Safety Improvement **Action Plans** (DIRSIAP). These action plans shall be based on RADAR's core strategy document, the Danube Infrastructure Road Safety Improvement **Strategy** (DIRSIS) which was composed around RADAR's six main areas of actions ("Thematic Areas"):

- TA1: General suitability of the road sections for safety and maintenance upgrading using Safer Roads Investment Plans.
- TA2: Provision for vulnerable road users (pedestrians and cyclists).
- TA3: ITS and other techniques for speed management strategies.
- TA4: Road safety near schools.
- TA5: Transport safety and COVID-19.
- TA6: Road Infrastructure Safety Management.

Each of the Action Plans (DIRSIAP) follows the structure of RADAR's Thematic Areas and is tailored to the national, regional and local requirements as well as based on a thorough analysis of road safety problems (and potentials for solutions) of the specific Danube Area country. It describes road safety interventions to be implemented over the decade 2021-2030 and provides, for each measure, details on

- time frame
- financial resources
- main actors
- explanatory notes on rationale and implementation in the specific country

The repository of interventions presented in this report resulted from the DIRSIS, which itself is based on the Thematic Reports of RADAR's Road Safety Expert Group (RSEG) as well as on the RADAR Training Courses, the RADAR Study Visits, and the RADAR Pilot Actions.

All DIRSIAPs were presented to – and discussed with – stakeholders in National Uptake Workshops to be organised in each RADAR partner country. It goes without saying that the ultimate aim is, eventually, for the DIRSIAPs to feed into, respectively be aligned with, the respective national road safety strategies of RADAR countries.

## 1.1. A short guide to Action Plan's tables of interventions

For each of the Thematic Areas, the tables of interventions are grouped and colour-coded into the three beforementioned target levels:

National level
Regional and local level
Road authorities

Each of the tables features the following fields:

- **Intervention:** the title/description of the road safety measure and a code referring to the equivalent entry in the Danube Infrastructure Road Safety Improvement Strategy (DIRSIS, for example: [\[TA1/national/standard\]](#)). Where required, the intervention's title was adapted to national requirements.
- **Time frame:** an estimate in which year(s) (during the decade 2021-2030) the uptake or implementation will take place. If activities are already ongoing, start and estimated end year are indicated. Activities which have already been finalised are not included.
- **Financial resources:** an estimate of costs required for the intervention (in Euros)
- **Main actor(s):** the ministries, authorities or other parties who will be mainly concerned with this activity
- **Explanatory notes:** a short description and rationale/justification for the intervention
- **Uptake Plan:** a list and short description of national uptake activities and targeted national documents acknowledging the intervention

## 2. Danube Infrastructure Road Safety Improvement Action Plan (DIRSIAP) for Hungary

This Action Plan has been created in the framework of the [RADAR project](#) which aims at raising road safety levels of countries in the Danube Region. It is structured along RADAR's six Thematic Areas:

- 1) Investing in safe infrastructure,
- 2) Provisions for vulnerable road users,
- 3) ITS and other techniques for speed management,
- 4) Safe infrastructure near schools,
- 5) Transport safety and COVID-19
- 6) Road Infrastructure Safety Management

and is adapted to the specific road safety requirements of Hungary. The interventions set out in this Action Plan are directed at all levels of road safety management, i.e., from national to regional and local level, with a special section on road authorities.

## 1) Investing in safe infrastructure

	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Definition of a national minimal standard for road infrastructure safety rating for existing and new roads based on an evidence-based methodology</b> <a href="#">[TA1/national/standard]</a>	2021-2024	60.000 EUR	ITM, (MK, KTI, MAUT)
Investing in safe infrastructure National level	<b>Explanatory notes:</b> <b>Why?</b> The current legal and technical regulations (Road Technical Specification – ÚME and the 176/2011. (VIII. 31.) Government Decree on road safety management of infrastructure) deals with road safety of the elements of the transport system, but do not represent traffic safety aspects in a complex, comprehensive way. It is difficult to reconcile the need to optimize the design, operation and maintenance of roads, environment and the road users for safety. <b>How?</b> The related regulations have to be reviewed, comparing them with the set of tools offered by international good practices. The iRAP methodology should be implemented in technical design and maintenance regulations. Based on the results of the review, the regulatory environment has to be transformed so that the aspects and requirements according to the iRAP methodology could appear as conditions to be fulfilled already during the development of the transport system components. <b>Timeframe and financial resources</b> Between the years 2021-2024; cc. 60.000 EUR <b>Who?</b> The main actor of coordinating this process is the responsible ministry (Ministry for Innovation and Technology - ITM). The implementation need cooperation of stakeholders (Hungarian Public Road Non-profit Plc. - MK, KTI Non-profit Ltd - KTI., Hungarian Road and Railway Association – MAUT)			
	<b>Uptake Plan</b> Preparation of an evaluation material for decision-makers analysing the possibilities of adapting the iRAP methodology Revision of the 176/2011. (VIII. 31.) Government Decree on road safety management of infrastructure Revision of the 20/1984. (XII. 21.) KM decree on the regulation of road traffic and the placement of road signs Amendment of the relevant Road Technical Specifications (UME) Publication of legislation Organizing related professional trainings, forums, education			



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Allocation of a certain portion of road infrastructure investments to road safety interventions</b> <a href="#">[TA1 /national/investment]</a>	2021-2030	10.000EUR (preparation)	ITM
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Currently, the road safety interventions are not investment-related. As part of public task, the state expend a part of the incomes from technical examination of vehicles for road safety purposes. In this process, the safety of infrastructure is handled only at the level of methodological questions or through low-cost measures. A certain percentage of transport investments could be specifically dedicated to activities improving infrastructure safety.</p> <p><b>How?</b> The amount and method of payment of the required road safety fund should be laid down in legislation for investments above a certain volume.</p> <p><b>Timeframe and financial resources</b> Continuous intervention through the decade. There is no need for extra resources in the budget, preparation costs approx. 10.000EUR</p> <p><b>Who?</b> ITM</p>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>Professional consultation</li> <li>Preparation of the concept</li> <li>Preparation of legislation, codification, amendment</li> </ul>			

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice</b> [TA1/national/SafeSystem]</p>	2021-2024	10.000 EUR (preparation)	ITM
<p><b>Explanatory notes:</b>  <b>Why?</b>            One of the pillars of this intervention is the road infrastructure safety management system itself. The Government has adopted a decree on road infrastructure safety management in August 2011 with the necessary details covering the fields of the 2008/96/EC Directive. In addition to the already established practice, the volume of the involved infrastructure could be expanded. Another pillar should be the introduction of a mandatory quality management system in the field of road safety, especially in the case of representatives and processes affecting the safety of the transport system.  <b>How?</b>            Development of the quality management system, as well as the legal environment. Based on this, the practical application of the system should be mandatory in the necessary cases.  <b>Timeframe and financial resources</b>            Between the years 2021-2024. There is no need for extra resources in the budget, preparation costs approx. 10.000EUR  <b>Who?</b>            ITM</p>				
<p><b>Uptake Plan</b>            Professional consultation            Preparation of the concept            Preparation of legislation, codification, amendment</p>				

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Institutionalisation of trainings for road safety auditors and road safety inspectors</b> [TA1/national/auditors]</p>	-	-	-
<p><b>Explanatory notes:</b>            The intervention is already implemented in Hungary according to the 76/2011. (VIII. 31) Government Decree, developed based on the 2019/1936 EU Directive. The coordination of the training is performed by a university. Graduates who successfully pass the exam are included in a contact list. Periodical further trainings are compulsory.</p>				
<p><b>Uptake Plan</b>            -</p>				

Investing in safe infrastructure National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Transfer of the Safe System approach to local governments and local road authorities</b> <a href="#">[TA1/national/vertical]</a>	2022	10.000 EUR	ITM, BM, KTI
<b>Explanatory notes:</b> <b>Why?</b> A fundamental problem is that locally, especially in the case of smaller settlements, road safety activities are not conceptual and consistent, and do not necessarily fit in with the strategic goals at the national level. <b>How?</b> The road safety activities should be consistent also at local levels taking into account national road safety targets and visions, applying the Safe System approach. The development of a road safety strategy should be mandatory for counties and settlements with more than 10,000 inhabitants. Key inputs for the Safe System are: <ul style="list-style-type: none"> <li>• using data, research and evaluation to understand crashes and risks,</li> <li>• developing road rules and enforcement strategies to encourage compliance and manage non-compliance with the road rules,</li> <li>• providing education and information,</li> <li>• developing standards for safe vehicles, roads and equipment,</li> <li>• good management and coordination, seeking innovation.</li> </ul> <b>Timeframe and financial resources</b> The year 2022, cca. 10.000 EUR <b>Who?</b> ITM, BM, KTI				
<b>Uptake Plan</b> Elaboration of the concept Inter-ministerial consultations Establishment of the legal framework Implementation and evaluation of a Pilot project, implementation of necessary amendments Introduction of the intervention				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Enlarging the scope of roads to be treated in accordance with Directive 2019/1936 to 2nd level roads (e.g., “regional roads”)</b> <a href="#">[TA1/national/secondary]</a>	2027-2030	5000 EUR	ITM, KTI, MK
	<p><b>Explanatory notes:</b>            Please provide a short description and rationale/justification for the intervention in your country (and delete this greyed text):</p> <p><b>Why?</b>            In Hungary, an amendment of the Road Transport Law was adopted by the Parliament in December 2010, containing regulations concerning the 2008/96/EC Directive. Based on this amendment the Government has adopted a decree on road infrastructure safety management in August 2011 with the necessary details covering the fields of the EU Directive.</p> <p>The European RISM directive applies to the TEN-T network. Our legal regulation defines a wider scope: besides the TEN-T network we apply the procedures to all motorways and expressways, and to all national main roads. Above these currently we apply the law to all roads exceeding the traffic volume of 10.000 pcu/day. However, the need of the homogeneous management of the road network as well as the accident data justifies the further extension of the scope of roads to be treated in accordance with the new, 2019/1936 EU Directive.</p> <p><b>How?</b>            By amending the relevant national regulation (Government Decree 76/2011 (VIII. 31.)) developed based on the EU Directive 2019/1936.</p> <p><b>Timeframe and financial resources</b>            Between the years 2027-2030, cc. 5000 EUR.</p> <p><b>Who?</b>            ITM, KTI, MK</p>			
	<p><b>Uptake Plan</b>            Preparation of the concept with capacity and cost plan            Development of the methodology            Amendment of the legislation</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Institutionalisation of knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments</b> <a href="#">[TA1/national/good_practice]</a>	2023-2025	15.000 EUR +500.000 EUR	ITM, MMK
Investing in safe infrastructure National level	<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            Basically, regular road safety related trainings are ensured in the national road management practice. Knowledge transfer takes place in auditor's conference and trainings of the Hungarian Chamber of Engineers (MMK). The problem is more with the professional training of the local road operators (municipalities), so a comprehensive program needs to be developed for this purpose. Further training of the persons responsible for transport management in the local governments has to be established.</p> <p><b>How?</b>            On the one hand, the legal framework of the compulsory education and trainings has to be developed, providing the general and basic road safety knowledge for the responsible person at regional/local levels.            On the other hand, the motivation system must be set up to increase involvement and commitment. This can be facilitated for example by a tendering system under which support can be obtained for low-cost road safety interventions. Furthermore, raising awareness and forming of the attitude should be a mandatory element of larger investment projects not only among the road users, but also in the case of decision-makers and professionals.</p> <p><b>Timeframe and financial resources</b>            Between the years 2023-2025, preparation costs approx. 15.000 EUR (legislation, curriculum, training), tender is approx. 500.000 EUR</p> <p><b>Who?</b>            ITM, MMK</p>			
	<p><b>Uptake Plan</b>            Review and transformation of the training system            Review of the investment financing system,            Examination of the possibilities of incorporating mandatory elements aimed at awareness raising and the forming of the attitude            Transforming the regulatory framework            Development and operation of a tender system</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Regional and local level	<b>Systematic road safety data collection and analysis to plan interventions/investments on most critical locations</b> <a href="#">[TA1/regional/data]</a>	2021-2030	10.000 EUR	KTI, ITM, BM, Police
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Data collection and analysis is ensured in the case of the national road network. The accident data (registered by the police and published by the Central Statistics Office) and the results of the accident black spot analyses are available by online database management software. The problem emerges in the case of local roads, due to the lack of capacities to systematically analyse the data. There are gaps in both human resources and expertise.</p> <p><b>How?</b> Consistent and programmatic cooperation between the local police and the road operator can alleviate the shortcomings. In the best case this would take place in an institutionalized way, or at least on a legal basis. In addition, the work of local road operators can be supported with special software support, for which software development can be a priority in this regard.</p> <p><b>Timeframe and financial resources</b> Continuous intervention through the decade. Costs approx. 10.000EUR</p> <p><b>Who?</b> KTI, ITM, BM, Police</p>			
	<p><b>Uptake Plan</b> Incorporation of the task into accident prevention activities and the tasks of road operator (by developing a legal background, if necessary) Software development Introduction</p>			

Investing in safe infrastructure Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Setting up of road safety funds for investments in road safety upgrades in terms of road safety equipment and measures at locations with most effectiveness</b> <a href="#">[TA1/authorities/funds]</a>	2023-2024	12.000 EUR	ITM,KTI,BM,Police
	<b>Explanatory notes:</b> <b>Why?</b> In Hungary, as part of public task, the state expends a part of the incomes from technical examination of vehicles for road safety purposes, so resources are provided. However, this amount is not enough for significant infrastructure development. It supports the implementation of strategic tasks to in many areas. Fewer resources are allocated to dealing with local affairs, which also makes it difficult to put the principle of subsidiarity into practice. <b>How?</b> An effective solution can be the use of parts of the local revenues. For example, a certain percentage of the local business tax could be used for road safety purposes. <b>Timeframe and financial resources</b> Between the years 2023-2024, 12.000 EUR <b>Who?</b> ITM, KTI, BM, Police			
<b>Uptake Plan</b> Preparation of the concept Preparation of the legislation Introduction				

Investing in safe infrastructure Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Observation of road safety trends and good practices to plan maintenance and upgrades of the existing road network in operation</b> <a href="#">[TA1/authorities/good_practice]</a></p>	2021-2023	40.000 EUR	ITM, MK, KTI
<p><b>Explanatory notes:</b> <b>Why?</b> In many cases, the latest state-of-the-art solutions, best practices and opportunities doesn't get to the experts and professionals, or significant delays occur in the uptake of these solutions. <b>How?</b> A collection of good practices should be published at specified intervals (recommended in every 2 years). Furthermore, in every three years the most important technical regulations should be reviewed with the aim of uptaking the state-of-the-art knowledge, technologies and procedures. <b>Timeframe and financial resources</b> Between the years 2021-2023, the preparation costs 10.000 EUR, collection of good practices 10.000 EUR, review and amendment of technical regulations 20.000 EUR. <b>Who?</b> The ministry (ITM) is responsible for the tasks described, and the road operator (MK) should be obliged for the integrated use of the results in the practice.</p>				
<p><b>Uptake Plan</b> Preparation of an action plan Collection and publication of best practices Review and amendment of technical regulations</p>				



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Road authorities	<b>Use of methodologies for selecting most critical locations with highest potential savings.</b> <a href="#">[TA1 /authorities/methodologies]</a>	2024-2027	10.000 EUR	KTI, MK, ITM
	<b>Explanatory notes:</b> <b>Why?</b> The use and distribution of resources does not necessarily take place according to the greatest utilization. Sometimes problems are exacerbated by certain interests whose level of risk is disproportionate to the scale of the problem. Therefore, the goal is to identify interventions with the greatest potential for improvement. This requires appropriate methodological approaches and the support of algorithmic, automated IT solutions. <b>How?</b> The road network should be analysed at the county level. Locations and accident black spots with the greatest potential for improvement should be revealed, and an intervention plan focusing on these places should be developed within the remit of the Ministry of Transport. This should be taken into account by the road operator during the preparation of its work plan. These suggestions should not be mandatory to follow, but any deviation should be justified and reported to the ministry. <b>Timeframe and financial resources</b> Between the years 2024-2027, cca. 10.000 EUR. <b>Who?</b> KTI, MK, ITM			
	<b>Uptake Plan</b> Development and presentation of the methodology Exploring legal necessities, preparing amendments Establishing a regulatory framework Introduction			

Investing in safe infrastructure Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Publication of the list of high accident concentration road sections / hot spots.</b> <a href="#">[TA1 /authorities/hotspots]</a>	2021-2030	10.000 EUR	ITM, KTI
	<b>Explanatory notes:</b> <b>Why?</b> Society and road users must be confronted with the most dangerous places and informed about the potential risks. In addition, this would support and incite the road operator to intervene. <b>How?</b> The publication of the list of high accident concentration road sections/hot spots should be the duty of the Minister responsible for Transport, along with the accident loss values (which is currently published in every year according to the Hungarian regulations). <b>Timeframe and financial resources</b> Continuous task. Costs approx. 10.000EUR <b>Who?</b> ITM, KTI			
	<b>Uptake Plan</b> Development of the methodology Review of road network Preparation of priority lists based on the potential for improvement Publication, dissemination			

## 2) Provisions for vulnerable road users

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Incorporation of the principles and concepts of the Safe System approach in relevant legislation and VRUs' countermeasures selection criteria</b> <a href="#">[TA2/national/SafeSystem]</a>	2025-2030	15.000 EUR	ITM, KTI
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Consideration of the security concerns of the vulnerable road users is not given sufficient weight in the design and maintenance of infrastructure. The construction of pedestrian facilities is subject to loose technical regulations, which primarily focuses on capacity issues.</p> <p><b>How?</b> The technical regulations should be reviewed according to the road safety aspects especially focusing on the safety of vulnerable road users. Following this, periodic revision is needed in accordance with the actions defined in one of the previous points ([TA1/authorities/good_practice]). The obligation must be laid down in a government decree.</p> <p><b>Timeframe and financial resources</b> Between the years 2025-2030, 15.000 EUR.</p> <p><b>Who?</b> ITM, KTI</p>			
	<p><b>Uptake Plan</b> Development of a system of criteria (road safety aspects) Review of technical regulations Preparation of legislation</p>			

Provisions for vulnerable road users National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Development/Incorporation of a unified protocol for assessment of the risks of VRUs, which will ensure that results are understood and comparable between countries</b> <a href="#">[TA2/ national /risk_assessment]</a>	2025-2030	15.000 EUR	ITM, KTI
<b>Explanatory notes:</b> <b>Why?</b> Identifying the safety risks of vulnerable road users is the first step in improving their road safety level. However, in many cases the risk assessment may not be the same as that used in the case of vehicles, and in many cases, there is no established method for this purpose. <b>How?</b> Development of an assessment methodology to identify and evaluate the safety level of vulnerable road users, focusing on the following aspects in accordance with the European best practices: <ul style="list-style-type: none"> <li>• preparation of VRUs for safe transport,</li> <li>• road safety situation,</li> <li>• possibilities to support the transportation and improve the road safety level of VRUs,</li> <li>• evaluation of the behaviour of drivers towards VRUs.</li> </ul> <b>Timeframe and financial resources</b> Between the years 2025-2030, 15.000 EUR. <b>Who?</b> ITM, KTI				
<b>Uptake Plan</b> Professional consultations Defining requirements Development of the assessment methodology Dissemination				

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Making sure that countermeasures' selection, prioritization and implementation process for VRUs should not in any case be performed only based on subjective criteria but primarily based on official, standardized, objective methodology which considers all relevant road safety indicators (AADT, peak-hour pedestrian/cyclist flows, operating speed, traffic accidents characteristics)</b></p> <p><i>[TA2/ national /methodology]</i></p>	2025-2030	10.000 EUR	ITM, KTI
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> The definition of a methodology to select, prioritize and implement countermeasures for VRUs based on the relevant road safety indicators is currently missing.</p> <p><b>How?</b> Similarly to the previous point the methodology should be developed in the first step, which could be included in the relevant technical regulations. Countermeasures' selection, prioritization and implementation process for VRUs should be defined primarily based on official, standardized, objective methodology which considers all relevant road safety indicators (AADT, peak-hour pedestrian/cyclist flows, operating speed, traffic accidents characteristics).</p> <p><b>Timeframe and financial resources</b> Between the years 2025-2030, 10.000 EUR.</p> <p><b>Who?</b> KTI, ITM</p>				
<p><b>Uptake Plan</b> Development and dissemination of the methodology</p>				

Provisions for vulnerable road users National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Definition of a national minimal standard threshold values of relevant road safety indicators based on which high-risk road sections for VRUs will be identified</b> <a href="#">[TA2/ national /standard]</a>	2021-2022	10.000 EUR	KTI, ITM
	<b>Explanatory notes:</b> <b>Why?</b> National minimal standard threshold values of road safety indicators are not defined currently. This should be elaborated for the selection of the most critical road sections. <b>How?</b> The relevant indicators should be identified, and minimal standard threshold values have to be defined and published by the ministry. The related methodological issues should be included in the methodologies defined in the previous points ([TA1/national/standard] and [TA1/authorities/methodologies]). <b>Timeframe and financial resources</b> Years 2021-2022, 10.000 EUR <b>Who?</b> KTI, ITM			
	<b>Uptake Plan</b> Development of a concept, definition of the investigated safety indicators Development of the methodology			

Provisions for vulnerable road users National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Ensuring that available funds are primarily invested in low-cost, high-impact countermeasures, by considering the concepts of tactical urbanism and space-wise planning</b> <i>[TA2/ national /funds]</i></p>	2021-2030	10.000 EUR	KTI, ITM
	<p><b>Explanatory notes:</b>  <b>Why?</b>            In many cases, road safety interventions are selected based on economic considerations instead of efficiency. Due to the limited resources available, low-cost, high-impact countermeasures should be prioritized. To this end, it is also essential to evaluate the effectiveness of the various interventions.  <b>How?</b>            Based on the international results and good practices, as well as the evaluation of interventions, the effectiveness of the different type of measures should be determined. Cost efficient interventions have to be collected and published for the road operators.  <b>Timeframe and financial resources</b>            Continuous task through the decade, 10.000 EUR  <b>Who?</b>            KTI, ITM</p>			
	<p><b>Uptake Plan</b>            Definition of methodological elements            Exploration of connection points for other activities (road safety interventions, infrastructure development programs)</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Development/restructuring and linking datasets on road traffic accidents and road network in order to increase their precision and provide free and easy access to all stakeholders</b> <i>[TA2/ national /dataset]</i>	2024-2028	50.000 EUR	ITM, MK, BM, Police, health sector
	<b>Explanatory notes:</b> <b>Why?</b> Road accident data are collected by the police. The data are structured and published by the Hungarian Central Statistical Office (HCSO). The internal database of the police is more detailed and comprehensive than the published version. The road operator has a database management and analytical online software operating based on the data of the HCSO. In the database there are often problems with the accurate identification of accident locations, which the road operator tries to fix for himself. Accordingly, differences arise between the different databases. Linking the databases of the health sector to traffic accident databases is also an important task. This could make the datasets more complete and accurate. <b>How?</b> The framework of the development and linking of datasets on road traffic accidents should be elaborated. It is important to ensure free and easy access to all stakeholders. <b>Timeframe and financial resources</b> Between the years 2024-2028, 50.000 EUR <b>Who?</b> To refine and link the data, the police, the road operator and the health sector must cooperate. The necessary framework has to be developed by an inter-ministerial committee, while the Ministry responsible for Transport will be responsible for the implementation.			
	<b>Uptake Plan</b> Establishment of an inter-ministerial committee Development of professional concept Preparation of an operational action plan Creating a cost plan Implementation of measures Development of legal background Introduction			



Provisions for vulnerable road users National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Linking the police database on road traffic accidents with hospital data in order to minimize the VRUs accidents under-reporting issue</b> <a href="#">[TA2/ national /database_link]</a>	2024-2028	30.000 EUR	ITM, KTI, health sector, police, HCSC
	<b>Explanatory notes:</b> <b>Why?</b> The problem is defined in the previous point ([TA2/ national /dataset]). Linking the databases of the health sector to traffic accident databases could make the datasets more complete and accurate. <b>How?</b> In the first step, the data of the health sector should be analysed. Road safety related usability has to be revealed and the methodology and aim of the use of the data have to be defined. The primary aim of the use of these data should be the support of road safety prevention. The necessary framework for linking the datasets has to be developed by an inter-ministerial committee, while the Ministry responsible for Transport will be responsible for the implementation. <b>Timeframe and financial resources</b> Between the years 2024-2028, 30.000 EUR <b>Who?</b> ITM, KTI, health sector, police, HCSC			
	<b>Uptake Plan</b> Development of the methodology, investigation of the database of the health sector Development of a feasibility study, framework Pilot Action			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Changing traffic culture and public awareness by disseminating relevant information to the public by various media sources</b> <a href="#">[TA2/ national /awareness]</a>	2021-2030	30.000 EUR	ITM, KTE
	<b>Explanatory notes:</b> <b>Why?</b> Traffic culture is the element in accident prevention that forms attitudes at the societal level, so it is what makes it possible to improve road safety and the level of transport services in a lasting and sustainable way. <b>How?</b> In Hungary, May 11 has been declared the day of traffic culture. Every year, various organizations, state and civil actors take part in a wide range of awareness-raising and accident prevention campaigns. The broad cooperation also made the initiative visible at the societal level, it receives significant press attention, and the national implementation and local programs also attract local media. This means that the communication is not centralized, but local, authentic and close, resulting in more effective involvement of residents and road users. In Hungary, a professional non-governmental organization is the coordinator of the program, which is also not governmental, but receives governmental support. Hungary has taken steps to classify this day as a day of traffic culture at the European level as well. Besides that, a campaign called “Let’s save 600 lives” (MM600) was launched, this program involves residents and road users in the planning of accident prevention activities, and raise awareness of the importance of road safety. <b>Timeframe and financial resources</b> Continuous work through the decade, approx. 30.000 EUR <b>Who?</b> ITM, KTE			
	<b>Uptake Plan</b> Extension of the day of traffic culture, connection with the MM600 program Elaboration of competitions and programs Propagation, dissemination			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Knowledge transfer with demonstrations of good practices and approaches in VRU safety for road authorities and to regional/local governments</b> <a href="#">[TA2/ national /vertical]</a>			
	<b>Explanatory notes:</b> Detailed description of the action can be found at a previous table, see: [TA1/national/good_practice].			
	<b>Uptake Plan</b> -			

Provisions for vulnerable road users Regional and local level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Ensuring that results obtained by road safety assessments performed in individual municipalities at local level are standardized and comparable between different municipalities and on the National level</b> <a href="#">[TA2/ regional /standard]</a>	2024-2026	10.000 EUR	ITM, BM
<b>Explanatory notes:</b> <b>Why?</b> Currently, the municipalities are responsible for the operation and maintenance of local roads and transport management at local level. However, in many cases, technical regulations are not mandatory for them, and they do not have road safety or transport experts and up-to-date knowledge in the subject. They do not usually receive support in analytical evaluation work. As a consequence, interventions are not concentrated on the locations with the greatest potential for improvement, and countermeasure selection is also not evidence based. This is a serious shortcoming which impairs the efficiency of road safety work. <b>How?</b> The mandatory extension (at least on some level) of the technical regulations for the municipalities is necessary. Besides that, a methodological guide based on good practices could effectively support the professional and standardized management. A specific part of the implemented interventions on local roads should be reported to a central database, supporting the analysis of the road safety work. For the analytical evaluation, an independent body should be appointed. <b>Timeframe and financial resources</b> Between 2024-2026, 10.000 EUR <b>Who?</b> The necessary framework and guidelines should be elaborated and provided by the Ministries responsible for transport and the operation of municipalities.				
<b>Uptake Plan</b> Examining the possibilities of extending technical regulation Estimation of the expected resource requirements Development of the concept Introduction				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Regional and local level	<b>Systematic, high-quality road safety data collection and analysis to plan interventions/investments on most critical locations for VRU</b> <a href="#">[TA2/ regional /data]</a>	2021-2030	40.000 EUR	ITM, KTI
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> A fundamental problem related to the planning of road safety interventions of vulnerable road users is the follow-up nature of these kind of activities. Usually, ex-post measures are taken based on already occurred accidents.</p> <p><b>How?</b> It is important to observe the behaviour of the road users at different infrastructure designs and environment and to systematically collect road safety related data. The risks of different location types have to be revealed based on the observations and the desirable/avoidable infrastructure designs have to be identified. A good example is the measurement of the willingness to give priority for the pedestrians at designated pedestrian crossings. An especially important issue is the adequacy of pedestrian and bicycle crossings. The most crossings can be located at urban areas, operated by local municipalities. Road safety inspections and analytical evaluations are usually not carried out due to the lack of road safety experts. However, the registration and safe operation of these facilities are still the task of the municipalities. To support this, the development of a user friendly, easy-to-use software is recommended, which can help the identification of the biggest problems and risks and the determination of most effective countermeasures. Although this does not completely replace expert activities, it is a significant help in problem-solving with a unified approach.</p> <p><b>Timeframe and financial resources</b> Continuous task through the decade. Approx. 10.000 EUR for the definition of safety indicators, 30.000 EUR for software development.</p> <p><b>Who?</b> ITM, KTI</p>			
	<p><b>Uptake Plan</b> Definition of safety indicators Software development Professional consultations and Pilot Actions Introduction</p>			

Provisions for vulnerable road users Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Use of official, standardized, objective methodology for selecting most critical locations for VRUs with highest potential savings</b> <a href="#">[TA2/ authorities /methodology]</a>	2021-2024	10.000 EUR	ITM, KTI, MAUT
	<b>Explanatory notes:</b> <b>Why?</b> Road safety risks of vulnerable road users are especially high. Pedestrian traffic is less regulated and evident than motorized transport. A fundamental problem related to the planning of road safety interventions of vulnerable road users is the follow-up nature of these kind of activities. Usually, ex-post measures are taken based on already occurred accidents. <b>How?</b> The use of official, standardized, objective methodology for selecting most critical locations for VRUs with highest potential savings must be facilitated. The development of road safety audits and inspections based on existing methods and best practices could bring significant improvements. <b>Timeframe and financial resources</b> Between 2021-2024, 10.000 EUR <b>Who?</b> ITM, KTI, MAUT			
<b>Uptake Plan</b> Elaboration of methodological elements, amendments of the technical regulations Legislative amendment				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Ensuring that types of pedestrian/cyclist facilities and crossing arrangements are selected based on the operating speed of traffic flow and pedestrian, cyclists and vehicle peak-hour flow volumes</b> <a href="#">[TA2/ authorities /evidence_base]</a></p>	2022-2024	10.000 EUR	ITM, KTI, MAUT
	<p><b>Explanatory notes:</b>  <b>Why?</b>            According to the technical regulations, the design of pedestrian/cyclist facilities and crossing arrangements takes into account the operating speed of traffic flow and pedestrian, cyclists and vehicle peak-hour flow volumes. These regulations apply only to national roads.  <b>How?</b>            The technical regulations should also be mandatory for municipalities responsible for the operation of the local roads. Review and amendments of the relevant parts of the regulation is necessary.  <b>Timeframe and financial resources</b>            Between 2022-2024, 10.000 EUR  <b>Who?</b>            ITM, KTI, MAUT</p>			
	<p><b>Uptake Plan</b>            Review of technical regulations based on the aspects identified            Exploring legal options            Preparation of necessary technical regulatory and legislative amendments            Introduction</p>			

Provisions for vulnerable road users Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Periodical collection of relevant supporting data on characteristic VRU crash locations on the road network on a mandatory basis and update relevant databases</b> <a href="#">[TA2/ authorities /supporting_data]</a>	2022-2025	20.000 EUR	ITM, KTI, MK, Police
	<b>Explanatory notes:</b> <b>Why?</b> In case of accidents with personal injury and the intervention of police, data collection is carried out. However, mostly in the case of minor injuries, accident data is not recorded. The volume of the underreporting of accidents is especially high in the case of pedestrian/cyclist injuries. <b>How?</b> A legal obligation should be established for the preparation of annual intervention priority lists. The exact methodology should be published in connection with the legislation. Such an examination is impossible without the necessary data, so indirectly the data collection and processing is required by the provision. <b>Timeframe and financial resources</b> Between 2022-2025, 20.000 EUR <b>Who?</b> ITM, KTI, MK, Police			
	<b>Uptake Plan</b> Establishment of an inter-ministerial working group Development of criteria for priority lists Development of legal background Introduction			



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<b>Periodical analysis of effectiveness and efficiency of implemented countermeasures for VRUs</b> <a href="#">[TA2/ authorities /analysis]</a>	2023-2025	15.000 EUR	KTI, EU, KTE
	<b>Explanatory notes:</b> <b>Why?</b> Analysis of the effectiveness and efficiency of implemented countermeasures is an important task aiding the plan of future investments. Currently, research activity on this field is inconsistent, which is mainly due to the lack of interest and focus of the decision-makers on the policy level. <b>How?</b> Decision makers need to be made interested (even through a legal obligation) in the task. The requirement to carry out an annual situation assessment should apply to all road operators. An important part of this work should be the analysis of effectiveness and efficiency of implemented countermeasures for VRUs. <b>Timeframe and financial resources</b> Between 2023-2025, 15.000 EUR <b>Who?</b> KTI, EU, KTE			
	<b>Uptake Plan</b> Development of the concept of analysis Professional consultations Creating a supporting and funding background Establishment of the legal framework			

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Engaging all stakeholders in the process of VRU-friendly road design (engineers need to collaborate with different stakeholders and NGOs)</b> <a href="#">[TA2/ authorities /stakeholders]</a>	2022-2023	10.000 EUR	KTI, KTE, NGOs
	<b>Explanatory notes:</b> <b>Why?</b> The minimum requirements need to be defined that can be accepted by all stakeholders. This must then be laid down in technical regulations and legislation. All aspects must be included, from design principles to the use of intelligent transport systems and solutions, taking into account the aspects of compliance and controllability. <b>How?</b> Organizing national professional workshops is an essential step of the process. In an ideal case, this was preceded by a project at the European level that defines the basic conditions and considerations. The requirements should be included in the technical regulations, trainings of experts and road operating tasks. <b>Timeframe and financial resources</b> Between 2022-2023, 10.000 EUR <b>Who?</b> KTI, KTE, NGOs			
<b>Uptake Plan</b> Organization of professional forum(s) Development of criteria and parameter system Development of the regulatory background				

### 3) ITS and other techniques for speed management

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
ITS and speed management National level	<b>Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches</b> <a href="#">[TA3/ national /guidelines]</a>	2022-2025	20.000 EUR	KTI
	<b>Explanatory notes:</b> <b>Why?</b> Intelligent Transportation Systems (ITS) aim to provide innovative solutions for the different transport modes and traffic management, enabling users to be better informed and make safer, more coordinated, and 'smarter' use of transport networks. The improvement and continuous involvement of these solutions can improve road safety, and therefore must be promoted. In this regard, the joint work of urban planning, IT, urban management and developers is needed. <b>How?</b> One of the major risks on the road arise from high vehicle speeds. New guidelines related to speed management and traffic calming ITS solutions have to be developed, and the existing ones need to be reviewed. Pre-defined minimum standards have to be elaborated and included in the technical regulations, education of professionals and tasks of the road operator. <b>Timeframe and financial resources</b> Between 2022-2025, 20.000 EUR <b>Who?</b> KTI			
	<b>Uptake Plan</b> Organization of a European forum – resolution Formation of a national working group Determination of requirements Development of the regulatory background			

ITS and speed management Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Exploitation of new ideas and recommendations:</b></p> <ul style="list-style-type: none"> <li>• Speed-activated warning signs (e.g. “Slow down” in the approach of bends and other dangerous locations);</li> <li>• Variable speed limit signs on high-level roads (traffic and/or weather-dependent);</li> <li>• Time-dependent speed limits, e.g. in the vicinity of schools during opening hours;</li> <li>• Transversal rumble strips in the approach of junctions or sharp bends;</li> <li>• Efficiency of administration of fines from automatic speed enforcement;</li> <li>• Lack of resources among authorities tasked with the issuing of fines;</li> <li>• Different degrees of automation (centralized &amp; nearly full automation in France. Inefficient manual processing in other countries ...)</li> </ul> <p><a href="#">[TA3/ regional /ideas]</a></p>	2022-2026	100.000 EUR	ITM, KTI, KTE, MMK
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> New ideas and recommendations in the field of speed management have to be promoted to tackle one of the major risks on our roads. Currently, information and education is provided for the road operators in the framework of an auditor's conference and the trainings of the Chamber of Engineers.</p> <p><b>How?</b> To increase involvement and engagement, a motivation system needs to be set up. The importance of trainings must be increased as well. Content of the trainings need to be developed including new technologies, opportunities, best practices, and the results of the evaluation of previous measurements.</p> <p><b>Timeframe and financial resources</b> Between 2022-2026, 100.000 EUR</p> <p><b>Who?</b> ITM, KTI, KTE, MMK</p>	<p><b>Uptake Plan</b></p> <p>Elaboration of the motivation system Development, revision and completion of training materials Continuous evaluation of the applied speed management solutions</p>			

ITS and speed management Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Setting of speed limits: elaboration and continuous revision of guidelines &amp; systematic implementation</b> <a href="#">[TA3/ authorities /guidelines]</a>	2022-2024	20.000 EUR	ITM, KTI, MK, KTE
<b>Explanatory notes:</b> <b>Why?</b> When setting speed limits, the aim is to optimize between safety, economic and social benefits. In speed management, this can be achieved by setting a safe speed limit that is permissible at all times in terms of the parameters of the road, environment and traffic. The definition of the speed limit must take into account accident data and the characteristics of the infrastructure and traffic. <b>How?</b> The aspects of the review of the infrastructure and the results of the examination of speed-related accident data shall be combined. Setting of the speed limit is standardized but the road operator should determine reduced speed limits at critical sections of the operated road network based on a uniform methodology. <b>Timeframe and financial resources</b> Between 2022-2024, 20.000 EUR <b>Who?</b> ITM, KTI, MK, KTE				
<b>Uptake Plan</b> Preparation of project plan Collection and binding of basic data Analytical evaluation, by performing necessary measurements Preparation of a speed management action plan				

ITS and speed management Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Consistency of speed limits: differentiated speed limits depending on the function, alignment, volume and structure of traffic must be defined, in accordance with the reasonable local speed limits</b> [TA3/ authorities /consistency]</p>	2022-2026	60.000 EUR	KTI, MK, Police
	<p><b>Explanatory notes:</b>  <b>Why?</b>            This recommendation is in principle ensured in the Hungarian regulations. Examination of the practice may be necessary.  <b>How?</b>            The Ministry responsible for the transportation should initiate a nation-wide review of the infrastructure focusing on the regulation of traffic and the traffic signs. As part of this, the practice of speed management must be assessed according to a uniform, defined methodology. Then an independent professional organization should formulate recommendations to the road operator based on the evaluation of the results.  <b>Timeframe and financial resources</b>            Between 2022-2026, 60.000 EUR  <b>Who?</b>            KTI, MK, Police</p>			
<p><b>Uptake Plan</b>            Development of a national methodology for infrastructure revision            Survey of road management practices            Comparative analyses            Implementation of the nation-wide review of the infrastructure</p>				

ITS and speed management Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Speed enforcement: implementation of section control, minimization of the obstacles in violation processing procedures</b> <a href="#">[TA3/ authorities /enforcement]</a>	2022-2024	100.000 EUR	EU
	<b>Explanatory notes:</b> <b>Why?</b> Currently the local lobbies, interest hinder the conceptual implementation of section control. <b>How?</b> European level regulation is needed which can be supported by a bottom-up professional initiative. A road safety workshop should be organized for national stakeholders and European professional organizations, where an attempt could be made to adopt a decision to make the section control mandatory for countries at the European level. <b>Timeframe and financial resources</b> Between 2022-2024, 100.000 EUR <b>Who?</b> EU			
	<b>Uptake Plan</b> Organizing an international workshop Developing a concept for the EU			

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Speed data collection and analysis: systematic collection of speed data development in anonymized speed database. Further development of the methodology of analysis (for example speed development by road types, etc.)</b> <a href="#">[TA3/ authorities /data]</a></p>	2022-2026	20.000 EUR	ITM, KTI, MK, Police
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Speed measurement currently takes place at the national road network. These data are up-to-date on the highways, and also available for some sections on the primary and secondary main roads. Automatic speed measurement gates also provide speed data. The problem is that these data are not integrated and processed comprehensively.</p> <p><b>How?</b> In the first step, legal basis should be established for the mandatory collection, analysis and provision of speed data. The background for the process and analysis should be provided. Host of the data can be the Police, an independent research institute, or the national road operator.</p> <p><b>Timeframe and financial resources</b> Between 2022-2026, 20.000 EUR</p> <p><b>Who?</b> ITM, KTI, MK, Police</p>				
<p><b>Uptake Plan</b> Planning of the system Establishment of the legal framework Start of data collection in a Pilot Action</p>				



## 4) Safe infrastructure near schools

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Development and support of specific design guidelines for road sections in the vicinity of schools</b> <a href="#">[TA4/ national /guidelines]</a>	2021-2023	15.000 EUR	KTI, KTE
<b>Explanatory notes:</b> <b>Why?</b> The scope of the problem and the solution are similar to those described in [TA2/authorities/stakeholders]. <b>How?</b> Compared to the steps defined in [TA2/authorities/stakeholders], a system of specific requirements and design guidelines at the vicinity of schools needs to be developed and the methodology should be supplemented accordingly. <b>Timeframe and financial resources</b> Between 2021-2023, 15.000 EUR <b>Who?</b> KTI, KTE				
<b>Uptake Plan</b> Organization of professional forum(s) Development of criteria and parameter system related the vicinity of schools Development of the regulatory background				

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Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Definition of special speed limits in the Road Traffic Code to be applied on road sections in the vicinity of schools</b> <a href="#">[TA4/ national /limits]</a>	2022-2023	50.000 EUR	EU, ITM
<b>Explanatory notes:</b> <b>Why?</b> The necessity of the intervention need to be examined. <b>How?</b> If the current set of tools is not appropriate, further solutions need to be developed (e.g. system of traffic signs, enforcement). European best practices need to be followed. Initiation of an international professional conference on the subject (at European level). <b>Timeframe and financial resources</b> Between 2022-2023, 50.000 EUR <b>Who?</b> EU, ITM				
<b>Uptake Plan</b> Preparation of a study analysing the possibilities and best practices				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools National level	<b>Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools</b> <a href="#">[TA4/ national /funding]</a>	2022-2027	300.000 EUR	ITM, KTI
	<b>Explanatory notes:</b> <b>Why?</b> The task is twofold. On the one hand, the possibility of professional review must be ensured, on the other hand, the financing of interventions and the implementation of recommendations must be ensured. <b>How?</b> Problem identification could be solved by using the methods defined in [TA2/ authorities /methodology]. To finance the interventions, the ministry could issue a tender, where the intervention plans developed on the basis of the previously cited methods could be applied for and funding could be obtained for the implementation. This would also encourage the road operator and the local government to find the best solutions. <b>Timeframe and financial resources</b> Between 2022-2027, 300.000 EUR <b>Who?</b> ITM, KTI			
	<b>Uptake Plan</b> Development of the tendering system Development of tenders			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools National level	<b>Systematic collection of data on road crashes near schools and related casualties</b>	2022-2023	10.000 EUR	KTI, Police
	<b>Explanatory notes:</b> <b>Why?</b> Database on personal injury road accidents is already exist. The task to be solved is the development of the criteria of territorial delimitation of examinations, and the clarification of the location identification in the case of the accidents. <b>How?</b> After defining the area of the investigated location (vicinity of schools) the road accidents can be collected based on the existing database. The road operator has the specific database management software. <b>Timeframe and financial resources</b> Between 2022-2023, 10.000 EUR <b>Who?</b> KTI, Police			
	<b>Uptake Plan</b> Preparation of the concept plan Definition of the area of investigated locations Filtering of the data Preparation of analyses			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools National level	<b>Systematic collection and publishing of key performance indicators on the road network around schools</b> <a href="#">[TA4/ national /indicators]</a>	2022-2023	50.000 EUR	EU
	<b>Explanatory notes:</b> <b>Why?</b> The difficulty of the task is caused by the fact that it requires on-site data collection, which is resource intensive. This can be helped with software support, and the task must be assigned within an institutionalized framework, otherwise there will be no general implementation. <b>How?</b> The task should be made a mandatory part of national Road Safety Action Programs. This could be a solution in other cases as well. It would require European programming that could be integrated, into national programs. At the same time, the applications and software that support data collection should be developed and made available free of charge. <b>Timeframe and financial resources</b> Between 2022-2023, 50.000 EUR <b>Who?</b> EU			
	<b>Uptake Plan</b> Determination of the strategic framework Determination of the legal framework Software development Introduction			

Safe infrastructure near schools Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Ensuring adequate funding for road safety interventions in local roads in the vicinity of schools</b> <a href="#">[TA4/ regional /funding]</a>	2022-2027	300.000 EUR	ITM, KTI
<b>Explanatory notes:</b> <b>Why?</b> Funding for interventions cannot be or can only be partially implemented from existing local resources intended for road operation. <b>How?</b> The steps described previously in the section [TA4/ national /funding] must be followed. The government must provide funding from the central budget. <b>Timeframe and financial resources</b> Between 2022-2027, 300.000 EUR <b>Who?</b> ITM, KTI				
<b>Uptake Plan</b> Development of the tendering system Development of tenders				

Safe infrastructure near schools Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Systematic collection of data on road crashes near schools and related casualties</b> <a href="#">[TA4/ regional /data]</a>	2022-2023	10.000 EUR	KTI, Police
<b>Explanatory notes:</b> <b>Why?</b> Database on personal injury road accidents is already exist. The task to be solved is the development of the criteria of territorial delimitation of examinations, and the clarification of the location identification in the case of the accidents. <b>How?</b> After defining the area of the investigated location (vicinity of schools) the road accidents can be collected based on the existing database. The road operator has the specific database management software. <b>Timeframe and financial resources</b> Between 2022-2023, 10.000 EUR <b>Who?</b> KTI, Police				
<b>Uptake Plan</b> Preparation of the concept plan Definition of the area of investigated locations Filtering of the data Preparation of analyses				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Regional and local level	<b>Educational campaigns to promote safer transport to/from schools</b> <a href="#">[TA4/ regional /campaigns]</a>	2022-2023	30.000 EUR	ITM, EMMI, Police, KTE
	<b>Explanatory notes:</b> <b>Why?</b> Promoting and educating road safety for children is a very important topic. The difficulty is that the time frame and professional capacity for implementation are difficult to find in the public education framework and in the school schedule. <b>How?</b> Our proposal is to introduce the Road Safety Theme Week, where the transfer of knowledge to specific age groups, or even to all age groups can take place at the beginning of the school year according to a methodology prepared by experts. <b>Timeframe and financial resources</b> Between 2022-2023, 30.000 EUR <b>Who?</b> ITM, EMMI, Police, KTE			
	<b>Uptake Plan</b> Elaboration of the content of the theme week Development of legal frameworks (NAT, etc.) Capacity building Introduction			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	<b>Forming a special road safety fund dedicated for direct investments in road safety, to implement upgrades in the vicinity of schools</b> <a href="#">[TA4/ authorities /funding]</a>	2022	30.000 EUR	EU, ETSC
	<b>Explanatory notes:</b> <b>Why?</b> The problem is that there is already a general resource provided for the state tasks of road safety. As a consequence, the professional lobbying in this direction is very difficult (even if the referred resource is not suitable for handling such issues). <b>How?</b> A European level regulation/initiative would be necessary. This should be preceded by an EU forum to define and agree the professional requirements providing the basis for lobbying at EU level. <b>Timeframe and financial resources</b> In 2022, 30.000 EUR <b>Who?</b> EU, ETSC			
	<b>Uptake Plan</b> Organizing a professional forum Definition of the professional requirements and minimum standards			

Safe infrastructure near schools Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Observation of road safety trends and good practices to plan maintenance and upgrades of existing road network in the vicinity of schools</b> [TA4/ authorities /good_practice]</p>	2022-2025	100.000 EUR	EU
<p><b>Explanatory notes:</b>  <b>Why?</b>            This intervention belongs to the topic of best practices in the field of the design of the infrastructure and traffic management. As part of the road network, the vicinity of schools has to be treated with special attention.  <b>How?</b>            In general, a forum should be provided for sharing good practices. Perhaps this should also be formulated as an EU requirement, in the framework of mandatory reporting, together with a motivation system to facilitate the process. For example, best practices should receive an award and some financial support to implement it in several locations in a given country. This could also be an important step towards the implementation of efficiency measurements.  <b>Timeframe and financial resources</b>            Between 2022-2025, 100.000 EUR  <b>Who?</b>            EU</p>				
<p><b>Uptake Plan</b>            Development of the concept            Establishment of the regulatory framework</p>				

Safe infrastructure near schools Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Use of appropriate methodologies to identify hazardous locations near schools and the causes of road safety problems, identify intervention priorities and implement countermeasures</b> [TA4/ authorities /methodology]</p>			
<p><b>Explanatory notes:</b>            See [TA4/ regional /data].</p>				
<p><b>Uptake Plan</b>            -</p>				



Safe infrastructure near schools Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Carrying out of “before and after” studies to evaluate the road safety effect of implemented interventions</b> <a href="#">[TA4/ authorities /impact]</a></p>	2022-2025	100.000 EUR	EU and member states
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> The necessary capacities are missing, and the transition between institutions and data provision is problematic.</p> <p><b>How?</b> An EU directive is needed to set expectations and standards. The elaboration of the method of implementation must be a national competence, but it is important that the union approves the method so that international practice is uniform, and the data and results are comparable.</p> <p><b>Timeframe and financial resources</b> Between 2022-2025, 100.000 EUR</p> <p><b>Who?</b> EU and member states</p>				
<p><b>Uptake Plan</b> Preparation of the Directive. Coordination of national programs</p>				

## 5) Transport Safety and COVID-19

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Revision of the default speed limit for rural roads and consider adaptations where necessary (possibly only on sub-sets of the network, e.g. roads with narrow cross-sections, or roads with vulnerable road user traffic), with a view to preventing collision forces that humans cannot survive or would cause serious injury.</b></p> <p><a href="#">[TA5/national/speed limit]</a></p>			
	<p><b>Explanatory notes:</b></p> <p>The setting of appropriate speed limits, the elaboration and continuous revision of related guidelines, and systematic implementation is a key area of improving road safety, since the choice of inappropriate speed is the most common cause of road accidents (around 33% in Hungary).</p> <p>The detailed steps (uptake plan), timeframe, financial resources and main actors have been previously introduced in this document, see <a href="#">[TA3/authorities/guidelines]</a> and <a href="#">[TA3/authorities/consistency]</a></p>			
	<p><b>Uptake Plan</b></p>			

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Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Implementation of a Safe System, with emphasis on rural roads, so that they eventually become self-explaining and forgiving to human error</b></p> <p><a href="#">[TA5/national/SafeSystem]</a></p>			
	<p><b>Explanatory notes:</b></p> <p>The Safe System approach has to be embedded into the mainstream of road design/investment, maintenance legislation and practice, as described in details in <a href="#">[TA1/national/SafeSystem]</a>. This has to be transferred also to regional and local level activities, as introduced in <a href="#">[TA1/national/vertical]</a>.</p>			
	<p><b>Uptake Plan</b></p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Provide police forces and other enforcement entities with adequate resources and legal precautions for re-instated &amp; intensified and effective speed enforcement; this may include section (average speed) controls – also on rural roads</b> [TA5/national/enforcement]</p>	2023-2025	20.000 EUR	BM, ITM
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Investing in safe infrastructure National level</p>	<p><b>Explanatory notes:</b> <b>Why?</b> The current speed enforcement system in Hungary consists of fixed site speed cameras at specified cross-sections and the live speed measurements by the police. The COVID-19 epidemic has shown that because of the limited police resources and increased volume of tasks, providing the necessary capacities and adequate resources in this area is problematic. <b>How?</b> The establishment of an efficient and up-to-date control system that is in line with social expectations and road safety requirements should be set as a politically declared, strategic goal. To this end, a legal framework needs to be created that allows for the use of automated systems, section control, and the involvement of capacities from other areas, if appropriate. The first step is the preparation of a document facilitating the decision-making in this regard, forming the basis of the legislative process and codification. Based on the developed legislation framework, budget and a person responsible for the implementation with appropriate authority must be assigned to establish the system. <b>Timeframe and financial resources</b> Between the years 2023-2025, cc. 20.000 EUR. <b>Who?</b> BM, ITM</p>			
	<p><b>Uptake Plan</b> Listing the activities of implementation and relevant national documents Establishment of a working group Development of a legislative concept Preparation of documents facilitating the decision-making</p>			

Investing in safe infrastructure National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Consider tougher legal sanctions for excessive speed violations, such as higher/ income-dependent fines, licence withdrawal, and confiscation of vehicles</b> <i>[TA5/national/sanctions]</i>	2024-2025	20.000 EUR	ITM, BM, KTI
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Sanctions are not dissuasive in all cases and in all social / road user groups. While sustainable positive change can be achieved primarily by increasing the likelihood of getting caught, tougher legal sanctions can also improve the willingness to follow the traffic rules.</p> <p><b>How?</b> In case of violation of the speed rules, the methods of risk analysis and risk assessment must be used. The level of sanctions should be set at the level of risk, more dangerous behaviour should lead to stricter sanctions. The issue of absolute and relative speeding needs to be addressed. Cases that are already dealt within the category of relative speeding but there is no awareness of its risk or legal consequences need to be made visible. An example is the approach to designated pedestrian crossings, where increased attention as a behaviour is associated with a decrease in speed in legal practice. As a first step, the preparation of expert decision support material defining and linking the risk analysis and the possible sanctioning tools and levels is required. Then the mapping of legal possibilities and the elaboration of proposals on the basis of this are needed. It is recommended to pursue a social debate on the issue, revealing social attitudes and judgments, so that the acceptance of the regulation to be introduced should be high and respond to social expectations in addition to professional ones.</p> <p><b>Timeframe and financial resources</b> Between the years 2024-2025, cc. 20.000 EUR</p> <p><b>Who?</b> ITM, BM, KTI</p>				
<p><b>Uptake Plan</b> Short list of implementation activities, relevant national documents Risk analysis Development of professional proposal package Amendment of the 410/2007. (XII. 29.) Government Decree</p>				
Investing in safe infrastructure National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Encourage the use of seatbelts in passenger cars through awareness raising and enforcement measures</b> <i>[TA5/national/seatbelt]</i>	2023-2024	10.000 EUR	KTI, ITM, BM, Non-governmental organizations

	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Drivers and passengers who do not wear seat belts are overrepresented among road deaths. In addition, wearing a seat belt is a performance indicator that describes the willingness to follow the rules, safety awareness, and the degree of risky behaviour.</p> <p><b>How?</b> The topic should be emphasized in education and should also be given special attention in driver training. To this end, trainers should be encouraged to present the topic, methodological and demonstration materials should be provided for them. For this purpose, the handbook previously issued by GRSP (Global Road Safety Partnership) is a useful methodological basis, in which, in addition to presenting the effects, the means and possibilities of involving decision-makers were also explained. The issue should be highlighted as a priority area in national strategies, where, in addition to incentives, enforcement and sanctioning tools should also be addressed. It is necessary to develop and publish a comprehensive program with the joint development and representation of the relevant organizations involved.</p> <p><b>Timeframe and financial resources</b> Between the years 2023-2024, cc. 10.000 EUR</p> <p><b>Who?</b> KTI, ITM, BM, Non-governmental organizations</p>
	<p><b>Uptake Plan</b> Short list of implementation activities, relevant national documents Highlighting the importance of the topic in the curriculum and examination requirements for category-based driver training Preparation of methodological materials for trainings Review of the Road Safety Action Program</p>

Investing in safe infrastructure Regional and local level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Put high priority on enforcement and educational &amp; awareness-raising activity to curb inappropriate speeds</b> <a href="#">[TA5/regional/speed]</a>	2023-2024	3.000.000	BM, ITM, Police, KTI
<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            Inappropriate choice of speed is the leading cause of road accidents. The majority of the road users do not understand the reasons for posting speed limits and the real dangers of exceeding them, which results in a lower willingness to follow the rules voluntarily.</p> <p><b>How?</b>            The development of a national program is recommended, which consistently takes into account all the elements of the system of tools that support, encourage or enforce speed reduction and the compliance with speed limits. The comprehensive program should be developed as a joint work of the relevant organizations.</p> <p>As the so-called soft elements of the program, an intensive campaign should be implemented including targeted information communication, educational program elements and an attitude-forming communication campaign. At the same time, the necessary legislative amendments must be developed and implemented.</p> <p>In the second phase of the program, the police should carry out announced, campaign-like and regular enforcement activities, the results of which should be continuously communicated to the road users. The resources needed to implement the program should be provided by the government.</p> <p><b>Timeframe and financial resources</b>            Between the years 2023-2024, cc. 3.000.000 EUR</p> <p><b>Who?</b>            BM, ITM, Police, KTI</p>	<p><b>Uptake Plan</b></p> <p>Short list of implementation activities, relevant national documents</p> <p>Develop a national program against speeding</p> <p>Development and implementation of a campaign</p> <p>Preparation of amendments to the legislation - 410/2007. (XII. 29.) Government Decree, extension of objective liability, revision of the point demerit system</p>			

Investing in safe infrastructure Regional and local level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Consider the implementation of local safe zones (30 km/h) around educational and medical institutions, area-wide 30 km/h limits in urban areas (potentially excluding major urban thoroughfares) and other traffic calming measures</b>  <a href="#">[TA5/regional/traffic_calming]</a></p>			
	<p><b>Explanatory notes:</b>            The scope of the problem and the solution are similar to those described in [TA2/authorities/stakeholders].            Compared to the steps defined in [TA2/authorities/stakeholders], the developed system of specific requirements and design guidelines have to be expanded to take into account also the vicinity of medical institutions, and the methodology should be supplemented accordingly.            In this regard, systematic collection of road safety data near the educational and medical institutions is also a fundamental task, defined in [TA4/regional/data].</p>			
	<p><b>Uptake Plan</b></p>			

Investing in safe infrastructure Regional and local level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Help making the increased usage levels of active mobility (walking, cycling) sustainable by providing them with safe facilities and an adequate share of road space</b> <a href="#">[TA5/regional/active_mobility]</a></p>	2021-2030	See the cited actions below	All actors of the cited actions
	<p><b>Explanatory notes:</b>  <b>Why?</b>            The active mobility modes alleviate environmental burdens, supporting the sustainability of transport system. However, the road users of these modes are the most vulnerable participants in transport, with a high risk, so during the planning and maintenance of facilities, traffic safety aspects should prevail more than at present.  <b>How?</b>            In order to achieve the goals of this action, it is necessary to validate and implement the proposals developed in relation to vulnerable road users. Specifically, the main steps of the following actions are relevant here: [TA2/national/SafeSystem], [TA2/national/methodology], [TA2/national/funds], [TA2/national/vertical], [TA2/regional/data], [TA2/authorities/evidence_base], [TA2/authorities/supporting_data], [TA2/authorities/analysis], [TA2/authorities/stakeholders].  <b>Timeframe and financial resources</b>            Continuous task through the decade, with the costs applied through the previously cited actions.  <b>Who?</b>            All actors of previously cited actions</p> <p><b>Uptake Plan</b>            Steps are defined in the previously cited actions.</p>			



Investing in safe infrastructure Regional and local level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Set the necessary promotive steps to re-establish the modal share of public transport – by far the safest and most sustainable transport mode – at least to pre-pandemic levels</b> [TA5/regional/public_transport]</p>	2022-2023	500.000	Public transport providers, ITM, KTI
	<p><b>Explanatory notes:</b>  <b>Why?</b>            A large reserve of traffic safety activities lies in increasing the share of public transport, as the specific accident risk is significantly lower for public transport modes compared to individual transport. In addition to increasing safety, environmental awareness and sustainability can also be increased by moving the modal split in this direction.  <b>How?</b>            A change in transport habits should be facilitated by launching a joint awareness raising program with public transport providers, non-governmental organizations and public education institutions. In addition, a system of incentives (tariff rebates, giveaway of tickets, passes, etc.) should be developed which generates first-hand use, as road users need to gain experience in public transport in order to reorganize their habits on the long-term.  <b>Timeframe and financial resources</b>            Between the years 2022-2023, cc. 500.000 EUR  <b>Who?</b>            Public transport providers, ITM, KTI</p>			
	<p><b>Uptake Plan</b>            Establishment of a Public Transport work group            Review of the public service tariff system            Awareness raising and promotion activities</p>			

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Establish an evidence base to prioritise infrastructure investments based on safety indicators: crash locations, traffic flows, speed levels, road infrastructure design &amp; safety data.</b>  <a href="#">[TA5/authorities/prioritisation]</a></p>			
	<p><b>Explanatory notes:</b>            For the planning of interventions/investments, systematic road safety data collection and analysis is fundamental as described in [TA1/regional/data]. The analysis provides a basis for appropriate prioritisation and selection of critical locations with highest potential savings. The relevant steps are described in detail in [TA1/authorities/good_practice] and [TA1/authorities/methodologies].</p>			
<b>Uptake Plan</b>				

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Make sure that for each road construction, reconstruction or maintenance project, the implementation of Safe System principles is considered</b>  <a href="#">[TA5/authorities/SafeSystem]</a></p>			
	<p><b>Explanatory notes:</b>            The Safe System approach has to be embedded into the mainstream of road design/investment, construction and reconstruction phases, as described in details in [TA1/national/SafeSystem]. This has to be transferred also to regional and local level activities, as introduced in [TA1/national/vertical].</p>			
<b>Uptake Plan</b>				

## 6) Road Infrastructure Safety Management

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>In the process of definition of Primary road network, national authorities should encourage including roads where at least 50% of fatal and serious accidents occur</b> <a href="#">[TA6/national/primary]</a>			
	<b>Explanatory notes:</b> Not applicable.			
	<b>Uptake Plan</b>			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Country specific national classification criteria should be encouraged in order to enable proper classification of high, medium and low risk roads, based on accident reduction potential as a direct consequence of road infrastructure improvements</b> <a href="#">[TA6/ national /classification]</a>			
	<b>Explanatory notes:</b> For this purpose, international good practices and well established methodologies should be adapted as described in [TA1 /national/standard]			
	<b>Uptake Plan</b>			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Safe System concept should be built in in all road infrastructure related legal acts</b> <a href="#">[TA6/ national /SafeSystem]</a>			
	<b>Explanatory notes:</b> The Safe System approach has to be embedded into the mainstream of road design/investment, maintenance legislation and practice, as described in details in [TA1/national/SafeSystem]. This has to be transferred also to regional and local level activities, as introduced in [TA1/national/vertical].			
<b>Uptake Plan</b>				

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Special attention needs to be given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure</b> <a href="#">[TA6/ national /VRU]</a>			
	<b>Explanatory notes:</b> See [TA2/regional/active_mobility]			
<b>Uptake Plan</b>				

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>All investment plans in road infrastructure safety improvements should be made based on cost/benefit analysis with modelling of savings in terms of fatal and serious injuries prevented</b> <i>[TA6/ national /investment]</i></p>			
	<p><b>Explanatory notes:</b> The previously introduced action [TA1/authorities/methodologies] applies here, ensuring also that the determination of the potential for improvement takes into account the savings achieved by prevented fatal and serious injuries.</p>			
<p><b>Uptake Plan</b></p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<p><b>Raise the minimal road safety design standards for new and existing road infrastructure.</b></p> <p><i>[TA6/ national /standards]</i></p>	2022-2023	200.000 EUR	ITM, KTI, MK, KTE, MAUT
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Despite the significant development of the last decade, roads with a relatively low level of road safety can be built, and there are plenty of sections on the existing network with a low level of safety. Regulations are not sufficiently incentive; safety elements can be omitted. For example, the use of standards is only optional in the case of municipal roads.</p> <p><b>How?</b> By analysing the accident data and information in detail, the infrastructure characteristics contributing to the occurrence/severity of accidents must be determined. After collecting and analysing the good practices available to address the identified factors, review of the technical regulations is needed and the obligation to apply the identified solutions has to be ensured.</p> <p><b>Timeframe and financial resources</b> Between the years 2022-2023, cc. 200.000 EUR</p> <p><b>Who?</b> ITM, KTI, MK, KTE, MAUT</p>			
	<p><b>Uptake Plan</b> Short list of implementation activities, relevant national documents Accident data analysis and collection of best practices Review of technical regulations</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Regional and local level	<b>Road safety audit and inspection procedures should be performed on regional road network based on crash occurrence analysis</b> <a href="#">[TA6/ regional /audit]</a>	2022-2030	1.000.000 EUR	ITM, KTI, MK, KTE
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> The development of the safety services of the regional road network plays a role in the improvement of road safety and also in the improvement of the traffic culture.</p> <p><b>How?</b> A road safety inspection program shall be launched by the Minister responsible for transport. The high-risk sections of the road network should be identified based on the EURO-RAP methodological analysis. For these sites, review plans should be prepared. Based on the results, a set of measures should be proposed divided into three categories:</p> <ul style="list-style-type: none"> <li>• interventions belonging to the scope of operation,</li> <li>• low-cost interventions,</li> <li>• construction investments.</li> </ul> <p>On the basis of the proposals, a development plan must be elaborated, the conditions for the implementation of which must be provided by the Minister responsible for transport (legal basis, financial resources).</p> <p><b>Timeframe and financial resources</b> Between the years 2022-2030, cc. 1.000.000 EUR</p> <p><b>Who?</b> ITM, KTI, MK, KTE</p>			
<p><b>Uptake Plan</b> Short list of implementation activities, relevant national documents Identification of high-risk sections Development of proposals and plans Revision of the 176/2011. (VIII. 31.) Government Decree</p>				

Provisions for vulnerable road users Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)	
	<b>Special attention needs to be given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure in urban and suburban areas</b> <a href="#">[TA6/ regional /VRU]</a>				
	<b>Explanatory notes:</b> See [TA2/regional/active_mobility]				
<b>Uptake Plan</b>					

Provisions for vulnerable road users Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Promote and expand 30 km/h speed limit zones in residential areas</b> <a href="#">[TA6/ regional /residential]</a>	2022-2023	100.000 EUR	KTI, KTE, municipalities
	<b>Explanatory notes:</b> <b>Why?</b> Protecting vulnerable road users, encouraging and promoting cycling and walking is an important goal in residential areas, and the application of 30 km/h zones is a residential-friendly, environmentally conscious and stimulating tool for this. <b>How?</b> Municipalities and local governments should be encouraged and assisted by developing a guide that presents the benefits, the method of design, the steps of implementation, the formation of the related approach and the elements of the communication campaign. The guide can be distributed in printed and digital form to all municipalities. <b>Timeframe and financial resources</b> Between the years 2022-2023, cc. 100.000 EUR <b>Who?</b> KTI, KTE, municipalities			
<b>Uptake Plan</b> Short list of implementation activities, relevant national documents Development and spread of guides Amendment of the Highway Code				



Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)	
	<b>Significantly increase weight of road safety priorities in investment and maintenance plans development</b> <a href="#">[TA6/ authorities /priorities]</a>				
	<b>Explanatory notes:</b> Along with embedding the Safe System approach into the mainstream of road design/investment, maintenance legislation and practice, the weight of road safety can be highly increased. It is especially important to integrate this also at the level of road authorities. The detailed steps and data are described in [TA1/national/SafeSystem] and [TA1/national/vertical].				
<b>Uptake Plan</b>					

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)	
	<b>Define clear strategy and action plan to reduce 50% of fatal and serious accident on managed road network by 2030</b> <a href="#">[TA6/ authorities /strategy]</a>				
	<b>Explanatory notes:</b> Already implemented in Hungary (KKBAP – Road Safety Action Program)				
<b>Uptake Plan</b>					

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Set internal guidelines above the minimal road safety standards</b> <a href="#">[TA6/ authorities /guidelines]</a>	2022-2025	500.000 EUR	ITM
<b>Explanatory notes:</b> <b>Why?</b> Increasing organizational motivation and commitment is needed to increase the level of safety above the minimal standards. <b>How?</b> A quality management standard for road safety related organizations and authorities has to be developed and applied. <b>Timeframe and financial resources</b> Between the years 2022-2025, cc. 500.000 EUR <b>Who?</b> ITM				
<b>Uptake Plan</b> Short list of implementation activities, relevant national documents Revision of the ISO 39001 standard and development of implementation instructions for mandatory use				

### **3. Danube Infrastructure Road Safety Improvement Action Plan (DIRSIAP) for Bulgaria**

This Action Plan has been created in the framework of the [RADAR project](#) which aims at raising road safety levels of countries in the Danube Region. It is structured along RADAR's four Thematic Areas:

- 1) Investing in safe infrastructure,
- 2) Provisions for vulnerable road users,
- 3) ITS and other techniques for speed management,
- 4) Safe infrastructure near schools,

and is adapted to the specific road safety requirements of Bulgaria. The interventions set out in this Action Plan are directed at all levels of road safety management, i.e., from national to regional and local level, with a special section on road authorities.

## 1) Investing in safe infrastructure

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Definition of a national minimal standard for road infrastructure safety rating for existing and new roads based on an evidence-based methodology</b> [TA1/national/standard]</p>	2021-2024 (2025)	n/a for strategic adoption; unknown for implementation	SARS (State Agency Road Safety), RIA
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• <b>Why?</b> - Bulgaria does not yet have an efficient road safety rating system. Providing such is crucial for the proactive road safety management, as well as for implementing Directive (EU) 2019/1936 of the European Parliament and of the Council of 23 October 2019 amending Directive 2008/96/EC on road infrastructure safety management. According to it, member states shall classify all sections of the road network into at least three categories according to their level of safety. EC is expected to provide guidelines, each country will have to comply with them.</li> <li>• <b>How?</b> - An appropriate methodology based on a thorough review of best international practices and specific national needs should be established.</li> <li>• <b>When?</b> - The Directive has to be implemented in national regulation on December 17, 2021 at the latest, so a reasonable deadline for defining minimal standard for road safety rating for existing roads should be December 2021. According to the in March 2021 amended Road Law, The first comprehensive road safety assessment shall be carried out by 31 December 2024 and, based on its results, the State Agency for Road Safety shall submit to the European Commission a report on the classification of road safety by 31 October 2025.</li> <li>• <b>Who?</b> - State Agency for Road Safety should define the national minimal standard for road infrastructure safety rating in coordination with Road infrastructure agency</li> </ul>			
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>- Creating new guidelines for safety assessment and road infrastructure safety rating and amendment of relevant national documents</li> <li>- Organising relevant workshops, trainings etc.</li> </ul>				

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Allocation of a certain portion of road infrastructure investments to road safety interventions</b> <a href="#">[TA1/national/investment]</a>	2021 - 2030	Road infrastructure budget, EU funds, defined percentage of RIA's budget?	MRDPW, RIA, SARS
<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> – Although according to 1.1.13 of the National Action Plan, sustainable financing of Road safety measures in the annual budget estimates of road authorities on all levels should be provided. This measure is attributed to Ministry of Interior, Ministry of Transport, Ministry of regional development and public works (RIA). Ministry of Education and science, Ministry of Health, SARS with a permanent term. by now, there is still no separate budget for road safety interventions planned. It is advisable to ensure separate budget in RIA or else, for example maintaining an effective Road Safety Fund, in order to directly invest in road safety projects in accordance with road safety strategy targets.</li> <li>• Without having budget, explicitly dedicated to road safety interventions, funding conditions are complex and procedures for applying and receiving financing for such are quite cumbersome.</li> <li>• <b>How and when?</b> – The importance for such measure must be justified as soon as possible and allocations in budget planning of relevant decision makers should be considered. In the long run it will be important to ensure the stability and coherence of decisions to finance improvements to infrastructure, other road safety actions, and for capacity building.</li> <li>• <b>Who?</b> – Relevant authorities – Ministry of regional development and public works, Ministry of interior, State agency Road safety, Road infrastructure Agency.</li> </ul>				
<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>- Budget planning and possible reallocations upon cost benefit analysis and proper investment plans</li> <li>- Different stakeholder institutions could dedicate certain percentage of their budgets to road safety interventions.</li> </ul>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice</b> <a href="#">[TA1/national/SafeSystem]</a>	Already embedded with a Permanent term	n/a for strategic adoption; unknown for implementation	Ministry of regional development and public works, SARS, RIA
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> – The Safe System approach aims at minimising road deaths and serious injuries through eliminating possible infrastructure deficiencies that could contribute to human errors and infrastructure, that is better able to accommodate human errors. Providing effective post-crash care is also part of the system. Safe system principles and approaches should be considered throughout the whole life cycle of the road and on all levels of its administration and should be incorporated in a systematic road safety management system.</li> <li>• <b>Who and How?</b> – This should happen mainly through the policies and activities of SARS and practice of RIA and through development and practical application of common road safety management system.</li> <li>• <b>When?</b> – The Safe System approach is already embedded in the National Road safety strategy, developed by SARS. By Decision № 16 of 17 January 2019 of the Council of Ministers, the government adopted a package of operational measures to limit road accident injuries until 2020 and declares the approach "safe system" with zero vision killed and seriously injured.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>- Amendment of the Road law and creation of new legislation for transposing Directive (EU) 2019/1936 of the European Parliament and of the Council of 23 October 2019 amending Directive 2008/96 / EC on road infrastructure safety management (p 4.1.6. of the National Action Plan).</li> <li>- Revision and amendment (if necessary) of relevant legislation and guidelines.</li> </ul>			

Investing in safe infrastructure National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Institutionalisation of trainings for road safety auditors and road safety inspectors</b> <a href="#">[TA1/national/auditors]</a>			
	<b>Explanatory notes:</b> The conditions and the procedure for acquiring the professional qualification “road safety auditor” and for passing periodic courses for additional training shall be determined by the ordinance under Art. 36 from the Roads Act. As part of the requirements, Road safety auditors should have a master’s degree in Road engineering or equivalent and certificate of professional qualification issued based on the training of a road safety auditor under a program approved by the Chairman of the State Agency "Road Safety", coordinated with the Minister of Education and Science; SARS keeps a register of road safety auditors. There is no need of further institutionalization of road safety auditors and road safety inspectors’ trainings.			

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Transfer of the Safe System approach to local governments and local road authorities</b> <i>[TA1/national/vertical]</i></p>	Permanent	Minor, unknown for implementation	RIA, regional departments of Ministry of Interior, regional road authorities,
<p><b>Explanatory notes:</b> The Safe System approach should not only be applied on national level to the National road network, but also on regional and local.</p> <ul style="list-style-type: none"> <li>• <b>Why?</b> - A lot of accidents occur on rural roads, which are not part of the national road network as well as in urban areas. Therefore, the safe system approach should be transferred to local governments and local road authorities to address local road safety issues.</li> <li>• <b>How and who?</b> - Dissemination, coordination and interaction between road owners (municipalities and regional road administrations) with the Ministry of regional development and public works, Ministry of Interior, SARS and RIA for the purpose of joint actions to improve the safety of road infrastructure.</li> <li>• <b>When?</b> – Prompt actions for dissemination with a permanent term for implementation activities</li> </ul> <p>This measure is already embedded in the National action plan. All activities, of local governments and local road authorities should be done according to it and to its annexes. it should be obligatory to include road safety experts in the local road safety commissions.</p>	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>- Assist local governments in understanding and adopting the Safe system approach through multiple workshops, roundtables, discussions and trainings;</li> <li>- Develop set of specific guiding principles for local governments and local road authorities according to the National action plan.</li> </ul>			



Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Enlarging the scope of roads to be treated in accordance with Directive 2019/1936 to 2nd level roads (e.g., “regional roads”)</b> [TA1 /national/secondary]</p>	2021	n/a	MRDPW, RIA, SARS, local governments
	<p><b>Explanatory notes:</b> This measure coincides to a large extent with p. 4.1.6. from the National Action plan. In March 2021 Bulgarian parliament adopted the Act for amendment and supplement of the Roads Act, according to which the scope of roads to be treated in accordance with Directive 2019/1936 was enlarged beyond roads, belonging to the TEN-T network. It is important that efforts are focused on complying with the provisions of the law and to include more streets in urban areas as well. Providing budget, explicitly dedicated to such procedures is essential for the success of the measure.</p>			
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>- Developing of efficiently working methodology.</li> <li>- Review and amendment of related legislation if needed.</li> </ul>				

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Institutionalisation of knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments</b> <i>[TA1 /national/good_practice]</i>	permanent	minor	MRRB, RIA, SARS
	<p><b>Explanatory notes:</b></p> <p>Road safety policy is dynamic field, that could be constantly upgraded through different research, good practices and approaches. A solid foundation of basic knowledge and theories, related to road safety is crucial for decision making processes including on regional/local level.</p> <p>Recognizing the importance of road safety knowledge transfer and institutionalisation of modern road safety practices could contribute to reducing road deaths and injuries.</p> <ul style="list-style-type: none"> <li>• <b>Why?</b> - There is often a gap between research, scientific and analytical work and policy and decision making by road authorities, especially on local and regional level.</li> <li>• <b>How?</b> - Implementation through wide range of activities and initiatives in the field of road safety – scientific works and studies, analysis of good practices and approaches, pilot projects; technical assistance and advices.</li> <li>• <b>When?</b> - immediate initiative and periodical activities for knowledge transfer</li> <li>• <b>Who?</b> - Ministry of Interior, Ministry of regional developments and public works, RIA, SARS, local governments,</li> </ul>			
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>- Procurement of different type of activities for knowledge transfer;</li> <li>- Technical assistance for local governments;</li> <li>- Distribution of knowledge materials.</li> </ul>				

Investing in safe infrastructure Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Systematic road safety data collection and analysis to plan interventions/investments on most critical locations</b> <a href="#">[TA1/regional/data]</a></p>	permanent	unknown	SARS, NAMRB, Local governments
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• <b>Why?</b> - Interventions and investments in road safety, especially within limited budgets, is often prioritized based on data for most critical locations. This could be upon accidents statistics, road safety assessment or both. Effective systematic road safety data collection and analysis is essential for this purpose.</li> <li>• <b>How?</b> - A methodology for systematic road safety data collection on regional and local level should be established. It should include road safety assessment and analysis procedures, road accidents statistics and analysis and defining criteria for prioritizing road sections to be upgraded.</li> <li>• <b>When?</b> - The methodological guidelines should be developed by the end of 2021 so that the implementation could start as soon as possible with a permanent term.</li> <li>• <b>Who?</b> - SARS, National Association of the municipalities in the Republic of Bulgaria, Local governments</li> </ul>				
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>- Review of best practices and development of methodology for systematic road safety data collection and analysis to plan interventions/investments on most critical locations.</li> <li>- Revision of existing (if existing) guidelines.</li> </ul>				

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Setting up of road safety funds for investments in road safety upgrades in terms of road safety equipment and measures at locations with most effectiveness</b> <a href="#">[TA1 /authorities/funds]</a>	2023 and onwards	n/a	MRDPW, MT, MI, ME, RIA, SARS
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> - According to the national road safety strategy measures related to road safety should be subject to multi-annual investment budgeting by the institutions. The latter should provide adequate funding for the planned road safety measures by prioritizing needs and applying the cost-effectiveness principle. Still, without separate budget for road safety interventions, even minor ones, funding relies only on cumbersome procedures and uncertain financing. Therefore, a separate road safety fund should be established and driven to work efficiently.</li> <li>• <b>How?</b> – Possible way is to define certain percentage of existing budgets of related institutions or other revenues.</li> </ul>			
<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Developing of the concept and amending related legislation.</li> <li>• Introduction to stakeholders</li> </ul>				

	Intervention	Time frame	Financial resources	Main actor(s)
Investing in safe infrastructure Road authorities	<p><b>Observation of road safety trends and good practices to plan maintenance and upgrades of the existing road network in operation</b> [TA1/authorities/good_practice]</p>	permanent	n/a	Responsible road authorities, Research institutions and State agencies
	<p><b>Explanatory notes:</b> Planning of maintenance and upgrade of the existing road network should be flexible and adaptive upon latest road safety trends and good practices.</p> <ul style="list-style-type: none"> <li>• <b>Why</b> - Modern researches reveal new opportunities for better and more efficient results of road safety measures implementation. With limited budgets for maintenance and road safety, actions based on best practices examples and road safety trends could ensure higher safety benefit upon reasonable costs.</li> <li>• <b>How</b> – It is necessary to assess good practices examples and constantly observe road safety trends in neighbouring countries and countries with similar economic status in order to establish the actual usefulness of the practices and pick up actions with higher cost-benefit ratio.</li> <li>• <b>When</b> – Throughout the period of the current national road safety strategy (2021 – 2030) and beyond. Financial resources required are minor. This could be assigned to the duties of road safety administration experts.</li> <li>• <b>Who</b> – Responsible road authorities on national and regional level.</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• Assess international policies and institutional settings relating to road safety issues and pick up best practice examples. Take explicit use of assessments of past performance to prioritise measures that have shown to be most effective.</li> <li>• Organize different discussions, workshops etc. to share expertise and lessons learned.</li> </ul>			

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Use of methodologies for selecting most critical locations with highest potential savings.</b> <i>[TA1/authorities/methodologies]</i></p>	2021-2030	-	Ministry of interior (Traffic police), Regional directorates of MI and responsible road authorities
<p><b>Explanatory notes:</b> Road authorities often have financial limitations for road upgrade and road safety investment funds. Using methodologies for selecting most critical locations with highest potential savings generates affordable and economically sound road improvements that could save lives and prevent injuries.</p> <ul style="list-style-type: none"> <li>• <b>Why</b> – The investment plans, for example, consider the existing road features, the speed and volume of traffic, the expected fatalities and injuries before and after treatment, the hierarchy of treatments, the expected economic benefits of investing in that treatment, the benefit to cost ratio and the internal rate of return. In this way the road owner can have a full appreciation of the investment business case and have confidence that the interventions will deliver results.</li> <li>• <b>How</b> – Assess existing such methodologies or develop one</li> <li>• <b>When</b> – 2021 - 2030</li> <li>• <b>Who</b> – Traffic police, Regional directorates of the Ministry of Interior, SARS, RIA</li> </ul>				
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>- Development and presentation of the methodology;</li> <li>- Exploring legal necessities, preparing amendments;</li> <li>- Establishing a regulatory framework.</li> </ul>				

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Publication of the list of high accident concentration road sections / hot spots.</b> <a href="#">[TA1 /authorities/hotspots]</a>	2022	-	SARS, MI, RIA
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> - Public information about dangerous roads and sections should be provided in order to raise the awareness of the society and road users and to inform about potential risk. Moreover, it could support and incite road owners to undertake activities for road safety interventions.</li> <li>• <b>How and Who?</b> – Duty of SARS is to publish working interactive map with road sections with high accidents concentration. Work on it should be accelerated in order to meet the initial goals sooner.</li> </ul>			
<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Providing working interactive map</li> </ul>				

## 2) Provisions for vulnerable road users

	Intervention	Time frame	Financial resources	Main participant(s)
	<b>Incorporation of the principles and concepts of the Safe System approach in relevant legislation and VRUs' countermeasures selection criteria</b> <i>TA2/national/Safe System</i>	2021-2023	Funds from the budget of the respective institution	State Road safety agency, Ministry of Transport, Information Technology and Communications, Executive Agency "Automotive Administration", Ministry of regional development and public works, RIA, Ministry of interior
Provisions for vulnerable road users National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Creation of a new and updating of the current legislation for introduction of new standards for safe infrastructure with regard to vulnerable road users. Annual reporting of actions on this sectoral policy at central level, reporting on actions taken and measures implemented. Explicit regulation of the road safety in the functional obligations of the territorial divisions of the central bodies of the executive power - determination of people / units /, provided with the necessary competencies and financial resources for implementation of safe movement activities by improving the regulations and job descriptions of specific individuals</li> <li>• <b>Why?</b> It is necessary to transpose Directive (EU) 2019/1936 of the European Parliament and of the Council of 23 October 2019 on vulnerable road users and their top priority.</li> <li>• <b>How?</b> Creation of a new and updating of the current legislation for introduction of new standards for safe infrastructure with regard to vulnerable road users. Amendment of the Law on Public Procurement, Law on Public Procurement. Preparation of methodological guidelines for elaboration of a sectoral strategy regarding the VRU / vulnerable road users / - road safety agency.</li> <li>• <b>When?</b> 2021-2023 with funds from the budget of the respective institution.</li> <li>• <b>Who?</b> Ministry of Transport, Information Technology and Communications, Executive Agency "Automotive Administration" MRRB, RIA, Ministry of interior, Ministry of Education, Ministry of Health.</li> </ul>			
	<b>Uptake Plan</b> Amendments and supplements to the Traffic Act, the Public Procurement Act, the Ordinance on the organization of traffic, the Ordinance on signalization with road markings, the Ordinance on signalization of roads with road signs, the Ordinance on the construction of artificial irregularities, etc. will be amended. means for limiting the speed of movement, Ordinance №RD-02-20-14 on the scope and content of the impact assessment on road safety and the road safety audit. The efficiency of law enforcement will be increased, existing and new normative documents will be updated, public relations will be permanently regulated.			



Provisions for vulnerable road users National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Development/Incorporation of a unified protocol for assessment of the risks of VRUs, which will ensure that results are understood and comparable between countries</b> [TA2/ national /risk assessment]</p>	2021-2023	Budget of State Road safety agency, RIA, MRRB, Ministry of interior,	Road safety agency in consultation with partner organizations RIA, MRRB, Ministry of interior,
	<p><b>Explanatory notes:</b> Introduction and maintenance of a unified system in SARS for collection and processing of data for VRUs through GIS - based information technologies, which allows easy comparison of the results with those of other countries. Categorization of road network safety by identifying, analysing and classifying the road network according to the potential for improving the safety of the VRUs and saving the costs related to accidents. Creating a methodology for assessing the damage from accidents</p> <ul style="list-style-type: none"> <li>• <b>Why?</b> - Until now, data have been collected only by the system of the Ministry of Interior;</li> <li>• <b>How?</b> 1. Initial systematization of the available data from the different information arrays 2. Statistical analysis of the data and analytical processing of the information;</li> <li>• <b>When?</b> 2021-2023 with the budget of SARS, RIA, Ministry of Regional Development and Public Works, Ministry of Interior;</li> <li>• <b>Who?</b> Road safety agency in consultation with partner organizations, Ministry of Regional Development and Public Works, RIA, Ministry of Interior.</li> </ul>			
<p><b>Uptake Plan</b> A unified information system will be created under the guidance and support of the SARS, connected to the electronic national database, to be used by all institutions related to road safety, incl. related to vulnerable road users. A systematic analysis of road accidents, influencing factors and causal dependencies on the occurrence of road accidents will be performed. Normative changes will be made in the Traffic Act, in connection with the creation of a mechanism for collecting, summarizing and analyzing data from all road owners. Through the created GIS based model with the necessary functional characteristics, it will be possible to easily compare the results of Bulgaria with those of other countries.</p>				

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users National level	<p><b>Making sure that countermeasures' selection, prioritization and implementation process for VRUs should not in any case be performed only based on subjective criteria but primarily based on official, standardized, objective methodology which considers all relevant road safety indicators (AADT, peak-hour pedestrian/cyclist flows, operating speed, traffic accidents characteristics)</b></p> <p><a href="#">[TA2/ national /methodology]</a></p>	2021-2022	Budget of RIA, Ministry of Regional Development and Public Works	RIA, Ministry of Regional Development and Public Works
	<p><b>Explanatory notes:</b></p> <p>Carrying out detailed technical inspections and engineering-economic analyzes, preceding the preparation of investment programs for impact on road infrastructure, current and systematic assessment of road safety by road owners - development and implementation of a methodology for planning road activities as a methodological guide, incl. for vulnerable road infrastructure users.</p> <ul style="list-style-type: none"> <li>• <b>Why?</b> It is necessary to update the methodological instruction for planning the road safety activities, prepared by the RIA and an internal document, which is not up-to-date for municipal roads.</li> <li>• <b>How?</b> Development and implementation of a new methodology for accident investigation, integrating all influencing factors. Provision of priority and budgeted safety measures for VRUs the basis of performed analyses and evaluation - development of annual investment programs.</li> <li>• <b>When?</b> 2021-2022 with funds from the budget of RIA and Ministry of Regional Development and Public Works</li> <li>• <b>Who?</b> RIA, Ministry of Regional Development and Public Works</li> </ul>			
	<p><b>Uptake Plan</b></p> <p>A survey, analysis, planning and management of the activities under the road safety for the VRUs and their subsequent implementation will be performed. A new methodology for accident investigation will be created, incl. of the VRUs, integrating all influencing factors. Investment programs will be developed and implemented with measures regarding road safety. Coordination and interaction between the individual road users will be introduced with regard to the envisaged measures.</p>			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Definition of a national minimal standard threshold values of relevant road safety indicators based on which high-risk road sections for VRUs will be identified</b> [TA2/ national /standard]</p>	2021-2022	Budget of RIA, State Road safety agency	Ministry of Regional Development and Public Works, RIA, Road safety agency
	<p><b>Explanatory notes:</b> Preparation of standards for minimum values of the relevant road safety indicators, including for VRUs. Implementation of targeted investments / according to EU Directive / 1936 from 2019 / in road sections with the highest concentration of road accidents with VRU or with the highest potential for reducing the risk of road accidents in the country</p> <ul style="list-style-type: none"> <li>• <b>Why?</b> There are currently no specific high-risk areas identified for vulnerable road users. There are also no minimum standards for road safety indicators in terms of VRUs;</li> <li>• <b>How?</b> Carrying out an analysis by the owners of road accidents with VRU and assessment of the risk from a point of view of the impact of the road infrastructure on their occurrence. Identification of high-risk road sections for VRUs;</li> <li>• <b>When?</b> 2021-2022 with funds from the budgets of RIA, SARS;</li> <li>• <b>Who?</b> Ministry of Regional Development and Public Works, RIA, Road safety agency.</li> </ul>			
<p><b>Uptake Plan</b> Standards for minimum values of the relevant road safety indicators, including for VRU, will be prepared. Specialists and all participants in the work on road safety will have access to the data, analyzes and details. Targeted investments will be made in road sections with the highest concentration of accidents with VRUs and potential for reduction of the number of victims of VRUs.</p>				

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Ensuring that available funds are primarily invested in low-cost, high-impact countermeasures, by considering the concepts of tactical urbanism and space-wise planning</b> [TA2/ national /funds]</p>	2021-2022	European investments and budget of municipalities, Ministry of Regional Development and Public Works, RIA	municipalities, Ministry of Regional Development and Public Works, RIA
	<p><b>Explanatory notes:</b> Change in the normative documents related to the development and implementation of measures for sustainable urban mobility, as part of broad-based strategic documents related to the provision of road safety for VRUs.</p> <ul style="list-style-type: none"> <li>• <b>Why?</b> Strategic planning of road safety through sustainable spatial planning and design;</li> <li>• <b>How?</b> Implementation of investments to improve the connectivity between the territories in order to provide safe, comfortable and fast transport services to the population, in the conditions of universal mobility / mobility for all, incl. VRUs;</li> <li>• <b>When?</b> 2021-2022 through European investments and budgets of Municipalities, Ministry of Regional Development and Public Works;</li> <li>• <b>Who?</b> Ministry of Regional Development and Public Works, Municipalities, RIA.</li> </ul>			
<p><b>Uptake Plan</b> With the preparation of the Urban mobility management plan, measures will be set and envisaged to ensure the road safety of the VRUs. Activities of RIA and municipalities for design and construction of sections of the road network will be envisaged and implemented in the implementation of measures for sustainable urban mobility and ensured road safety, incl. of the VRUs.</p>				

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Development/restructuring and linking datasets on road traffic accidents and road network in order to increase their precision and provide free and easy access to all stakeholders</b> <a href="#">[TA2/ national /dataset]</a>	2021-2022	Budget of State road safety agency, Ministry of Interior	State road safety agency, Ministry of Interior, Ministry of Health
	<b>Explanatory notes:</b> Creating an interactive map with information about all sections with concentration of road accidents with VRUs in the country. Informing drivers about these sections through this free accessible interactive map.			
	<ul style="list-style-type: none"> <li>• <b>Why?</b> Until now, there was no single center in which to collect, process and analyze information about road accidents in the country, incl. in the settlements.</li> <li>• <b>How?</b> An interactive map will be created, accessible to all users.</li> <li>• <b>When?</b> 2021-2022 with the budget of State road safety agency, Ministry of Interior</li> <li>• <b>Who?</b> SARS, Ministry of Interior, Ministry of Health</li> </ul>			
<b>Uptake Plan</b> Through an interactive map with accidents accessible to all users, incl. of the VRUs.				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Linking the police database on road traffic accidents with hospital data in order to minimize the VRUs accidents under-reporting issue</b> <a href="#">[TA2/ national /database_link]</a>	2021-2023	Own budgets of the Ministry of Interior, Ministry of Health, State road safety agency	Ministry of Health, Ministry of Interior, State road safety agency - National Coordination Center
Provisions for vulnerable road users National level	<p><b>Explanatory notes:</b>            Establishment of a unified system for reporting traffic injuries - introduction of comparability of data provided by both the Traffic Police and the health care system / Emergency Medical Center / and emergency departments. Creating an unified database system for collecting information.</p> <ul style="list-style-type: none"> <li>• <b>Why?</b> There is no single database for road traffic injuries.</li> <li>• <b>How?</b> Assessment of road traffic injuries according to the requirements of the EC:</li> <li>• Introduction of a scale for assessment of road traffic injuries, adopted by the High Level Group on Road Safety and Health at the European Commission, called the Maximum Abbreviated Injury Scale - MAIS3 + / to the Strategy for Serious Injuries in Accidents, MEMO 13/232, European Commission, Brussels, 2013.</li> <li>• Creating of a unified communication system between the emergency response services:               <ul style="list-style-type: none"> <li>○ Development of procedures for action as part of the National Coordination Centre;</li> <li>○ Introduction and observance of uniform algorithms for reaction after the accident, in which the joint actions of all rescue services are written. Conducting joint theoretical training - training activities for all rescue teams</li> </ul> </li> <li>• Normative regulation of adequate equipment of the first-aid kits of both vehicles and vehicles of the Traffic Police and public transport</li> <li>• Assessing the need to restructure the emergency medical care system:               <ul style="list-style-type: none"> <li>○ Disclosure, if necessary, of permanent posts of medical teams in the areas with increased concentration of road accidents, incl. and on highways;</li> <li>○ Discovering the need for new branches of emergency medical care and relocation of emergency medical teams to remote settlements depending on the development of demography</li> </ul> </li> <li>• Creating system capacity for providing emergency aeromedical assistance through air transport.</li> <li>• Constant updating of the material base in the system of emergency medical care.</li> </ul>			
	<p><b>Uptake Plan:</b>            A unified database system will be built by the Ministry of Interior and the Ministry of Health. An MAIS3 + rating scale will be introduced.            Action procedures will be developed as part of the National Coordination Center with unified action algorithms. Regular training activities for rescue services will be held.            Procedures for equipping first aid kits in vehicles, traffic police cars and public</p>			

	<p>transport will be regulated.</p> <p>The permanent posts of medical teams will be restructured for adequate and fast response in case of accidents to the most remote places.</p> <p>Measures will be taken to expand the types of medical transport. The technical resources for emergency medical care will be updated.</p>
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	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users National level	<p><b>Changing traffic culture and public awareness by disseminating relevant information to the public by various media sources</b> [TA2/ national /awareness]</p>	2021-2030	Funds from the budget of the respective institution	SARS in cooperation with the Ministry of Interior, Ministry of Education and Science, Ministry of Transport, Information Technology and Communications, Bulgarian Red Cross, NGOs
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Development and implementation of targeted communication and media policy related to vulnerable road users.</li> <li>• <b>Why?</b> With the adoption of Ordinance RD/02-20-2 for planning and design of the communication and transport system in urban areas, the priorities of the participants in the traffic were rearranged, as pedestrians are already in the first place, followed by cyclists, i.e. the culture of movement must be changed by removing the current priority of motor vehicles. This can happen through targeted actions and campaigns, mainly communication.</li> <li>• <b>How?</b> Preparation of a communication strategy and submission of regular information to the media. Development and implementation of thematic programs for awareness of the individual target groups of the population - upgrading educational and training activities. Maintaining a unified information space on the SARS website.</li> <li>• <b>When?</b> 2021-2030 with funds from the budget of the respective institution</li> <li>• <b>Who?</b> SARS in cooperation with the Ministry of Interior, Ministry of Education and Science, Ministry of Transport, Information Technology and Communications, Bulgarian Red Cross, NGOs</li> </ul>			
	<p><b>Uptake Plan:</b></p> <p>Targeted communication and media policies related to vulnerable road users will be developed and implemented.</p> <p>Campaigns will be organized and conducted, training materials for informing the individual target groups of the population will be published.</p>			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Knowledge transfer with demonstrations of good practices and approaches in VRU safety for road authorities and to regional/local governments</b> <a href="#">[TA2/ national /vertical]</a>	2021-2029	Budget of State road safety agency	State Advisory Commission and Council of the Scientific and Academic Community, under the coordination of SARS
	<b>Explanatory notes:</b> Integration of the specialized resources of the civil, corporate, scientific and academic sector for conducting expert research and analysis in connection with the vulnerable road users: <ul style="list-style-type: none"> <li>• <b>Why?</b> <ol style="list-style-type: none"> <li>1. Integration of the resource of the Council of the Scientific and Academic Community at SABS for application of a scientific approach in the implementation of measures for the benefit of vulnerable road users</li> <li>2. receiving information from the civil society, business and NGOs and implementation of joint activities</li> </ol> </li> <li>• <b>How?</b> – Trough departmental trainings organized by the relevant institutions for their employees, trainings of the regional and municipal commissions on traffic safety; preparation of methodological instructions from the central structures to the territorial divisions, to the municipalities</li> <li>• <b>When?</b> 2021-2029 through the budget of SARS</li> <li>• <b>Who?</b> State Advisory Commission and Council of the Scientific and Academic Community, under the coordination of SARS</li> </ul>			
<b>Uptake Plan</b> Conducting meetings of the Scientific Council, data exchange between organizations, preparation of doctoral studies and scientific reports, innovations, competitions. Innovations in GDP policy will be integrated - introduction of innovations in the field of measures to improve the safety of vulnerable road users.				



Provisions for vulnerable road users Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Ensuring that results obtained by road safety assessments performed in individual municipalities at local level are standardized and comparable between different municipalities and on the National level</b> [TA2/ regional /standard]</p>	2021-2022	Budget of State road safety agency, Ministry of regional Development and Public Works, MUNICIPALITIES	State road safety agency, Ministry of regional Development and Public Works, MUNICIPALITIES
	<p><b>Explanatory notes</b> Preparation of standards for road safety assessment for sites in settlements or outside them.</p> <ul style="list-style-type: none"> <li>• <b>Why?</b> Currently in the Republic of Bulgaria road safety assessment of streets and municipal roads is not performed.</li> <li>• <b>How?</b> The transposition of Directive (EU) 2019/1936 of the European Parliament and of the Council of 23 October 2019 in the national documents and the development of a Methodology / standard / for road safety assessment of infrastructure sites will ensure uniformity of application, regardless of class on the road - republican, municipal or street from the city territory.</li> <li>• <b>When?</b> It will be applied annually, according to a list approved by SARS and the municipalities.</li> <li>• <b>Who?</b> Municipalities, district administrations and the Road Infrastructure Agency need to organize the work of conducting road safety inspections on the basis of standardized documents.</li> </ul>			
<p><b>Uptake Plan</b> Standards for road safety assessment will be prepared for sites in settlements or outside them, in accordance with Directive (EU) 2019/1936. Amendment to Ordinance №5 for establishing and securing the areas with concentration of road accidents and for categorizing road safety; Change in "Guidelines for road infrastructure safety management", internal document of RIA and the creation of national guidelines.</p>				

Provisions for vulnerable road users Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Systematic, high-quality road safety data collection and analysis to plan interventions/investments on most critical locations for VRU</b> [TA2/ regional /data]</p>	permanent	From the budgets of Municipalities, State road safety agency, Ministry of Interior, Ministry of Health	Municipalities, State road safety agency, Ministry of Interior, Ministry of Health
<p><b>Explanatory notes:</b> Establishment of a unified system for reporting traffic injuries - introduction of comparability of data provided by both the Traffic Police and the health care system / Emergency Medical Center / and emergency departments of host hospitals. Building a unified database system for collecting information.</p> <ul style="list-style-type: none"> <li>• <b>Why?</b> Due to inaccuracies and incompleteness in the data from the health care system and inconsistency with the data provided by the Ministry of Interior, it is not possible to obtain a comprehensive view of the problems with road safety and classification of the problems.</li> <li>• <b>How?</b> Creating an interactive map with information about all sections with concentration of road accidents with VRUs in the country. Informing drivers about these sections through this accessible interactive map.</li> <li>• <b>When?</b> 2021-2030 from the budgets of Municipalities State road safety agency, Ministry of Interior</li> <li>• <b>Who?</b> Municipalities, SARS, Ministry of Interior, Ministry of Health</li> </ul>				
<p><b>Uptake Plan</b> An interactive map with road accidents, incl. VRUs.</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<b>Use of official, standardized, objective methodology for selecting most critical locations for VRUs with highest potential savings</b> <i>[TA2/ authorities /methodology]</i>	2021-2030	Own budgets of the institutions	Ministry of Regional Development and Public Works, Road Infrastructure Agency, Municipalities
	<b>Explanatory notes:</b> Road authorities often have financial constraints on road improvements and road safety investment funds. The use of methodologies for selecting the most critical locations with the greatest potential savings generates affordable and cost-effective road improvements that could save lives and prevent injuries. <ul style="list-style-type: none"> <li>• <b>Why?</b> Investment plans, for example, take into account existing road characteristics, speed and volume of traffic, expected deaths and injuries before and after treatment, the hierarchy of treatments, the expected economic benefits of investing in this treatment, the cost-benefit ratio and the internal rate of return. In this way, the road owner can have a full assessment of the investment business case and be confident that the interventions will lead to results.</li> <li>• <b>How?</b> Evaluate or develop existing such methodologies</li> <li>• <b>When?</b> 2021-2030 from the institutions' own budgets</li> <li>• <b>Who?</b> Ministry of Regional Development and Public Works, Road Infrastructure Agency, Municipalities</li> </ul>			
	<b>Uptake Plan</b> By amending Ordinance №5 for establishing and securing the areas with concentration of road accidents and for categorizing the road safety and a change in the “Guidelines for road infrastructure safety management” will create a methodology for selecting the most critical sites for VRUs, with the greatest potential for savings, in accordance with the guidelines of the EC and Directive (EU) 2019/1936.			

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Ensuring that types of pedestrian/cyclist facilities and crossing arrangements are selected based on the operating speed of traffic flow and pedestrian, cyclists and vehicle peak-hour flow volumes</b></p> <p><a href="#">[TA2/ authorities /evidence_base]</a></p>			
	<p><b>Explanatory notes:</b> Elaboration of instructions for designing road assets in the presence of VRUs, in accordance with the traffic intensity and the speed of the vehicle.</p>			
<p><b>Uptake Plan</b> Elaboration of instructions for designing road assets in the presence of VRUs. Application in design of roads outside settlements of Ordinance RD-02-20-2 for design of roads; Application in the design of roads in settlements of Ordinance RD-02-20-2 of 26.01.2021 for determining the requirements for accessibility and universal design of the elements of the accessible environment in the urban area and of the buildings and facilities.</p>				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Periodical collection of relevant supporting data on characteristic VRU crash locations on the road network on a mandatory basis and update relevant databases</b> [TA2/ <a href="#">authorities</a> /<a href="#">supporting_data</a>]</p>	2021-2023	Budgets of the respective institutions	Ministry of Interior, Municipalities, State road safety agency
	<p>Creating an interactive map with information about all sections with concentration of road accidents with VRUs in the country. Informing drivers about these sections through this accessible interactive map.</p> <ul style="list-style-type: none"> <li>• <b>Why</b> is it necessary (what is the current problem)? By now, there was no independent institution, explicitly created to collect, process and analyze information about road accidents in the country, incl. in the settlements.</li> <li>• <b>How</b> will it be implemented (what steps are required in the process)? An interactive map will be created, accessible to all users.</li> <li>• <b>When</b> will it be implemented, what financial resources are needed and from which fund or budget will they be received? 2021-2022 with the budget of SARS, Ministry of Interior</li> <li>• <b>Who</b> will be the actors (please mention the main actors and other actors involved, and how they should interact)? SARS, Ministry of Interior, Ministry of Health</li> </ul>			
	<p><b>Uptake Plan</b> Through creating of a unified system for reporting road traffic injuries - introduction of comparability of data provided by both the Traffic Police and the health care system / Emergency Medical Center / and emergency departments of hospitals. Building a unified database system for collecting information, incl. for vulnerable road users.</p>			

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Periodical analysis of effectiveness and efficiency of implemented countermeasures for VRUs</b></p> <p><i>[TA2/ authorities /analysis]</i></p>	permanent	From the respective budgets	State road safety agency, District Road Safety Commissions, Municipal Road Safety Commissions, Municipalities
<p><b>Explanatory notes:</b></p> <p>In order for road safety measures related to vulnerable road users to be effective, it is necessary to systematically monitor their effectiveness and update interventions.</p> <ul style="list-style-type: none"> <li>• <b>When?</b> 2021- 2030 from the respective budgets</li> <li>• <b>Who?</b> SARS, District Road Safety Commissions, Municipal Road Safety Commissions, Municipalities</li> </ul>				
<p><b>Uptake Plan</b></p> <p>Every quarter, when conducting municipal and regional road safety commissions, the applied measures are taken into account and an analysis of their effectiveness is prepared.</p>				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Engaging all stakeholders in the process of VRU-friendly road design (engineers need to collaborate with different stakeholders and NGOs)</b></p> <p><i>[TA2/ authorities /stakeholders]</i></p>	permanent	Relevant budgets	State road safety agency, Municipalities, Chamber of engineers in the investment design, NGO's
<p><b>Explanatory notes:</b></p> <p>It is necessary to monitor and apply the innovations from the international practice in the direction of designing roads adapted for vulnerable road users, especially in populated areas. Conducting seminars and conferences at national and municipal level, additional training of road designers on the topic.</p> <ul style="list-style-type: none"> <li>• <b>Why?</b> There are no separate regulations for vulnerable road users.</li> <li>• <b>When?</b> 2021-2030 through the relevant budgets</li> <li>• <b>Who?</b> SARS, Municipalities, Chamber of engineers in the investment design, NGO's</li> </ul>				
<p><b>Uptake Plan</b></p> <p>Conducting seminars, trainings, conferences.</p>				

### 3) ITS and other techniques for speed management

ITS and speed management National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches</b> <a href="#">[TA3/ national /guidelines]</a>	2021 - 2030	-	Ministry of Transportation, Ministry of regional development and public works
<b>Explanatory notes:</b> Intelligent transportation systems have been used for years now, but while they are rapidly gaining a significant share in the automobile industry, their application in road infrastructure in Bulgaria is not yet as effective. Innovations that are the basis of ITS in the field of information and communication technologies, can significantly contribute to a cleaner, safer and more efficient transport, but more important for saving lives and preventing accidents. <ul style="list-style-type: none"> <li>• <b>Why</b> - Besides the Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport and the relevant national ordinance, there is lack of comprehensive national legislation for ITS.</li> <li>• <b>How</b> – Elaboration of guidelines, based on research, pilot projects and best practices.</li> <li>• <b>When</b> – Guidelines should be elaborated and implemented within a reasonable time, during the first half of the National Road Safety Strategy and Action plan.</li> <li>• <b>Who</b> – Relevant Ministries, Research institutions and state agencies should be involved in the elaboration of guidelines for ITS.</li> </ul>				
<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – multiple workshops and discussions with main actors and stakeholders and procurement procedures for elaboration of the guidelines.</li> </ul>				

ITS and speed management Regional and local level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Exploitation of new ideas and recommendations:</b></p> <ul style="list-style-type: none"> <li>• Speed-activated warning signs (e.g. “Slow down” in the approach of bends and other dangerous locations);</li> <li>• Variable speed limit signs on high-level roads (traffic and/or weather-dependent);</li> <li>• Time-dependent speed limits, e.g. in the vicinity of schools during opening hours;</li> <li>• Transversal rumble strips in the approach of junctions or sharp bends;</li> <li>• Efficiency of administration of fines from automatic speed enforcement;</li> <li>• Lack of resources among authorities tasked with the issuing of fines;</li> <li>• Different degrees of automation (centralized &amp; nearly full automation in France. Inefficient manual processing in other countries ...)</li> </ul> <p><a href="#">[TA3/ regional /ideas]</a></p>	2023	n/a	MI, RIA, SARS, local governments
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• <b>Why?</b> – Speeding is a major problem in Bulgaria. According to the National Statistical Institute, in 2019 there were 6 517 accidents due to human error, 28,3% of which due to driving with inappropriate speed. Exploitation of new ideas and recommendations must be done by relevant institutions on regular basis in order to provide an efficient speed management system and to promote appropriate measures for speed control. Some of the above-mentioned measures are already introduced in Bulgaria, but not commonly used yet, others, concerning administration need to be better perceived.</li> <li>• <b>How?</b> – Raising the awareness on all levels from administration to road users and increasing involvement and engagement of the stakeholders.</li> </ul>	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>- Trainings in the field of speed management;</li> <li>- Promotions and recommendations of innovations and best practices;</li> <li>- Organizing training, workshops etc..</li> <li>- Periodical evaluation and optimization of applied speed management solutions.</li> </ul>			



ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Setting of speed limits: elaboration and continuous revision of guidelines &amp; systematic implementation</b> <a href="#">[TA3/ authorities /guidelines]</a>	2022 - 2024	n/a	MI, RIA, SARS
	<b>Explanatory notes:</b> Bulgaria is one of the countries with the highest speed limit on highways – 140 km/h and though it is limited to 120 or even 90 km/h on some sections, because of the actual characteristic of the road, that do not allow such speed. This leads to inhomogeneity of the road, according to speed, which could further cause confusion and uncertainty of the driver. <ul style="list-style-type: none"> <li>• <b>Why and How?</b> - Setting speed limits should be done in order to find best balance between safety, economic and social benefits. Therefore, existing guidelines should be revised, or new ones should be created, also with consideration of analysis of speed-related accident data. Their systematic implementation should be prioritized. A methodology for traffic calming and reducing speed limits should be elaborated, so that road owners or road authorities could determine reduced speed limits at critical sections.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>- Review of existing national and international guidelines and best practices</li> <li>- Elaboration of methodology and amendment of existing or creation of new guidelines;</li> <li>- Elaboration of speed management action plan.</li> </ul>			

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Consistency of speed limits: differentiated speed limits depending on the function, alignment, volume and structure of traffic must be defined, in accordance with the reasonable local speed limits</b> [TA3/ authorities /consistency]</p>	2022 -2026	n/a	MI, SARS
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• <b>Why and How?</b> - Examination of practice for defining speed limits and its consistency is needed in order to ensure homogeneity and predictability of safe speeds, according to the specific factors of influence, like function of the road, alignment, volume and structure of traffic The practice in Bulgaria corresponds to this, mainly because it is defined by law upon function (category) of the road and its design speed, but in most of the cases not upon volume and structure of traffic or other temporary conditions. It may be necessary to examine the practice and if needed to develop new methodology to be applied by road authorities. New rules could also be combined with ITS systems, so that up-to-date information could be provided to drivers in timely manner.</li> <li>• <b>Who?</b> – MI (Traffic police), together with SARS, road authorities and research organisations</li> </ul>			
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>- Review of existing practices</li> <li>- Development of methodology</li> <li>- Implementation on nation-wide level</li> </ul>				

ITS and speed management Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Speed enforcement: implementation of section control, minimization of the obstacles in violation processing procedures</b> <a href="#">[TA3/ authorities /enforcement]</a>	2022 -2025	n/a	MI (traffic police), SARS
	<b>Explanatory notes:</b> According to the national road safety strategy, promoting compliance with traffic rules is an important element in counteracting accidents and injuries. This applies to considering speed limits. To ensure compliance with the law, they are needed constant counteraction to violators and imposition of sanctions. Controls should be systematic and penalties effective. <ul style="list-style-type: none"> <li>• <b>Why?</b> – Section control was often discussed in Bulgaria, but still not introduced. Analysis of European practices in this field shows potential for reducing road accidents and road accidents severity, based on speeding.</li> <li>• <b>How?</b> – Possible road sections for introducing section control should be selected, upon appropriate analysis of the road network and road accidents statistics. This measure should be combined with ITS in order to work efficiently.</li> <li>• <b>Who?</b> – Traffic Police, together with SARS, RIA, research organisations and road experts.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>- More wider researches on the feasibility of section control in Bulgaria should be done;</li> <li>- Pilot section study;</li> <li>- Introduction of Section speed control and amendment of related legislation.</li> </ul>			

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Speed data collection and analysis: systematic collection of speed data development in anonymized speed database. Further development of the methodology of analysis (for example speed development by road types, etc.)</b> [TA3/ authorities /data]</p>	2021-2025	n/a	MI, SARS, RIA
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• <b>Why?</b> - Speed data is collected by MI only and is used for driver penalties. No statistics for speeds is gathered and stored for studies and analysis. Speed data is essential for analysis of traffic and safety conditions and is it necessary for further measures for improving road safety.</li> <li>• <b>How?</b> - Speed data collection system should be developed to provide data for analysis and contribute to strategy for increasing road safety. The Data should be fully accessible for defined authorities, research organizations and upon reasoned request.</li> <li>• <b>Who?</b> - MI (Traffic police), SARS, RIA (road authorities), research organizations and road safety experts.</li> </ul>			
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>- Amendment of related legislation;</li> <li>- Development of methodology;</li> <li>- Starting with Pilot project.</li> </ul>				

## 4) Safe infrastructure near schools

		Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools	National level	<b>Development and support of specific design guidelines for road sections in the vicinity of schools</b> <i>[TA4/ national /guidelines]</i>	By the end of 2022	Budget of the State Agency for Road Safety, Ministry of Regional Development and Public Works 10,000 - 15,000 Euros	Ministry of Regional Development and Public Works through public procurement
		<b>Explanatory notes:</b> Exchange of good practices among EU member states, development of a methodology for designing road sections near schools and kindergartens. <ul style="list-style-type: none"> <li>• Why - Unification of the requirements for Traffic organization around all schools and nurseries / kindergartens. It becomes easily recognizable by all participants in the movement.</li> <li>• How - A public procurement will be awarded by the Ministry of Regional Development and Public Works for the development of an Ordinance on Traffic organization and measures to calm traffic around schools, kindergartens / nurseries.</li> <li>• When - Within 10 000 to 15 000 euros from the budget of the Ministry of Regional Development and Public Works or State road safety agency</li> <li>• Who - State road safety agency, Ministry of Regional Development and Public Works, branch and non-governmental organizations are also included in the discussions.</li> </ul>			
		<b>Uptake Plan:</b> Undertaking inspections in the areas around the schools is mandatory before the beginning of the school year and the onset of the winter season. Analysis of specific sections with unclear signalization and the need for a change in the road signalization. Implementation of new projects for organization of the movement of places with specific risks. Implementation of solutions with simple and easily recognizable by drivers horizontal marking and vertical signaling. Speed limits in larger areas around schools and developing safe routes for movement of students.			

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Definition of special speed limits in the Road Traffic Code to be applied on road sections in the vicinity of schools</b> [TA4/ national /limits]</p>	<p>In the Traffic Act of Bulgaria there are speed limits around schools, kindergartens / nurseries up to 30 km / h</p>	<p>-</p>	<p>Ministry of Regional Development and Public Works, State Agency for Road Safety, Ministry of Interior, Ministry of Education and Science</p>
	<p><b>Explanatory notes:</b> Regulation in the legislation of the calm traffic areas and their application in the areas around the schools. Special bicycle management training other alternative ways for movement of students. Trainings for children and adults, establishment of appropriate training centers. Creating a guide for safe riding of bicycles and scooters.</p> <ul style="list-style-type: none"> <li>• Why - During the training by qualified teachers, the users will be acquainted with the main provisions of the Traffic Act of these road users, priorities, dangers, traffic culture.</li> <li>• How - Establishment of special training centers or in schools on specialized sites.</li> <li>• When will it be implemented, what financial resources are needed and from which fund or budget will they be received? From the budget of the Ministry of Education and the Ministry of Interior.</li> <li>• Who - Active actions of the Ministry of Interior on the implementation of the Law on Public Procurement and the Ministry of Education and Science for conducting the trainings.</li> </ul>			
<p><b>Uptake Plan:</b> Thus, as set out in the Action Plan to the Bulgarian Road Safety Strategy, effective and efficient proceedings for imposition, service and collection of fines in connection with the violation of the requirements for reduced speed in the areas of schools and kindergartens on the basis of the Road Traffic Act. Accordingly, the amounts received are directed back to the preparation and implementation of road safety measures around schools and training.</p>				

	Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools National level	<p><b>Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools</b> [TA4/ national /funding]</p>	permanent	From the respective budgets	State Agency for Road Safety, Ministry of Education and Science, Ministry of Transport, Information Technology and Communications, Regional Commissions for Road Safety, Municipalities.
	<p><b>Explanatory notes:</b> According to the National Road Safety Strategy and its plan, it is necessary to prepare methodological guidelines and sectoral strategies, which range from the level of SABS to the level of districts and municipalities. The budget is from the respective administration, the responsible institution is State Agency for Road Safety.</p> <ul style="list-style-type: none"> <li>• Why- In previous years there was no unified structure in Bulgaria / only the Commission for Traffic Safety at the Council of Ministers /, which is charged with the exclusive responsibility for road safety, preparation of strategic plans, visions and organization from national to regional and municipal level. State Agency for Road Safety determines the method of financing the activities and controls their implementation.</li> <li>• How - The implementation of the measures from the plan will be monitored and monitored through appropriate prepared reports and monthly and annual reporting of the undertaken measures.</li> <li>• When - From the respective budgets under the guidance and with the coordination of SARS. <ul style="list-style-type: none"> <li>• Who - SARS, Ministry of Regional Development and Public Works, Ministry of Education and Science, Ministry of Transport, Information Technology and Communications, regional commissions for road safety, Municipalities.</li> </ul> </li> </ul>			
	<p><b>Uptake Plan</b> Monitoring is extremely important both in terms of implementation and in terms of problems related to the implementation of specific measures. The responsible institution State Agency for Road Safety organizes the financing from the respective institutions.</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Systematic collection of data on road crashes near schools and related casualties</b>	permanent	State Agency for Road Safety and other institutions	State Agency for Road Safety, Ministry of Interior, Ministry of Health, Ministry of Education and Science, Municipalities
Safe infrastructure near schools National level	<p><b>Explanatory notes:</b></p> <p>Active activity of the National Coordination Center for road safety according to approved standard procedures. Introduction and maintenance of a unified system in State Agency for Road Safety, for data collection and processing through a geographic information system and systematization of the available data from the various information arrays. Statistical analysis of the data and analytical processing for the purposes of fulfilling the set goals in terms of road safety around schools, kindergartens and nurseries.</p> <ul style="list-style-type: none"> <li>• Why - At the moment there are no separate statistics on the number and type of accidents around schools. The systematization and analysis of the data will lead to specific new goals.</li> <li>• How - Data is collected and submitted to the national focal point, where it is processed and systematized.</li> <li>• When - From the budget of State Agency for Road Safety and other institutions.</li> <li>• Who - State Agency for Road Safety, Ministry of Interior, Ministry of Health, Ministry of Education and Science, municipalities.</li> </ul>			
	<p><b>Uptake Plan</b></p> <p>The systematic analysis and synthesis of road traffic injuries around schools, the study of its influencing factors and the causal relationships for the occurrence of accidents will be performed constantly and will be reported every six months. Information from civil society, academia and business initiatives related to improving road safety around schools will be collected and analyzed.</p>			



	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Systematic collection and publishing of key performance indicators on the road network around schools</b> [TA4/ national /indicators]</p>	<p><i>permanent</i></p>	<p><i>From the budgets of the respective institutions</i></p>	<p><i>State Agency for Road Safety, Ministry of Education and Science, Ministry of Health, Ministry of Interior, Districts, Municipalities</i></p>
<p>Safe infrastructure near schools National level</p>	<p><b>Explanatory notes:</b> The prepared analytical reports / based on reports from the districts / from SARS are published on the website of the agency. Based on the reports and scientific and academic developments, municipal and business initiatives and civic initiatives to improve the PB around the schools, the effectiveness of the implemented measures is assessed. The implementation of positive foreign practices is done with decisions of SARS as a result of received and evaluated proposals.</p> <ul style="list-style-type: none"> <li>• <b>Why? At the moment, there is no assessment of the effectiveness of the road infrastructure around the schools in particular.</b></li> <li>• <b>How?</b> Improving the regulation of the protection of children and students from road accidents in the system of the Ministry of Education and Science by making changes in normative / strategic documents of the Ministry of Education and Science. Preparation and implementation of a framework concept for GDP training, optimization and development of the methodology for preparation of children and students in kindergartens, schools, centers for support of personal development. Additional resource provision of the activity of the Ministry of Education and Science - improvement of the material and technical base for training in road safety, creation of training sites in the yards - a typical example has been created /, evaluation of the learning outcomes, professionally developed teachers. Support for children's creative performances on the topic of traffic accident. Conducting national, regional and municipal initiatives for children related to road traffic culture. Implementation of measures to limit the risks of accidents in organized transport of children, enhanced control of vehicles.</li> <li>• <b>When?</b> A working group will be established for the preparation of a framework concept for the education of children and students in road safety by State Agency for Road Safety, Ministry of Education and Science, external experts, the Council of the Scientific and Academic Community State Agency for Road Safety.</li> </ul>			
	<p><b>Uptake Plan</b> According to key indicators for road safety around the school establishments and established methodology, work standards will be unified, which will be published on the website of the agency. They will be updated on an annual basis.</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Regional and local level	<b>Ensuring adequate funding for road safety interventions in local roads in the vicinity of schools</b> <a href="#">[TA4/ regional /funding]</a>	permanent	Municipal budget	Municipalities
	<b>Explanatory notes:</b> Expanding the scope of the powers of the municipalities regarding the control under the Road traffic law with automated technical means - effective control by the municipalities for the condition of the road surfaces, facilities, markings, speed near the schools, return investment of the received funds in road safety measures. Development of a conceptual mechanism for long-term and predictable financing of road safety measures around schools with funds from the municipal budget, state budget and EU funds. <ul style="list-style-type: none"> <li>• <b>Why?</b> A unified, recognizable approach is needed specifically to ensure road safety in the areas around schools. Funds are also needed for periodic reviews of the measures implemented and their impact.</li> <li>• <b>How?</b> Development and implementation of measures for sustainable urban mobility by municipalities, as part of wide-ranging municipal strategic documents. The plans should contain a special part for the areas around the schools, to envisage a set of measures and to envisage an appropriate budget for the implementation of the indicated measures.</li> <li>• Development of General transport plans in which measures have been applied, according to Urban mobility plan / where there are such / and determination of specific measures as short-term and long-term measures in the areas of the kindergartens and schools.</li> <li>• <b>When? Municipal budgets, the state budget and EU funds will be used.</b></li> <li>• <b>Who The main participants are the administrations of the Municipalities in Bulgaria.</b></li> </ul>			
	<b>Uptake Plan</b> Providing long-term, predictable funding in order to implement a coherent and sustainable road infrastructure policy around schools.			

	Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools Regional and local level	<b>Systematic collection of data on road crashes near schools and related casualties</b> <a href="#">[TA4/ regional /data]</a>	2	Municipal budget	Municipalities, Ministry of Health, Ministry of Education and Science
	<p><b>Explanatory notes:</b> The methodical collection of data from the Ministry of Interior, Ministry of Health, Ministry of Education and Science and their reflection in the unified system / national coordination center / will lead to a systematic assessment of conflict situations and clarity regarding the causes of road accidents in schools. Preparation of the relevant methodological guidelines for the design of the sections around the schools and change in the legal framework will standardize the planning, implementation, evaluation and reporting of the respective road safety measures.</p> <ul style="list-style-type: none"> <li>• <b>Why?</b> At the moment, no data are collected specifically for the areas around schools and other kindergartens. It is necessary to create a common approach to the prevention of road traffic injuries in the areas around the schools, with clear links between the activities of the stakeholders and strict coordination in their implementation. Standardized procedures for interaction and coordination.</li> <li>• <b>How?</b> Ensuring publicity of data related to accidents around schools and kindergartens. Organizing and conducting public consultations with the civil society, based on their acquaintance with the received data. Creating an opportunity for submitting and processing signals for accidents related to accidents around schools. Creation of an interactive “National Calendar for road safety in the areas around the schools, published on the State road safety agency website. Issuance of an electronic bulletin.</li> <li>• <b>When?</b> From the budget of the Ministry of Interior and the Municipal Administrations.</li> <li>• <b>Who?</b> Municipalities, Ministry of Interior, Ministry of Health, Ministry of Education and Science.</li> </ul>			
	<p><b>Uptake Plan:</b> Exchange of regular operational and analytical information in electronic form and access to the information systems of SARS, Ministry of Interior Ministry of Health, thus obtaining archived, systematized and processed data on road traffic injuries around kindergartens and schools, which allows for specific steps to overcome the problems.</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Regional and local level	<b>Educational campaigns to promote safer transport to/ from schools</b> <i>[TA4/ regional /campaigns]</i>	permanent	From the budgets of the respective institutions	State Agency for Road Safety, Ministry of Education and Science, Districts, Municipalities
	<b>Explanatory notes:</b> Development and implementation of targeted communication and media policy - preparation of media strategy and regular submission of information to the media. Conducting campaigns of the Municipal Commissions for Road Safety for Safe Urban Mobility, aimed at children and students. <ul style="list-style-type: none"> <li>• <b>Why?</b> It is necessary to form in students a conscious and responsible attitude to the issues of personal safety and that of others, acquisition of additional knowledge and skills for recognizing and assessing dangerous situations and harmful factors in the environment, providing assistance in case of accidental danger.</li> <li>• <b>How</b> will it be implemented (what steps are required in the process)?                Conducting educational and training activities related to safe transport to / from schools. Organizing and conducting extracurricular initiatives on Road safety for children and students in the education system. Support for the creative performances of the children on the topic of RS. Organizing and conducting student Olympiads and national competitions on RS, regional and municipal initiatives related to the culture of road traffic.</li> <li>• <b>When?</b> From the budgets of State Agency for Road Safety, Ministry of Education and Science, Districts, Municipalities.</li> <li>• <b>Who?</b> State Agency for Road Safety, Ministry of Education and Science, Districts, Municipal Administrations.</li> </ul>			
	<b>Uptake Plan</b> Implemented initiatives in the field of road safety, aimed at children and students. Activation of the work of the school commissions on road safety in the development of the environment for training on road safety and the adjacent road infrastructure, as well as the organization of the traffic in the immediate vicinity of the schools. Formation in students of a conscious and responsible attitude to the issues of personal safety and that of others, acquisition of additional knowledge and skills for recognizing and assessing dangerous situations and harmful factors in the environment, providing assistance in case of accidental danger.			

	Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools Road authorities	<b>Forming a special road safety fund dedicated for direct investments in road safety, to implement upgrades in the vicinity of schools</b> <i>[TA4/ authorities /funding]</i>	2021-2022	State funds, municipal funds	Ministry of Regional Development and Public Works, Ministry of Finance, Ministry of Education and Science, Municipalities
	<b>Explanatory notes:</b> Expanding the scope of the powers of the municipalities in the direction of exercising control under the Road traffic act with automated technical means and re-investment of the received funds in ensuring road safety around the schools. Allocation of part of the funds from the Road Safety Fund targeted at the areas around the schools throughout the country. <ul style="list-style-type: none"> <li>• Why? There is no established practice for ensuring road safety around schools through specially targeted funds, the problem has not been identified independently and purposefully, as well as the provision of funds for this.</li> <li>• How? Funds will be allocated at national and municipal level specifically for the areas around the schools.</li> <li>• When? State funds, municipal funds</li> <li>• Who? Ministry of Regional Development and Public Works, Ministry of Finance, Ministry of Education and Science, Municipalities</li> </ul>			
	<b>Uptake Plan:</b> A traffic safety fund has been set up, no funds are provided specifically for the areas around the schools. The scope of the powers of the municipalities will be expanded in the direction of exercising control under the Road Traffic Act with automated technical means and re-investment of the received funds in ensuring road safety around the schools. Part of the funds from the Road Safety Fund will be allocated to the sections around the schools throughout the country.			

	Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools Road authorities	<p><b>Observation of road safety trends and good practices to plan maintenance and upgrades of existing road network in the vicinity of schools</b> [TA4/ authorities /good_practice]</p>	2021-2023	Budgets of the respective institutions	Ministry of Regional Development and Public Works, Ministry of Interior, State Agency for Road Safety, district administrations, municipalities
	<p><b>Explanatory notes:</b> Creation of new and updating of the current legislation for introduction of new standards for sustainable safe infrastructure around schools. Explicit regulation of road safety in the functional responsibilities of the territorial divisions of the central executive bodies - creation of units responsible for road safety around schools, provided with the necessary competencies and financial resources for the implementation of road safety activities around schools. Analysis and evaluation of the structural units. Carrying out detailed technical inspections and engineering-economic analyzes, preceding the drawing up of investment programs for impact on the road infrastructure around the schools, as well as ongoing assessment by the road owners.</p> <ul style="list-style-type: none"> <li>• Why? Bringing this so important issue on its own and creating a unified legal framework and guidelines for implementation.</li> <li>• How? Standards for sustainable safe infrastructure around schools will be established, regulatory requirements regarding road safety around schools will be monitored and updated in accordance with established international good practices, analyzes and new research and studies will be carried out.</li> <li>• When? Budgets of the respective institutions</li> <li>• Who? Ministry of Regional Development and Public Works, Ministry of Interior, SARS, district administrations, municipalities</li> </ul>			
	<p><b>Uptake Plan:</b> Survey, analysis, planning and management of activities and subsequent implementation of impact programs. Coordination and interaction between road owners.</p>			

Safe infrastructure near schools Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Use of appropriate methodologies to identify hazardous locations near schools and the causes of road safety problems, identify intervention priorities and implement countermeasures</b> [TA4/ authorities /methodology]</p>	2021-2023	Budgets of the respective institutions	Ministry of Regional Development and Public Works, State Agency for Road Safety
	<p><b>Explanatory notes:</b> Preparation of a methodology for identification of dangerous places near schools and kindergartens. Research for provided visibility, parking, pedestrian paths, safety fences, way of parking during rush hours / beginning and end of the school day / , calm traffic areas, access to public transport and opportunities for alternative mobility / bicycle, scooter, etc./ Physical dividers of the traffic lane, speed, warning signs and pictograms, reflective elements, illuminated signs and others.</p> <ul style="list-style-type: none"> <li>• Why? Only when the causes and problems have been identified can the appropriate forms of impact be found that are adequate and sustainable.</li> <li>• How? A methodology for identifying dangerous places near schools and kindergartens will be prepared.</li> <li>• When? Relevant budgets of the institutions</li> <li>• Who? Ministry of Regional Development and Public Works, State Agency for Road Safety</li> </ul>			
<p><b>Uptake Plan:</b> The Ministry of Regional Development and Public Works will be assigned to prepare a Methodology for identification of dangerous places near schools and kindergartens.</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	<b>Carrying out of “before and after” studies to evaluate the road safety effect of implemented interventions</b> <a href="#">[TA4/ authorities /impact]</a>	permanent	Budgets of the respective institutions	State Agency for Road Safety, Districts, Municipalities
	<b>Explanatory notes:</b> Expanding the scope of road infrastructure safety management procedures and conducting audits and inspections in the areas around schools. Supplementing the regulations. Mandatory application of an audit procedure in the design of the road infrastructure around schools. Inspections after implementation of the prepared projects and assessment of the effect in terms of road safety. <ul style="list-style-type: none"> <li>• Why? At the moment in the Republic of Bulgaria annual inspections are carried out at the beginning of the school year regarding the pedestrian paths near the educational establishments. It is necessary to expand the scope of these inspections, in accordance with the regulatory framework, which will be prepared specifically for these sections. Optimization of the processes through ready-made forms for inspection and evaluation of the necessary actions for elimination of the problems, as well as of the necessary means for that.</li> <li>• How? It is necessary to initially prepare the Methodology for securing the sections in the areas around the schools, preparation of the necessary standards for sustainable safe infrastructure around the schools, Methodology for identification of dangerous places near schools and kindergartens and standard forms for annual inspection. Constant monitoring of the areas around schools, data collection and analysis of the identified deficiencies. Updating the created methodologies, standards and forms.</li> <li>• When? Budgets of the respective institutions.</li> <li>• Who? State Agency for Road Safety, Districts, Municipal Administrations.</li> </ul>			
	<b>Uptake Plan:</b> Study of the experience of the countries with developed road infrastructure around the schools, constant monitoring of the sections around the schools, data collection and analysis of the discovered shortcomings. Reporting on a quarterly basis and mutual exchange of information between regional road safety commissions and State Agency for Road Safety. Targeted investments in road sections around the schools with the most traffic accidents.			



## 4. Danube Infrastructure Road Safety Improvement Action Plan (DIRSIAP) for the Republic of Moldova

This Action Plan has been created in the framework of the [RADAR project](#) which aims at raising road safety levels of countries in the Danube Region. It is structured along RADAR's four Thematic Areas:

- 1) Investing in safe infrastructure,
- 2) Provisions for vulnerable road users,
- 3) ITS and other techniques for speed management,
- 4) Safe infrastructure near schools,

and is adapted to the specific road safety requirements of Moldova. The interventions set out in this Action Plan are directed at all levels of road safety management, i.e., from national to regional and local level, with a special section on road authorities.

## 1) Investing in safe infrastructure

	Intervention 1.1	Time frame	Financial resources	Main actor(s)
	<p><b>Definition of a national minimal standard for road infrastructure safety rating for existing and new roads based on an evidence-based methodology</b> [TA1/national/standard]</p>	2022-2023	approximately 50 000 EUR	MIRD, Technical University of Moldova, road infrastructure management authorities
Investing in safe infrastructure National level	<ul style="list-style-type: none"> <li>• <b>Why?</b> According to PIARC studies, about 34% of road accidents with life injuries are caused by the bad quality of road infrastructure, even if statistics published by the police in the Republic of Moldova, shows it is only responsible for up to 1%. Although the Law no. 131/2007 on Road Traffic Safety contains provisions for assessing the safety of road infrastructure through impact assessments, audits and road safety inspections, a mechanism for implementing such procedures is lacking and the safety of infrastructure in road design or maintenance is not set as a priority.</li> <li>• <b>How?</b> Developing a coherent legal framework for the transposition of the EU Directive 2008/96/EC on road infrastructure safety management is necessary, as is a mechanism for impact assessment, audit, inspection and classification of safety on the public road network, by governmental (departmental) acts and regulations, respectively, for the classification of the training and qualification of road safety auditors. A classification of this profession is also necessary. The processes related to the planning, design, construction and maintenance of public roads will be adjusted to the implementation of the above-mentioned procedures.</li> <li>• <b>When?</b> 2021 – 2022</li> <li>• <b>Who?</b> The main actor is the Ministry of Infrastructure and Regional Development, under whose auspices all the related legislation and regulations will be developed. To develop this framework, the experience of academia experts working in this segment is important (Technical University of Moldova, Department of Road Infrastructure Engineering). For a better understanding of the processes, a project with international funding, by attracting EU expertise, would be useful.</li> </ul>			
	<p><b>Uptake Plan</b> Developing and approving by the Parliament the draft law on:</p> <ul style="list-style-type: none"> <li>- road infrastructure safety management (transposition of EU Directive 2008/96/EC).</li> <li>- amending and supplementing Road Law no. 509/1995,</li> <li>- amending and supplementing Law no. 131/2007 on road traffic safety</li> </ul> <p>Developing and approving regulations (Order of the Ministry of Infrastructure and Regional Development) on:</p> <ul style="list-style-type: none"> <li>- Occupation classification,</li> <li>- Road accident investigation and road network classification,</li> <li>- Road safety audit,</li> <li>- Road safety inspections,</li> </ul>			

	<ul style="list-style-type: none"> <li>- Training and qualification of road safety auditors,</li> <li>- Amending certain construction norms and regulations.</li> </ul> <p>Adopting regulations and publishing them. Organising professional training and media-based communication.</p>
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Investing in safe infrastructure National level	<b>Intervention 1.2</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Allocation of a certain portion of road infrastructure investments to road safety interventions</b> <a href="#">[TA1/national/investment]</a>	2022-2023		MIRD, State Road Administration
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> Annually, on public roads in the Republic of Moldova, about 300 people lose their lives in road accidents, the mortality rate exceeding 10. These deaths are also a consequence of infrastructure problems (speed management, geometry, functionality, predictability or homogeneity). To intervene with improvement actions on the roads in operation, resources are needed, but which are currently lacking.</li> <li>• <b>How?</b> Amending and supplementing Road Fund Law</li> <li>• <b>When?</b> 2022 - 2023</li> <li>• <b>Who will be the actors?</b></li> </ul> <p>MIRD – the road infrastructure policy manager; Ministry of Finance - the public finance policy manager, Parliament</p>			
	<b>Uptake Plan</b> Developing the draft amendments and supplements to the Road Fund Law, Organising workshops and seminars to raise awareness of the problem, Adopting the draft law by the Government Adopting the legislative act by the Parliament			

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice</b> <a href="#">[TA1/national/SafeSystem]</a>			
	<p><b>Shall be part of the first intervention</b></p>			

	<b>Intervention 1.3</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Institutionalisation of trainings for road safety auditors and road safety inspectors</b> <a href="#">[TA1/national/auditors]</a>	2023		MIRD, State Road Administration
	<ul style="list-style-type: none"> <li>• <b>Why?</b> Implementing road infrastructure safety management procedures involves setting up and putting into operation the institution of road safety auditor, as well as monitoring and assessing the results of its activity (see Intervention 1).</li> <li>• <b>How?</b> Drafting legislation to introduce road infrastructure safety management in accordance with the requirements of the EU Directive 2008/96/EC (see Intervention 1)</li> <li>• <b>When?</b> 2023</li> <li>• <b>Who will be the actors?</b> MIRD, the authority in charge of managing the road infrastructure safety management</li> </ul>			
	<p><b>Uptake Plan</b></p> <p>Developing and approving by the Parliament the draft law on:</p> <ul style="list-style-type: none"> <li>- road infrastructure safety management (transposition of EU Directive 2008/96/EC).</li> <li>- amending and supplementing Road Law no. 509/1995,</li> <li>- amending and supplementing Law no. 131/2007 on road traffic safety</li> </ul> <p>Developing and approving regulations (Order of the Ministry of Infrastructure and Regional Development) on:</p> <ul style="list-style-type: none"> <li>- Occupation classification,</li> <li>- Road accident investigation and road network classification,</li> <li>- Road safety audit,</li> <li>- Road safety inspections,</li> <li>- Training and qualification of road safety auditors,</li> <li>- Amending certain construction norms and regulations.</li> </ul> <p>Adopting regulations and publishing them.</p> <p>Organising professional training and media-based communication.</p>			

Investing in safe infrastructure National level	<b>Intervention 1.4</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Transfer of the Safe System approach to local governments and local road authorities</b> <a href="#">[TA1/national/vertical]</a>	2025-2027	25 000 EUR	MIRD, Local Public Authorities, academics
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> Over 40% of road accident deaths refer to vulnerable users, who lose their lives on urban and local road infrastructure. The Safe System principles are based on addressing human error through speed management and traffic calming, which are essential on road infrastructure in inhabited areas.</li> <li>• <b>How?</b> See Intervention 1. Developing good practice guides with speed management measures and traffic calming elements.</li> <li>• <b>When?</b> 2025 - 2027</li> <li>• <b>Who will be the actors?</b> MIRD, Technical University of Moldova, Local Public Authorities</li> </ul>			
	<b>Uptake Plan</b> Implementing the action plan for Intervention 1, Plan for developing and editing the normative, regulatory and standardization framework Speed management and traffic calming guides and manuals developed and adopted Publication and entry into force			

Investing in safe infrastructure National level	<b>Intervention 1.5</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Enlarging the scope of roads to be treated in accordance with Directive 2019/1936 to 2nd level roads (e.g., “regional roads”)</b> <a href="#">[TA1/national/secondary]</a>	2028-2030		MIRD, State Road Administration
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li> <b>Why?</b>  <i>Directive 2008/96/EC, as subsequently amended and supplemented, requires implementation of road infrastructure safety management only on the TEN-T network. In addition, according to the traffic regulations of the Republic of Moldova, the speed management on the road network does not distinguish the classification of the network according to functionality, which at the level of road safety has a crucial effect. The secondary network of public roads, managed largely by local public authorities, is a massive generator of insecurity, due to its lack of funding.</i> </li> <li> <b>How?</b>  <i>Implementing actions established in Intervention 1, in the decisive part of the legal framework, will also require a gradual implementation plan on different types of roads, after their classification.</i> </li> <li> <b>When?</b>            2028 - 2030         </li> <li> <b>Who will be the actors?</b>  <i>MIRD, State Road Administration, Authority in charge of managing road infrastructure safety management</i> </li> </ul>			
<b>Uptake Plan</b> <i>See Intervention 1. The implementation plan will be placed in the draft Law on road infrastructure safety management</i>				

Investing in safe infrastructure National level	<b>Intervention 1.6</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Institutionalisation of knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments</b> <a href="#">[TA1/national/good_practice]</a>			TUM
	<b>Explanatory notes:</b>  <b>Done within the study programme of the Technical University of Moldova and within the Constructions College</b>			



Investing in safe infrastructure Regional and local level	<b>Intervention 1.7</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Systematic road safety data collection and analysis to plan interventions/investments on most critical locations</b> <a href="#">[TA1/regional/data]</a>	2023-2025		MIRD, NIPS, SRA, TUM
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> Statistical road accident data, in the Republic of Moldova, are collected by the General Police Inspectorate through the subordinate specialized subdivisions. The analysis of this data is made only for statistical and analysis purposes in order to establish the guilt rather than assess the main causes. In 2021, the road administrators do not analyse road safety data, which would result in planning interventions to make the situation better.</li> <li>• <b>How?</b> Improving the data collection protocol by implementing CADaS and introducing the 'Road Data' chapter, in addition to accident, person and vehicle data, is crucial for comprehensive analysis. Also, activities specified in Intervention 1, especially those related to the adoption of the Regulation on Road Accident Investigation and the classification of the road network will allow the planning of improvement interventions.</li> <li>• <b>When?</b> 2023 - 2025</li> <li>• <b>Who will be the actors?</b> MIRD, NIPS, SRA, TUM, Authority in charge of managing road infrastructure safety management</li> </ul>			
<b>Uptake Plan</b> Implementing the CADaS system Preparing and approving by MIRD Order the Regulation of Road Accident Investigation and classification of the road network Putting the Regulation into use Planning intervention measures in the activity plans of road managers and ensuring financing Evaluating and monitoring results				

Investing in safe infrastructure Road authorities	<b>Intervention 1.8</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Setting up of road safety funds for investments in road safety upgrades in terms of road safety equipment and measures at locations with most effectiveness</b> <a href="#">[TA1 /authorities/funds]</a>			
<b>Explanatory notes:</b>  <b>There is a Road Fund in Moldova, see intervention 2</b>				

Investing in safe infrastructure Road authorities	<b>Intervention 1.9</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Observation of road safety trends and good practices to plan maintenance and upgrades of the existing road network in operation</b> <a href="#">[TA1/authorities/good_practice]</a>	2022-2030		MIRD, TUM
<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> Respecting road safety trends, innovations and good practices can and must keep the responsible authorities permanently informed of the state of affairs at international level. Allocating a budget for science and innovation, developing good practices and new methods and manuals would permanently intensify the transfer of technology and knowledge in the field.</li> <li>• <b>How?</b> The related legal framework referred to in Interventions 1 and 2 must provide the allocation of resources for science and innovation to implement good practices, by developing rules, standards, guidelines and manuals of road infrastructure safety.</li> <li>• <b>When?</b> 2022 - 2030</li> <li>• <b>Who will be the actors?</b> MIRD, Technical University of Moldova</li> </ul>				
<b>Uptake Plan</b> Developing and approving the legal framework (see Interventions 1 and 2) Planning the research and innovation activities Procedure for development and approval Implementation				

Investing in safe infrastructure Road authorities	<b>Intervention 1.10</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Publication of the list of high accident concentration road sections / hot spots.</b> <a href="#">[TA1 /authorities/hotspots]</a>	2025-2027		SRA, NIPS
<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> Such a data visualization tool is useful for several reasons:           <ol style="list-style-type: none"> <li>provides the possibility to present to the company the road infrastructure safety status;</li> <li>provides a platform for knowledge transfer with the work environment;</li> <li>creates a register of archiving analyses, records and monitoring over time, respectively, a monitoring of the evolution of a sector where road accidents are concentrated, after the implementation of interventions, for example.</li> </ol> </li> <li>• <b>How?</b> Creating a web page presenting the data collected and analysed, following road accidents, from the point of view of the location, according to a legally defined algorithm</li> <li>• <b>When?</b> 2025 – 2027 <b>Who will be the actors?</b> State Road Administration and General Police Inspectorate, in collaboration with academia</li> </ul>				
<b>Uptake Plan</b> System analysis for implementation Specifications Ensuring financing System development Implementation and putting into use				

## 2) Provisions for vulnerable road users

Provisions for vulnerable road users National level	Intervention 2.1	Time frame	Financial resources	Main actor(s)
	<p><b>Incorporation of the principles and concepts of the Safe System approach in relevant legislation and VRUs' countermeasures selection criteria</b> [TA2/national/SafeSystem]</p>	2023-2024		MIRD, TUM
	<p><b>Explanatory notes:</b> Over 40% of the total number of road accident victims are vulnerable road users, this rate being clearly higher than the European average. At the same time, the principle of 'vulnerability of the human body' requires the implementation of measures to mitigate the impact and reduce the consequences of human error.</p> <ul style="list-style-type: none"> <li> <p><b>How?</b> Implementing the provisions of Interventions 1 and 4 will drive the improvement of safety rules and measures for vulnerable users, and developing a standard guide of measures for the safety of vulnerable users, before and after the accident, will help road infrastructure designers to make internationally reasoned decisions.</p> </li> <li> <p><b>When?</b> 2023 – 2024</p> <p><b>Who?</b> MIRD, as the managing authority of the field, jointly with the academia</p> </li> </ul>			
<p><b>Uptake Plan</b> Approving the draft Law on road infrastructure safety, Developing the set of normative acts for the implementation of the Law, Adopting the design rules and standards with reference to related procedures, Developing and approving the Guide of good practices with measures for traffic calming and speed management</p>				

	<b>Intervention 2.2</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Development/Incorporation of a unified protocol for assessment of the risks of VRUs, which will ensure that results are understood and comparable between countries</b> <a href="#">[TA2/ national /risk_assessment]</a>	2023-2025		MIA, MIRD
Provisions for vulnerable road users National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li> <b>Why?</b>            Over 40% of the total number of road accident victims are vulnerable users, this rate being clearly higher than the European average. At the same time, the principle of ‘vulnerability of the human body’ requires the implementation of measures to highlight the seriousness of the problem and reduce the consequences of human error.            It is necessary to come up with an approach in line with good practices for assessing and monitoring collected data related to road accidents, deaths and injuries, which can be compared internationally, not just at the level of comparison between years inside the country.         </li> <li> <b>How?</b>            Such a protocol would offer the possibility to provide national data in international data systems, such as IRTAD, GRSP, etc., in a much larger volume. Such a protocol would also provide for new requirements towards collection of data of a much higher quality and competitiveness, not only for the police, but also for other authorities in charge of ensuring road safety, and consequently, new possibilities for data analysis and development of measures meant to improve preventive and reactive actions, with reference to both police and infrastructure.         </li> <li> <b>When?</b>            Such actions will be included in the measure plan for the implementation of CADaS. Years 2023 - 2025         </li> </ul> <b>Who?</b> MIA, MIRD			
	<b>Uptake Plan</b> Implementing the CADaS system (specifications, concept, development, implementation, etc.) Developing and approving by Government Decision the road accident data collection and evaluation procedure, according to CADaS protocol, competencies, evaluation and monitoring Training and retraining police officers in charge of collecting road accident data Putting the procedures into use Developing and adopting the data analysis procedure Evaluating and monitoring the results			

	<b>Intervention 2.3</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Making sure that countermeasures' selection, prioritization and implementation process for VRUs should not in any case be performed only based on subjective criteria but primarily based on official, standardized, objective methodology which considers all relevant road safety indicators (AADT, peak-hour pedestrian/cyclist flows, operating speed, traffic accidents characteristics)</b> [TA2/ national /methodology]</p>	2024-2026		MIRD
Provisions for vulnerable road users National level	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li> <b>Why?</b>  <i>As already mentioned, pedestrians are the most vulnerable participants in traffic (over 40% of total deaths), and profile studies demonstrate several important elements: i) speed management (prevention and infrastructure), ii) the need to calm traffic and ensure visibility in localities (infrastructure) and iii) behaviour prevention.</i> </li> <li> <b>How?</b>  <i>Developing and adopting a road accident impact assessment and investigation procedure, implementing the road infrastructure safety management and improving the road accident data collection procedure, should improve the situation and reduce the consequences of accidents involving vulnerable users.</i> </li> <li> <b>When?</b>            2023 - 2025         </li> <li> <b>Who?</b>  <i>MIRD, MER and the road infrastructure management authority</i> </li> </ul>			
	<p><b>Uptake Plan</b></p> <p><i>Approving by the Parliament the draft law on road infrastructure safety management (transposition of EU Directive 2008/96/EC) and amending other legislation and regulations</i></p> <p><i>Developing and approving the regulation (Order of the Ministry of Infrastructure and Regional Development) on the road accident investigation and classification of the road network</i></p> <p><i>Developing and approving good practice guidelines on:</i></p> <ul style="list-style-type: none"> <li><i>- Public road hierarchy and speed management,</i></li> <li><i>- Traffic calming on roads and streets,</i></li> </ul> <p><i>Developing and approving three-year road safety communication and information action plans</i></p> <p><i>Monitoring the process at Governmental level</i></p>			

Provisions for vulnerable road users National level	<b>Intervention 2.4</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Ensuring that available funds are primarily invested in low-cost, high-impact countermeasures, by considering the concepts of tactical urbanism and space-wise planning</b>            [TA2/ national /funds]</p>	2022-2025		MIRD, municipal authorities
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li> <b>Why?</b>  <i>It is proven that low-cost road safety actions are much more effective in terms of cost-benefit reported over time, but also in terms of quality management, when funds are insufficient. In order for the funds available or those obtained from donors to be used efficiently and with maximum power, there must be tools and procedures for analysing data, respectively for evaluating them and implementing planned measures.</i> </li> <li> <b>How?</b>  <i>The ones described below are valid through the development at Government level and implementation of road infrastructure safety management procedures, which should comprehensively include the safety of urban road infrastructure. In this respect, an urban mobility management strategy and an action plan for its implementation at the level of municipalities and cities would be very beneficial. Also, establishing hierarchy of urban road infrastructure is important, in order to ensure the efficient and safe speed management (within the 30 km/h limit).</i> </li> <li> <b>When?</b>            2022 - 2025  <b>Who?</b>            MIRD, Local Public Authorities (at least, Chisinau, Balti, Cahul, Ungheni and Edinet Town Halls)         </li> </ul>				
<p><b>Uptake Plan</b>  <i>It is important to start with:</i>            Approving in Parliament and Government the Law on road infrastructure safety management and governmental and departmental acts implementing this law (mechanism).            Developing and approving the Urban Mobility Plans for municipalities/cities  <i>And continue with:</i>            Developing and implementing the hierarchy of the urban network of roads and streets            Developing and approving a conceptual guide of practical solutions for urban mobility planning            Analysing the road safety on the managed network three times a year and drawing up the list of priority actions            Plan for implementing the above-mentioned, and ensuring funds</p>				



	<b>Intervention 2.5</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Development/restructuring and linking datasets on road traffic accidents and road network in order to increase their precision and provide free and easy access to all stakeholders (implementation of DRIVER<sup>1</sup>)</b> <a href="#">[TA2/ national /dataset]</a>	2021-2022		MIA, MIRD
Provisions for vulnerable road users National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b>  <i>The need to place road accident data on an interactive map is very important for specialists, academia and authorities responsible of road safety to have much more efficient access to data, and especially to the sectors where road accidents are concentrated on a road network, especially given that cooperation with police authorities cannot always be very open and effective.</i> </li> <li>• <b>How?</b>  <i>There have been several attempts from the private sector in the Republic of Moldova to develop such an instrument, but in the absence of legal regulation and support from the Government, these projects were stopped. On the other hand, the World Bank has offered the DRIVER tool, which gives the possibility to place road accident data on an authorized map, and, respectively, to obtain a preliminary data set. It is important to mention that the DRIVER can be improved, when it is officially taken over by a Government authority, according to the needs of the country. For this purpose, the Government must send a request to the World Bank Office in the Republic of Moldova to take over this instrument and complete (develop) it.</i> </li> <li>• <b>When?</b>            2021 - 2022         </li> <li>• <b>Who?</b>            MIA, MIRD         </li> </ul>			
	<b>Uptake Plan</b> <i>Decision on the implementation path (local tool or DRIVER),            The methodology of collection of road accident data by the GPI (MIA) must contain the Road Accident Database connected with the selected application,            Developing normative acts regarding the connection of this type of instrument to the Road Accident Database and providing data,            Developing and implementing technical software solutions,            Implementing the application            Note: This should be considered in the CADaS implementation process</i>			

<sup>1</sup> DRIVER - Data for Road Incident Visualization, Evaluation, and Re-orting App, developed and produced by the World Bank

	<b>Intervention 2.6</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Linking the police database on road traffic accidents with hospital data in order to minimize the VRUs accidents under-reporting issue</b> <a href="#">[TA2/ national /database_link]</a>			MIA, MHWSP
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> Underreporting is a general problem in the region, including the Republic of Moldova, and the fact that there is no interconnection of the Road Accident Database with the Hospital Database, so that victims of road accidents are reported in an automated way, makes data analysis difficult and, as a consequence, the mitigation of the gravity of the situation and the necessary measures to improve it.</li> <li>• <b>How?</b></li> <li>• This issue must be based on a comprehensive legal regulation, so that the responsible institutions are obliged to take the whole set of actions to resolve it. Also, the Road Accident Database must be adapted to the current international conditions, and to the technical and software tools necessary to take over this data set, the same being valid for the computer system of the Ministry of Health. The CADaS implementation process by the Ministry of Internal Affairs will have to be adapted to legislative and technical actions for automated take over of such data.</li> <li>• <b>When?</b> When implementing CADaS</li> <li>• <b>Who?</b> MIA and MHWSP</li> </ul>			
	<b>Uptake Plan</b> Developing the legal, technical and implementation framework of CADaS, Amending the legal framework related to the activity of the Ministry of Health to ensure that data on road accident victims are included in the Road Accident Database of the Ministry of Internal Affairs Developing the conditions and the technical solution and implementing it Testing the application and putting it into operation			

	<b>Intervention 2.7</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Changing traffic culture and public awareness by disseminating relevant information to the public by various media sources</b> <i>[TA2/ national /awareness]</i>	On a permanent basis		MIA, MER, NGOs, media channels
Provisions for vulnerable road users National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b>  <i>The culture and behaviour of drivers is formed in the educational process, but is maintained through police prevention and infrastructure safety (quality). At the same time, the same behaviour can be massively influenced by an effective communication and information strategy, which must be promoted by the Government. Even if the Government of the Republic of Moldova, through MIA and NGOs, participated in the improvement of communication on road safety, a state strategy in this regard is missing.</i> </li> <li>• <b>How?</b>  <i>Investigating road accidents, analysing, identifying, keeping record and monitoring them over time, must aim at drawing up improvement plans by locations and segments hierarchically and clearly defined, taking measures of communication with road users, in order to improve the perception of human error, which causes the car accident. To this end, the Road Fund must provide financial resources to improve road safety, in terms of communication and information.</i> </li> <li>• <b>When?</b>            2022 - 2023         </li> <li>• <b>Who?</b>  <i>MIRD, MIA, MER, NGOs, media channels</i> </li> </ul>			
	<b>Uptake Plan</b> <i>It is important to start with:</i> <i>Approving in Parliament and Government the Law on road infrastructure safety management and governmental and departmental acts implementing this law (mechanism). Mandatorily investigating road accidents and implementing classification of infrastructure safety.</i> <i>And continue with:</i> <i>Analysing the road safety on the managed network three times a year and drawing up the list of priority actions, which will include the 'Communication and Information' chapter</i> <i>Plan for implementing the above-mentioned, and ensuring funds</i> <i>Strengthening by the police the preventive actions related to the declared minor violations, such as the aggressive driving, the delimitation and the exchange of the traffic lanes, the traffic in intersections, stopping in areas with increased level of danger, etc.</i>			

	<b>Intervention 2.8</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Knowledge transfer with demonstrations of good practices and approaches in VRU safety for road authorities and to regional/local governments</b> <i>[TA2/ national /vertical]</i>	2022- permanent		MIRD, TUM
Provisions for vulnerable road users National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b>  <i>Implementing the road infrastructure safety management mechanism and procedures (impact assessment, audit, inspections and road safety classification) will require an extensive training program for specialists in the system of administration and planning, design, construction and maintenance of roads and streets with this new concept of road infrastructure management, which is different from the current approach.</i> </li> <li>• <b>How?</b>  <i>The Technical University of Moldova is the only higher education engineering institution, which trains licensed engineers in the field of transport infrastructure engineering and has the necessary expertise to implement a comprehensive educational program for road infrastructure safety and knowledge transfer to students and graduates, carrying out the activity in the road infrastructure management system at any level, covering the knowledge required by the Safe System approach. Retraining courses on the subject have already been developed and conducted.</i> </li> <li>• <b>When?</b>  <i>Since 2022</i> </li> <li>• <b>Who?</b>  <i>MIRD, SRA, subdivisions and employees in the field of road and street administration of central and local public authorities</i> </li> </ul>			
	<b>Uptake Plan</b> <i>It is important to start with:</i> <i>Approving in Parliament and Government the Law on road infrastructure safety management and governmental and departmental acts implementing this law (mechanism). Mandatorily training specialists for working as road safety auditor and inspector (engineer) provided by law and included in the Classification of Occupations in the Republic of Moldova.</i> <i>To continue with:</i> <i>Developing and approving by MIRD the regulatory framework for the training and qualification of road safety auditors and inspectors (engineers),</i> <i>Approving the Master's program 'Road Infrastructure Engineering and Safety' and short-term programs for retraining staff in road infrastructure safety</i> <i>Introducing the certification obligation for the performance of road infrastructure safety activities in the field of road planning, design, construction and maintenance,</i> <i>Implementing programs and transferring knowledge</i>			

Provisions for vulnerable road users Road authorities	Intervention 2.9	Time frame	Financial resources	Main actor(s)
	<p><b>Use of official, standardized, objective methodology for selecting most critical locations for VRUs with highest potential savings</b> [TA2/ authorities /methodology]</p>			MIRD, MER. SRA
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li> <b>Why?</b>  <i>As already mentioned, pedestrians are the most vulnerable participants in traffic (over 40% of total deaths), and profile studies demonstrate several important elements: i) speed management (prevention and infrastructure), ii) the need to calm traffic and ensure visibility in localities (infrastructure), and iii) behaviour prevention.</i> </li> <li> <b>How?</b>  <i>Developing and adopting a road accident impact assessment and investigation procedure, implementing a road infrastructure safety management and improving the road accident data collection procedure should improve the situation and reduce the consequences of accidents involving vulnerable users.</i> </li> <li> <b>When?</b>            2023 - 2025         </li> <li> <b>Who?</b>  <i>MIRD, MER and the road infrastructure safety management authority</i> </li> </ul>	<p><b>Uptake Plan</b></p> <p><i>It is important to start with:</i></p> <p><i>Approving by the Parliament the draft law on road infrastructure safety management (transposition of the EU Directive 2008/96/EC) and amending other legislation and regulations.</i></p> <p><i>Developing and approving the regulation (Order of the Minister of Infrastructure and Regional Development) on the investigation of road accidents and classification of the road network.</i></p> <p><i>Developing and approve good practice guidelines on:</i></p> <ul style="list-style-type: none"> <li><i>- Public road hierarchy and speed management,</i></li> <li><i>- Calming traffic on roads and streets,</i></li> </ul> <p><i>To continue with:</i></p> <p><i>Developing and approving three-year road safety communication and information action plans</i></p> <p><i>Monitoring the process at the level of the Municipal Council</i></p>			

Provisions for vulnerable road users Road authorities	<b>Intervention 2.10</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Periodical analysis of effectiveness and efficiency of implemented countermeasures for VRUs</b> <a href="#">[TA2/ authorities /analysis]</a>	2023-2025		SRA, LPAs
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> Collecting data following road accidents in the Republic of Moldova is carried out by the General Police Inspectorate through subordinate specialized subdivisions, and an analysis of such data is made only for statistics and analyses to establish guilt rather than assess causes. In 2021, the road administrators do not analyse road safety data, which would result in planning interventions to make the situation better.</li> <li>• <b>How?</b> Improving the data collection protocol by implementing CADaS and introducing the 'Road Data' chapter, in addition to accident, person and vehicle data, is crucial for comprehensive analysis. Also, the activities specified in Intervention 1, especially with reference to the adoption of the Regulation on the Road Accident Investigation and the classification of the road network will allow the planning of improvement interventions.</li> <li>• <b>When?</b> 2023 - 2025</li> <li>• <b>Who will be the actors?</b> SRA, Local Public Authorities</li> </ul>			
<b>Uptake Plan</b> Developing and approving by MIRD Order the Regulation on the Road Accident Investigation and classification of the road network Putting the Regulation into use Planning intervention measures in the activity plans of road managers and ensuring financing Evaluating and monitoring the results				

Provisions for vulnerable road users Road authorities	<b>Intervention 2.11</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Engaging all stakeholders in the process of VRU-friendly road design (engineers need to collaborate with different stakeholders and NGOs)</b> <i>[TA2/ authorities /stakeholders]</i>	After the implementation of Road Safety Audit		MIRD, LPAs
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> The technical rules for the organization and realization of road and street design do not require a thorough consultation of local authorities and company when designing facilities with a direct effect on local communities, which subsequently creates insecurity for vulnerable road users.</li> <li>• <b>How?</b> Imposing clear consultation obligations with local public authorities and the local community is essential for the designed and built transport facilities to meet their requirements. Also, the implementation of the road safety audit will drive this process.</li> <li>• <b>When?</b> Immediately after the implementation of Intervention 1</li> <li>• <b>Who?</b> MIRD, Local Public Authorities</li> </ul>			
<b>Uptake Plan</b> <i>Implementing the Road Safety Audit</i> <i>Amending and supplementing the legal framework by obliging the designer to consult the local public authorities and the local community on the road infrastructure design problems</i>				

### 3) ITS and other techniques for speed management

ITS and speed management National level	<b>Intervention 3.1</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches</b> <a href="#">[TA3/ national /guidelines]</a>	2025-2028		MIRD
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b>  <i>ITS can help transport planners to achieve policy objectives in many different ways. It can help to tackle congestion, pollution, poor accessibility and even social exclusion. It can also help to reduce journey times and improve reliability – either in actuality, or simply by changing people’s perceptions.</i> </li> <li>• <b>How?</b>  <i>To implement ITS, a procedure document is required, which will guide road authorities on the manner and scope, but also on the related requirements.</i> </li> <li>• <b>When?</b>            2025 - 2028         </li> <li>• <b>Who?</b>            MIRD         </li> </ul>			
	<b>Uptake Plan</b> <i>Developing the Regulation for ITS implementation on road infrastructure and approving it by the Government</i> <i>Developing a good practice guide for ITS implementation</i>			



ITS and speed management Regional and local level	<b>Intervention 3.2</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Exploitation of new ideas and recommendations:</b></p> <ul style="list-style-type: none"> <li>• Speed-activated warning signs (e.g. “Slow down” in the approach of bends and other dangerous locations);</li> <li>• Variable speed limit signs on high-level roads (traffic and/or weather-dependent);</li> <li>• Time-dependent speed limits, e.g. in the vicinity of schools during opening hours;</li> <li>• Transversal rumble strips in the approach of junctions or sharp bends;</li> <li>• Efficiency of administration of fines from automatic speed enforcement;</li> <li>• Lack of resources among authorities tasked with the issuing of fines;</li> <li>• Different degrees of automation (centralized &amp; nearly full automation in France. Inefficient manual processing in other countries ...)</li> </ul> <p><a href="#">[TA3/ regional /ideas]</a></p>	2026-2028		SRA
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• <b>Why?</b> <i>Traffic speed is the most important risk factor in road safety, so its management, including through ITS, has beneficial effects.</i></li> <li>• <b>How?</b> <i>To implement ITS, a procedure document is required, which will guide road authorities on the manner and scope, but also on the related requirements.</i></li> <li>• <b>When?</b> 2025 - 2028</li> <li>• <b>Who?</b> SRA</li> </ul>	<p><b>Uptake Plan</b></p> <p><i>Developing the Regulation for ITS implementation on road infrastructure and approving it by the Government</i></p> <p><i>Developing a good practice guide for ITS implementation</i></p>			

ITS and speed management Road authorities	<b>Intervention 3.3</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Setting of speed limits: elaboration and continuous revision of guidelines &amp; systematic implementation</b> <a href="#">[TA3/ authorities /guidelines]</a>	2025-2026		MIRD, SRA, MIA
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> Speed limits must be defined differently, depending on the function, alignment, volume and structure of traffic, in accordance with local traffic conditions and traffic requirements, on the condition that the change in traffic management structure must be clearly regulated from a legal point of view to make the prevention possible.</li> <li>• <b>How?</b> Developing a legal regulation, which should establish through instructions the time, the circumstances and causes, and the person who should take the decision to change the voting regime on a public road sector.</li> <li>• <b>When?</b> 2025 - 2026</li> <li>• <b>Who?</b> MIRD, SRA, MIA</li> </ul>			
<b>Uptake Plan</b> Establishing hierarchy of the public road network from a functional point of view, respectively, the speed management, Developing and approving the legal regulations for speed management on public road infrastructure Technical application of regulations				

ITS and speed management Road authorities	Intervention 3.4	Time frame	Financial resources	Main actor(s)
	<b>Speed enforcement: implementation of section control, minimization of the obstacles in violation processing procedures</b> <a href="#">[TA3/ authorities /enforcement]</a>	2023-2025		MIRD,SRA,MIA
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> Automated speed control by photo-fixing the average speed is an efficient way of managing speed in linear localities with long distances. The fact that the speed is checked at an entry point and then at an exit point on a certain section of the road, determines the driver to comply with the speed limit set by the authorities.</li> <li>• <b>How?</b> A photo-fixing system is implemented at the entrance and exit of a road sector (street), which catches the average traffic speed and records it in the computer system. Such a control method has been implemented in few localities in the Republic of Moldova.</li> <li>• <b>When?</b></li> <li>• 2023 - 2025</li> <li>• <b>Who?</b> MIRD, SRA, MIA, Local Public Authorities</li> </ul>			
<b>Uptake Plan</b> Establishing legal regulations regarding legality and application of the sanction Determining how to finance projects and technical conditions Implementing the project				

## 4) Safe infrastructure near schools

Safe infrastructure near schools National level	Intervention 4.1	Time frame	Financial resources	Main actor(s)
		<p><b>Development and support of specific design guidelines for road sections in the vicinity of schools</b> [TA4/ national /guidelines]</p>	2025-2027	
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li> <p><b>Why?</b> Children are among the most vulnerable road users, especially when schools are located on public roads in linear localities. Traffic calming and other protective measures (coercion) for children going near a road are very important for protecting their lives and health.</p> </li> <li> <p><b>How?</b> After the legal framework is developed in accordance with Intervention 1, the guide to good practice for traffic calming will also have a chapter for this type of action. <b>When?</b> 2025 - 2027</p> </li> <li> <p><b>Who?</b> MIRD, SRA</p> </li> </ul>			
	<p><b>Uptake Plan</b> Implementing the action plan for Intervention 1, The plan for preparing and editing the normative, regulatory and standardization framework Guide to good speed management and traffic calming practices developed and adopted Publication and entry into force</p>			

Safe infrastructure near schools National level	<b>Intervention 4.2</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Definition of special speed limits in the Road Traffic Code to be applied on road sections in the vicinity of schools</b> <a href="#">[TA4/ national /limits]</a>	2022		MIA, MIRD
<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> The management as a regulation of the speed limits on public roads is established by the road administrator, but the preventive control is established by the traffic regulations.</li> <li>• <b>How?</b> Proposing an exhaustive description of speed management in traffic regulations, which establish the relationship between the road user and the traffic supervisory authority.</li> <li>• <b>When?</b> 2022</li> <li>• <b>Who?</b> MIA, MIRD</li> </ul>				
<b>Uptake Plan</b> Developing and approving the amendments and supplements to the Road Traffic Regulations, to establish the minimum and maximum speed limits in different traffic conditions/areas Enforcing regulations				

Safe infrastructure near schools National level	Intervention 4.3	Time frame	Financial resources	Main actor(s)
		<b>Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools</b> <i>[TA4/ national /funding]</i>	2023-2025	
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> <i>Road infrastructure safety interventions, including in schools, require planning and funding, but prioritizing them is the most important aspect. At the same time, Intervention 1.2 establishes intervention requirements on the Road Fund, and the mandatory introduction of road accident investigation based on the provisions of Directive 2008/96/EC will regulate this fact.</i></li> <li>• <b>How?</b> <i>Establishing provisions for financing road safety from road fund sources and implementing road infrastructure safety management</i></li> <li>• <b>When?</b> 2023 - 2025</li> <li>• <b>Who?</b> MIRD, SRA</li> </ul>			
	<b>Uptake Plan</b> <i>Amending and supplementing the Road Fund Law (Intervention 1.2)</i> <i>Developing and approving the regulations on road accident investigation (Intervention 2.3)</i>			

Safe infrastructure near schools National level	Intervention 4.4	Time frame	Financial resources	Main actor(s)
		<b>Systematic collection of data on road crashes near schools and related casualties</b>		
	<b>Explanatory notes:</b> <i>See intervention 1.6</i>			
	<b>Uptake Plan</b> <i>Intervention 1.6</i>			

Safe infrastructure near schools Regional and local level	Intervention 4.5	Time frame	Financial resources	Main actor(s)
	<b>Educational campaigns to promote safer transport to/ from schools</b> <i>[TA4/ regional /campaigns]</i>	2023- permanently		MIRD, MER – action planning, local public authorities, NGOs, district education directorates - implementation
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> As a rule, pedestrian facilities for safe movement to/from school are not always built, which makes it quite dangerous for children to move, especially due to the lack of sidewalks, or that the entrance to schools is directly from the main road, with heavy traffic. The form and competence of communication with children is very important</li> <li>• <b>How?</b> Dedicating a budget from the road fund sources, but also the annual planning of the communication strategy for road safety, depending on the analysis of road accidents carried out annually</li> <li>• <b>When?</b> 2025 - permanently</li> <li>• <b>Who?</b> MIRD, MER – action planning, local public authorities, NGOs, district education directorates - implementation</li> </ul>			
<b>Uptake Plan</b> Implementing Intervention 1.2 and 4.8 Planning communication actions by MIRD and ensuring their financing Implementation				

	<b>Intervention 4.6</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	<b>Forming a special road safety fund dedicated for direct investments in road safety, to implement upgrades in the vicinity of schools</b> <a href="#">[TA4/ authorities /funding]</a>	2023-2025		MIRD, MF
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li> <b>Why?</b>  <i>The road safety actions must also be financed from sources collected from economic activities, related to transportation means and transport services. In addition to the sources accumulated in the Road Fund for the use of public roads, there are many other types of activities, such as car insurance, issuing driving licenses and vehicle registration, etc., which could help improve the situation.</i> </li> <li> <b>How?</b>  <i>Amending and supplementing the Road Fund Law, but also creating a road safety fund</i> </li> <li> <b>When?</b>            2022 - 2025  <b>Who will be the actors?</b>  <i>MIRD - which is the road infrastructure policy manager; Ministry of Finance - public finance policy manager, Parliament</i> </li> </ul>			
	<b>Uptake Plan</b> <i>Developing the draft amendments and supplements to the Road Fund Law,            Preparing the draft law developing the road safety fund            Organising workshops and seminars to raise awareness of the problem,            Adopting the draft law by the Government            Adopting the legislative act by the Parliament</i>			



	<b>Intervention 4.7</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Observation of road safety trends and good practices to plan maintenance and upgrades of existing road network in the vicinity of schools</b> <a href="#">[TA4/ authorities /good_practice]</a>	2022-2025		MIRD, NRSC Executive Bureau, TUM, profile NGOs
Safe infrastructure near schools Road authorities	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li> <b>Why?</b>            The COVID-19 pandemic has shown that road safety can also be influenced by other aspects, which may have an impact on the behaviour of people in general, and children in particular, and in the Republic of Moldova, which is a small country with poorly developed road safety analysis tools, following trends and good practices in road safety would be one way to improve the measures applied.         </li> <li> <b>How?</b>            Implementing the Directive 2008/96/EC on the management of road infrastructure safety, as amended by Directive (EU) 2019/1936 amending Directive 2008/96/EC on the management of road infrastructure safety, required the development of several best practice guides, published by PIARC, or other organizations and profile projects, based on the Safe System principles and approach. All these materials are made public. In this respect, these guides of good practice must be followed-up and observed, as well as taken over in the official circuit.         </li> <li> <b>When?</b>            2022 - 2025         </li> <li> <b>Who?</b>            MIRD, Executive Office of NRSC, TUM, profile NGOs         </li> </ul>			
	<b>Uptake Plan</b> Transposing Directive 2008/96/EC and its amendments and supplements into the legislative system of the Republic of Moldova Developing the legislative and normative mechanism related to the implementation of road infrastructure safety management procedures in the Republic of Moldova Creating the framework for the application of good practice guides for road infrastructure projects in terms of road safety, including in the area of schools Implementing rules and mechanism for road accident investigation and classification of the road network from the point of view of road safety Assessing on an annual basis the road network safety, including in the area of schools Imposing in the process of registration of road accidents the statistical requirements for keeping track of school locations			

Safe infrastructure near schools Road authorities	Intervention 4.8	Time frame	Financial resources	Main actor(s)
	<b>Use of appropriate methodologies to identify hazardous locations near schools and the causes of road safety problems, identify intervention priorities and implement countermeasures</b> <a href="#">[TA4/ authorities /methodology]</a>	2023 - permanently		MIRD, SRA, LPAs
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b> Approval by the Government of the regulations on the road accident investigation and the classification of the road network safety must provide for the use of methods and measures aimed at listing and rating the sectors where road accidents are concentrated and the methodology of addressing them (classification, analysis, records, measures and treatment plan, monitoring).</li> <li>• <b>How?</b> Initially - annually, and after the first 3 years – every three years, the rating of the sectors of road accidents concentration will be produced, according to the legally established definition. The government must decide on the financial possibility to improve road safety, based on which the road safety improvement action plan is subsequently planned for a number of locations in the mentioned list, which will include in-depth analysis of locations with improvement measures, the implementation plan and subsequent monitoring measures and records.</li> <li>• <b>When?</b> 2023 - permanently</li> <li>• <b>Who?</b> MIRD - regulation, SRA, Local Public Authorities – implementation</li> </ul>			
<b>Uptake Plan</b> Carrying out the Intervention 1.1 Developing and approving the regulations on road accident investigation and classification of road network safety Analysing and assessing road accident concentration sectors, the rating Action plan of the public road administrator, financially ensured Designing (if required). Approving the improvement measures by the road administrator Carrying out measures/works according to the list of sectors required for improvement Monitoring and keeping record				

	<b>Intervention 4.9</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Carrying out of “before and after” studies to evaluate the road safety effect of implemented interventions</b> <i>[TA4/ authorities /impact]</i>	2024 – permanently		MIRD – regulation, SRA and local public authorities - planning, implementation, monitoring and communication
Safe infrastructure near schools Road authorities	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b>  <i>‘Before/after’ studies are very important in the field of road safety to monitor and communicate to the society and to the government, but also very important – for the professional and knowledge transfer and improvement measures, and more importantly, to monitor the results, and correct things, if necessary.</i> </li> <li>• <b>How?</b>  <i>It is very important that the regulations impose requirements to create an institutional history of road safety improvement works, from data collection and analysis, planning and decision-making actions, implementation of treatment measures, to records, monitoring and communication.</i> </li> <li>• <b>When?</b>            2024 - permanently         </li> <li>• <b>Who?</b>  <i>MIRD - regulation, SRA and local public authorities - planning, implementation, monitoring and communication</i> </li> </ul>			
	<b>Uptake Plan</b> <i>Carrying out the Intervention 1.1</i> <i>Developing and approving the regulations on the road accident investigation and classification of road network safety</i> <i>Analysing and assessing road accident concentration sectors, the rating</i> <i>Action plan of the public road administrator, financially ensured</i> <i>Designing (if required). Approving the improvement measures by the road administrator</i> <i>Carrying out measures/works according to the list of sectors required for improvement</i> <i>Monitoring and keeping record and communicating</i>			

## 5) Transport Safety and COVID-19

Investing in safe infrastructure National level	<b>Intervention 5.1</b>			
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Revision of the default speed limit for rural roads and consider adaptations where necessary (possibly only on sub-sets of the network, e.g. roads with narrow cross-sections, or roads with vulnerable road user traffic), with a view to preventing collision forces that humans cannot survive or would cause serious injury.</b> <a href="#">[TA5/national/speed limit]</a>	2023 - 2024		MIDR, MAI
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why?</b>  <i>Speed that is not adapted to visibility, conditions, road situation, especially in the area of localities, is one of the main causes of road traffic deaths, which accounts for over 43% of the total number of deaths, according to police data. The severity of such accidents is higher than the number of accidents with this causality.</i> </li> <li>• <b>How?</b>  <i>Managing the traffic speed on public roads must fall within the obligation of the manager of the infrastructure and transport field, through the road administrator, these aspects being provided for by the relevant legislation. At the same time, the circumstances and the way of speed management are missing. The management of speed on the public road network must be regulated by the relevant legislation regarding the classification of roads.</i> </li> <li>• <b>When?</b>            2023 - 2024         </li> <li>• <b>Who?</b>            MIRD, MIA         </li> </ul>			
<b>Implementation plan:</b> <i>Amending and supplementing GD no. 1468/2016 approving the lists of national and local public roads in the Republic of Moldova,</i> <i>Developing and approving the Guide of good practices with measures for traffic calming and speed management</i> <i>Implementation plan</i>				

<b>Intervenție 5.2</b>				
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Implementation of a Safe System, with emphasis on rural roads, so that they eventually become self-explaining and forgiving to human error</b> <a href="#">[TA5/national/SafeSystem]</a>	2023 - 2024		MIRD, as the relevant managing authority, together with the academia
	<ul style="list-style-type: none"> <li> <b>Why?</b>            Over 40% of the total number of road accident victims are vulnerable users, this index being clearly higher than the European average. At the same time, the principle of 'vulnerability of the human body' requires the implementation of measures to mitigate the impact and reduce the consequences of human error.         </li> <li> <b>How?</b>            Implementing the provisions of Interventions no. 1.1 and 1.4 will drive the improvement of safety rules and measures for vulnerable users, and developing a standard guide of safety measures for vulnerable users, before and after the accident, will help road infrastructure designers to make internationally reasoned decisions. The aspect of 'Friendly roads' and 'Forgiving roads' must prevail in road infrastructure construction projects.         </li> <li> <b>When?</b>            2023 - 2024         </li> <li> <b>Who?</b>            MIRD, as the relevant managing authority, together with the academia         </li> </ul>			
	<b>Implementation plan</b> Approving the draft Law on the management of road infrastructure safety, Developing the set of normative acts for the implementation of the Law. Introducing the terms 'friendly roads' and 'forgiving roads' Adopting the design rules and standards with reference to related procedures, Developing and approving the Guide of good practices with measures for calming the road traffic and managing speed			

<b>Intervenție 5.3</b>				
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<p><b>Provide police forces and other enforcement entities with adequate resources and legal precautions for re-instated &amp; intensified and effective speed enforcement; this may include section (average speed) controls – also on rural roads</b></p> <p><a href="#">[TA5/national/enforcement]</a></p>	2025 - 2030		MIA, SRA
	<ul style="list-style-type: none"> <li>• <b>Why?</b> <i>The efficiency of police activity to counteract the most important risk factor - compliance with the speed limit, is directly dependent on the technical equipment and how developed are the related regulations.</i></li> <li>• <b>How?</b> <i>The legal framework with regard to methods and the way used by the police to control speed, especially in the segment of automated and camouflaged control, needs to be improved. An equipment program and description of related sources and locations must also be developed, approved and funded.</i></li> <li>• <b>When?</b> 2025 - 2030</li> <li>• <b>Who?</b> MIA, SRA</li> </ul>			

Investing in safe infrastructure National level	<b>Intervenție 5.4</b>			
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Consider tougher legal sanctions for excessive speed violations, such as higher/income-dependent fines, licence withdrawal, and confiscation of vehicles</b> <a href="#">[TA5/national/sanctions]</a>	2027 - 2028		MIA
	<ul style="list-style-type: none"> <li>• <b>Why?</b> The efficiency of the police activity for counteracting the most important risk factor - the compliance with the speed limit, is also directly dependent on the result of the sanction or the irreversibility of the punishment.</li> <li>• <b>How?</b> Improving the legal framework with regard to methods and the way used by the police to control speed, especially in the area of seriousness of the offense and irreversibility of the sentence, could discourage serious offenses. For example, exceeding the speed limit set on a road sector with more than 100 km/h should be declared a criminal sanction and sanctioned with confiscation by the state of the vehicle.</li> <li>• <b>When?</b> 2027 - 2028</li> <li>• <b>Who?</b> MIA</li> </ul>			
<b>Implementation plan</b> Amending the Contravention, Criminal and Civil Codes Amending other legislative and normative acts of procedure Implementation				

Investing in safe infrastructure National level	<b>Intervenție 5.5</b>			
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Encourage the use of seatbelts in passenger cars through awareness and enforcement measures</b> <a href="#">[TA5/national/seatbelt]</a>			
	<ul style="list-style-type: none"> <li>• <b>Why?</b>  <i>The efficiency of the police activity to counteract one of the important risk factors - the use of a seatbelt for all users of the vehicle, is directly dependent on the result of the sanction or the irreversibility of the punishment.</i> </li> <li>• <b>How?</b>  <i>Improving the legal framework with regard to the methods and the way the police controls the use of the seatbelt, especially when controlling the coupling of the seatbelt whenever stopping the vehicle. This can be done by the police officer registering the use of the seatbelt every time he/she stops a vehicle.</i> </li> <li>• <b>When?</b>            2023 - 2025         </li> <li>• <b>Who?</b>            MIA         </li> </ul>			
	<b>Implementation plan</b> <i>Amending and supplementing internal instructions to ensure the collection of information when stopping a motor vehicle in traffic</i> <i>Implementation</i>			



Investing in safe infrastructure National level	<b>Intervenție 5.6</b>			
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Put high priority on enforcement and educational &amp; awareness-raising activity to curb inappropriate speeds</b> <i>[TA5/regional/speed]</i>	Permanent		MIA, MIRD, NRSC Executive Bureau
	<ul style="list-style-type: none"> <li>• <b>Why?</b>  <i>Specialist studies show that a 1% increase in average speed increases the risk of accidents with injuries by 3% and the risk of death - by 4-5%. This is not always understood by drivers, so the need for more efficient communication with road users can improve the situation.</i> </li> <li>• <b>How?</b>  <i>Analysing the data collected at the crash site can show where, when and in how to intervene with communication campaigns, for a better efficiency. Based on this analysis, planning actions and communication events with the target groups would be necessary.</i> </li> <li>• <b>When?</b>  <i>Permanently</i> </li> <li>• <b>Who?</b>  <i>MIA, MIRD, NRSC Executive Bureau</i> </li> </ul>			
<b>Implementation plan</b> <i>Ministry of Internal Affairs will ensure the provision of data, and MIRD will commission independent studies to analyse road accident data</i> <i>Developing the Communication Road Safety Plan</i> <i>Plan implementation</i>				

<b>Intervenție 5.7</b>			
<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
<p><b>Consider the implementation of local safe zones (30 km/h) around educational and medical institutions, area-wide 30 km/h limits in urban areas (potentially excluding major urban thoroughfares) and other traffic calming measures</b> [TA5/regional/traffic_calming]</p>			
<ul style="list-style-type: none"> <li> <b>Why?</b>  <i>Specialist studies show that a 1% increase in average speed increases the risk of accidents with injuries by 3% and the risk of death - by 4-5%. This is not always understood by drivers, so the need for more efficient communication with road users can improve the situation. Also, the 30 km/h speed limit ensures a degree of survival in road accidents of 85% of the number of accidents.</i> </li> <li> <b>How?</b>  <i>Recommending to municipalities of Chisinau, Balti, Cahul, Ungheni and Edinet to apply this desideratum for the implementation of the speed limit in the central zones (at least) would be an opportunity to implement this concept. At the same time, it is important that these restrictions have an infrastructural component to ensure compliance with this speed regime.</i> </li> <li> <b>When?</b>            2022 - 2025         </li> <li> <b>Who?</b>  <i>MIA, MIRD - recommendation and methodological support, Public authorities mentioned</i> </li> </ul>			
<p><b>Implementation plan</b>  <i>MIA and MIRD will commission an exhaustive analysis with recommendations to local public authorities, which will contain the justification and method of application of 30 km/h speed on street sectors</i>  <i>Organising a workshop to present the results of the analysis</i>  <i>Establishing financial sources for implementation</i>  <i>Sector design</i>  <i>Memorandum of understanding with local public authorities</i>  <i>Implementation</i></p>			

Investing in safe infrastructure  
National and local level

Investing in safe infrastructure National level	<b>Intervention 5.8</b>			
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Help making the increased usage levels of active mobility (walking, cycling) sustainable by providing them with safe facilities and an adequate share of road space</b> <a href="#">[TA5/regional/active_mobility]</a>	2023 - 2030		MIRD, Local public authorities
	<ul style="list-style-type: none"> <li>• <b>Why?</b>  <i>Cities and towns in the Republic of Moldova face a big problem in their attempts to make the streets more friendly for vulnerable users (pedestrians, cyclists, etc.), given the rules of design and construction of urban infrastructure, which are outdated and put focus only on car facilities.</i> </li> <li>• <b>How?</b>  <i>Screening the legal framework and technical rules in the field of urban planning, establishing street hierarchy and traffic facilities will lead to identification of the gaps and to the improvement of the situation. Subsequently, a plan for the recovery of the legislative and regulatory framework will be developed, so that local public authorities can impose improved requirements for designing transport facilities.</i> </li> <li>• <b>When?</b>            2023 - 2030         </li> <li>• <b>Who?</b>            MIRd, Local public authorities         </li> </ul>			
<b>Implementation plan</b> <i>Contracting and screening the legal framework and technical norms in the field of urban planning, street hierarchy and traffic facilities</i> <i>Recommendations and action plan to improve the legislative, regulatory and normative framework</i> <i>Implementing the Action Plan</i> <i>Improved regulatory framework</i> <i>Good practice guides</i> <i>Project implementation</i>				

<b>Intervention 5.9</b>			
<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
<p><b>Set the necessary promotive steps to re-establish the modal share of public transport – by far the safest and most sustainable transport mode – at least to pre-pandemic levels</b></p> <p><a href="#">[TA5/regional/public_transport]</a></p>			
<ul style="list-style-type: none"> <li> <b>Why?</b>  <i>The sustainable development of public transport can make an essential contribution to the decongestion of towns, and first of all, of the capital - the city of Chisinau. The modal connection at the national level with the urban one has been significantly distorted in the last few decades due to the deep economic crisis that the Republic of Moldova has gone and still goes through. The connection between national and local public transport is quite chaotic, and in this sense, national routes create major problems for urban transport infrastructure.</i> </li> <li> <b>How?</b>  <i>Screening the legal framework and technical norms in the field of public transport, both at national level and with reference to local damage, will identify gaps and improve the situation. Subsequently, a plan for the recovery of the legislative and regulatory framework will be developed, in order for local public authorities to have access to and be able to impose improved requirements for designing transport facilities.</i> </li> <li> <b>When?</b>            2023 - 2030         </li> <li> <b>Who?</b>  <i>MIRD, Local public authorities</i> </li> </ul>			
<p><b>Implementation plan</b></p> <p><i>Amending and supplementing the Road Transport Code no. 150/2014</i></p> <p><i>Amending and supplementing the Regulation on passenger and freight transport, GD 854/2004</i></p> <p><i>Developing the national framework for modal transport and the connection between national, local and urban road transport</i></p> <p><i>Implementation plan</i></p>			

 Investing in safe infrastructure  
 Regional and local level

<b>Intervention 5.10</b>				
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Road authorities	<p><b>Establish an evidence base to prioritise infrastructure investments based on safety indicators: crash locations, traffic flows, speed levels, road infrastructure design &amp; safety data.</b></p> <p><a href="#">[TA5/authorities/prioritisation]</a></p>	2022 - 2023		MIRD, SRA
	<ul style="list-style-type: none"> <li>• <b>Why?</b> <i>Prioritizing investments in road infrastructure is of crucial importance, and organizing it according to performance indicators can ensure the quality and results of such investments. At the very least, the classification of road network safety, including according to traffic intensity and flows, will justify possible investments.</i></li> <li>• <b>How?</b> <i>Road Law no. 509/1995 does not provide exhaustively for the way of investments and the reliance on data collected from traffic or road safety analyses. In this respect, amending the law, but also introducing infrastructure safety procedures, also oriented towards the road infrastructure investment structure will solve the issue, as the road safety audit aims at this.</i></li> <li>• <b>When?</b> 2022 - 2023</li> <li>• <b>Who?</b> MIRD, SRA</li> </ul>			
	<p><b>Action plan</b></p> <p>Developing and adopting the draft Law amending and supplementing Law no. 509/1995, Carrying out the Intervention 1.1 Implementation</p>			

## 6) Road Infrastructure Safety Management

Provisions for vulnerable road users National level	<b>Intervention 6.1</b>			
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Country specific national classification criteria should be encouraged in order to enable proper classification of high, medium and low risk roads, based on accident reduction potential as a direct consequence of road infrastructure improvements</b> <i>[TA6/ national /classification]</i>	2022-2023		MIRD, SRA
	<ul style="list-style-type: none"> <li>• <b>Why?</b> The classification of the road network from the point of view of safety is one of the purposes arising from the implementation of Intervention 1.1 through regulations for investigating road accidents and classification of infrastructure safety.</li> <li>• <b>How?</b> See Intervention 1.1</li> <li>• <b>When?</b> 2022 - 2023</li> <li>• <b>Who?</b> MIRD, SRA</li> </ul>			
<b>Implementation plan</b> Developing and approving by the Parliament the draft law on: <ul style="list-style-type: none"> <li>- road infrastructure safety management (transposition of EU Directive 2008/96/EC).</li> <li>- amending and supplementing Road Law no. 509/1995,</li> <li>- amending and supplementing Law no. 131/2007 on road traffic safety</li> </ul> Developing and approving regulations (Order of the Ministry of Infrastructure and Regional Development) on: <ul style="list-style-type: none"> <li>- Occupation classification,</li> <li>- Road accident investigation and road network classification,</li> <li>- Road safety audit,</li> <li>- Road safety inspections,</li> <li>- Training and qualification of road safety auditors,</li> <li>- Amending certain construction norms and regulations.</li> </ul> Adopting regulations and publishing them. Organising professional training and media-based communication.				

Provisions for vulnerable road users National level	<b>Intervention 6.2</b>			
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Safe System concept should be built in in all road infrastructure related legal acts</b> <a href="#">[TA6/ national /SafeSystem]</a>	2022 - 2023		MIRD, MIA, NRSC member authorities
	<ul style="list-style-type: none"> <li>• <b>Why?</b>  <i>The implementation of the ‘Safe System’ concept is crucial for the ones referred to in Intervention 1.1 to work successfully. Studying and analysing human error and tolerance of the human body through the lens of prioritizing the network of roads and streets in terms of speed management is very important.</i> </li> <li>• <b>How?</b>  <i>In 2020, the first National Road Safety Strategy ceased its action, which was built upon the concept of Zero Vision. Continuing the idea of this strategy must move to the next phase - adoption in legislation (Intervention 1.1) and the principles of ‘Safe System’ principle - in the new version of the National Road Safety Strategy.</i> </li> <li>• <b>When?</b>            2022 - 2023         </li> <li>• <b>Who?</b>            MIRD, MIA, NRSC member authorities         </li> </ul>			
	<b>Implementation plan</b> <i>See Intervention 1.1</i> <i>Developing and approving the draft National Road Safety Strategy 2023 - 2033</i> <i>Developing and approving the Strategy Implementation Plan</i> <i>Plan implementation</i>			

Provisions for vulnerable road users National level	<b>Intervention 6.3</b>			
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Special attention needs to be given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure</b> <i>[TA6/ national /VRU]</i>	2023- 2024		MIRD, as the relevant managing authority, together with the academia
	<ul style="list-style-type: none"> <li>• <b>Why?</b> Over 40% of the total number of road accident victims are vulnerable users, this index being clearly higher than the European average. At the same time, the principle of ‘vulnerability of the human body’ requires the implementation of measures to mitigate the impact and reduce the consequences of human error.</li> <li>• <b>How?</b> Implementing the provisions of Interventions no. 1.1 and 1.4 will drive the improvement of safety rules and measures for vulnerable users, and developing a standard guide of safety measures for vulnerable users, before and after the accident, will help road infrastructure designers to make internationally reasoned decisions.</li> <li>• <b>When?</b> 2023 - 2024</li> <li>• <b>Who?</b> MIRD, as the relevant managing authority, together with the academia</li> </ul>			
<b>Implementation plan</b> <i>Approving the draft Law on road infrastructure safety,</i> <i>Developing the set of normative acts for the implementation of the Law,</i> <i>Adopting the design rules and standards with reference to related procedures,</i> <i>Developing and approving the Guide of good practices with measures for calming the road traffic and managing speed</i>				



<b>Intervention 6.4</b>				
<b>Intervention</b>		<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<p><b>All investment plans in road infrastructure safety improvements should be made based on cost/benefit analysis with modelling of savings in terms of fatal and serious injuries prevented</b></p> <p><i>[TA6/ national /investment]</i></p>		2024 - 2025	MIRD, MF, ME, academia
	<ul style="list-style-type: none"> <li> <b>Why?</b>  <i>Interventions 1.1 and 1.6 mentioned the importance of implementing road infrastructure safety procedures and its implementation plan. To be able to assess the effects of possible investments, the social costs of life, in relation to the consequences of road accidents, to establish the economic effects caused by them, must be determined.</i> </li> <li> <b>How?</b>  <i>Implementing in the legislative system the elements related to the determination of the economic and social costs of deaths and injuries in road accidents. In this regard, the proposal to strengthen this legislative aspect and to develop and implement the methodology for calculating these costs should be taken into account in investment plans.</i> </li> <li> <b>When?</b>            2024 - 2025         </li> <li> <b>Who?</b>  <i>MIRD, MF, ME, academia</i> </li> </ul>			
	<p><b>Implementation plan</b></p> <p><i>Carrying out Interventions 1.1 and 1.6</i></p> <p><i>Developing and approving the Methodology for calculating the social and economic costs of deaths and injuries in road accidents</i></p> <p><i>Implementing the Methodology</i></p>			

<b>Intervention 6.5</b>				
<b>Intervention</b>		<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Raise the minimal road safety design standards for new and existing road infrastructure.</b> <i>[TA6/ national /standards]</i>			
	<ul style="list-style-type: none"> <li>• <b>Why?</b> All investments in road infrastructure, according to the law, must be design-supported. Thus, without the improvement of road design rules, applying the road infrastructure safety management procedures is not possible.</li> <li>• <b>How?</b> An assessment program of road infrastructure design rules, based on the establishment of risk indicators and key issues, followed by the revision of the related design rules must be put in place.</li> <li>• <b>When?</b> 2022 - 2026</li> <li>• <b>Who?</b> MIRD, Institute of Standardization</li> </ul>			
	<b>Implementation plan</b> Proposal to donors for a technical project to evaluate road and street design standards to comply with Safe System principles Specifications and tender Project implementation and change of rules Implementation			

<b>Intervention 6.6</b>			
<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
<p><b>Road safety audit and inspection procedures should be performed on regional road network based on crash occurrence analysis</b></p> <p><i>[TA6/ regional /audit]</i></p>	2025 - 2030		MIRD, SRA
<ul style="list-style-type: none"> <li>• <b>Why?</b>  <i>In the first phase, it is important to implement the infrastructure safety management procedures on the republican national road network, with the index 'M' and 'R', which are part of the TEN-T network, so that later, after an evaluation of the indices, results and resources, to continue with the regional road network.</i></li> <li>• <b>How?</b>  <i>The related legislation referred to in Intervention 1.1 will establish an exhaustive implementation plan, depending on the classified public road network, so that the regional road network is covered starting with 2025.</i></li> <li>• <b>When?</b>            2025 - 2030</li> <li>• <b>Who?</b>            MIRD, SRA</li> </ul>			
<p><b>Implementation plan</b></p> <p><i>Developing and approving by the Parliament the draft law on:</i></p> <ul style="list-style-type: none"> <li>- <i>road infrastructure safety management (transposition of EU Directive 2008/96/EC).</i></li> <li>- <i>amending and supplementing Road Law no. 509/1995,</i></li> <li>- <i>amending and supplementing Law no. 131/2007 on road traffic safety</i></li> </ul> <p><i>Developing and approving regulations (Order of the Ministry of Infrastructure and Regional Development) on:</i></p> <ul style="list-style-type: none"> <li>- <i>Occupation classification,</i></li> <li>- <i>Road accident investigation and road network classification,</i></li> <li>- <i>Road safety audit,</i></li> <li>- <i>Road safety inspections,</i></li> <li>- <i>Training and qualification of road safety auditors,</i></li> <li>- <i>Amending certain construction norms and regulations.</i></li> </ul> <p><i>Adopting regulations and publishing them.</i></p> <p><i>Organising professional training and media-based communication.</i></p>			

 Provisions for vulnerable road users  
 Regional and local level

<b>Intervention 6.7</b>				
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Regional and local level	<b>Promote and expand 30 km/h speed limit zones in residential areas</b> <a href="#">[TA6/ regional /residential]</a>	2024 - 2030		MIRD, LPAs
	<ul style="list-style-type: none"> <li>• <b>Why?</b>                The concept of prioritizing the road network according to the principle of transit - distribution - local, is based on efficient speed management, in terms of the types of traffic used.</li> <li>• <b>How?</b>                Developing and approving the new concept of road infrastructure safety management (Interventions 1.1 and 6.5) will allow local public authorities to adopt plans and programs for establishing hierarchy of the local road network.</li> <li>• <b>When?</b>                2024 - 2030</li> <li>• <b>Who?</b>                MIRD, Local public authorities</li> </ul>			
	<b>Implementation plan</b> Implementing Interventions 1.1 and 6.5 National action plan Plans and programs of local public authorities Implementation			

<b>Intervention 6.8</b>				
	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<b>Define clear strategy and action plan to reduce 50% of fatal and serious accident on managed road network by 2030</b> <a href="#">[TA6/ authorities /strategy]</a>	2022 - 2030		NRSC, member authorities
	<ul style="list-style-type: none"> <li>• <b>Why?</b>                The existence of a set goal is the essence of a strategy. The national road safety strategy, which expired in 2020, has already aimed at reducing the number of deaths in road accidents by 50%, and we consider it necessary to maintain this goal.</li> <li>• <b>How?</b>                Developing a new strategy, reconfirming the affiliation of the EU program and action plan in progress, and accepting the same values and goals to reduce the number of deaths in road accidents by 50% by 2030. Implementing the 'Safe System Approach' in this strategy must be a clear goal.</li> <li>• <b>When?</b>                2022 - 2030</li> <li>• <b>Who?</b>                NRSC member authorities</li> </ul>			
	<b>Implementation plan</b> See Intervention 1.1 Developing and approving the draft National Road Safety Strategy 2023 - 2033 Developing and approving the Strategy Implementation Plan Plan implementation			

## 5. Danube Infrastructure Road Safety Improvement Action Plan (DIRSIAP) for Austria

This Action Plan has been created in the framework of the [RADAR project](#) which aims at raising road safety levels of countries in the Danube Region. It is structured along RADAR's six Thematic Areas:

- 1) Investing in safe infrastructure,
- 2) Provisions for vulnerable road users,
- 3) ITS and other techniques for speed management,
- 4) Safe infrastructure near schools,
- 5) Transport Safety and COVID-19
- 6) Road Infrastructure Safety Management

and is adapted to the specific road safety requirements of Austria. The interventions set out in this Action Plan are directed at all levels of road safety management, i.e., from national to regional and local level, with a special section on road authorities.

*All measures are taken from the Danube Infrastructure Road Safety Improvement Strategy (DIRSIS). Measures already implemented in Austria are marked in green, new interventions are in yellow whereas measures deemed currently unfeasible – or subject to political consultation and therefore out of reach of this action plan – are marked in red.*

## 1) Investing in safe infrastructure

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice</b></p> <p>[TA1/national/SafeSystem]</p>	2021-2030	n/a for strategic adoption (RSP); unknown for implementation	Federal Ministry of Transport + regional + local road authorities
Investing in safe infrastructure National level	<p><b>Explanatory notes:</b></p> <p>Best performing countries in road safety have shown that the ex-post treatment of high-accident sites alone does not bring about the ambitious fatality reductions most European countries have envisaged. To substantially curb road death and serious injury, a systemic and proactive approach is needed - towards a transport system that tolerates human error and limits crash forces so that humans can overcome them without serious injury.</p> <p>The Austrian Federal Ministry of Transport has, in its <b>Road Safety Strategy for the decade 2021-2030*</b> declared the Safe System as underlying approach for all further activities. Two of the strategy's main areas of action are safe active mobility (VRUs) and safe rural roads – both at the heart of RADAR's work programme. Over the decade, a number of short-term action plans will be issued, detailing the activities, resources and actors for specific interventions. For <b>VRUs</b>, these are likely to include: modifications of Highway Code, safety education of planners and authorities' technical experts, promotional campaigns, fighting blind spot crashes, and targeted enforcement. For <b>rural roads</b>, interventions are likely to entail e.g., the embedding of Safe System into the Austrian Guidelines for Road Planning, Construction and Maintenance (RVS), harmonised risk assessments, RSI and RSA also on the secondary network – based on risk-based prioritisation, evaluation of current rural default speed limits (100 km/h), and stricter enforcement with reduced fine tolerance margins.</p> <p><b>Financial resources?</b></p> <p>Investments will largely be <b>financed</b> from road provider's construction &amp; maintenance budgets (there are no earmarked budgets for safety in Austria). For research and educational/promotional activities, the Austrian Road Safety Fund (revenues from customised licence plates) will launch topical calls for tenders which will be harmonised with key areas of respective short-term action plans.</p> <p><b>Who?</b></p> <p>The <b>main actors</b> will be defined in accordance with the concrete action plan and interventions at hand, ranging from national, regional and local authorities, research organisations and mobility clubs to interest groups and enterprises. The strategy puts great weight on <b>dissemination</b> between the various actors with their respective responsibilities.</p>			
	<p><b>Uptake Plan</b></p> <p>Across the decade, <b>short-term action plans</b> will address priority problems with targeted activities, listing concrete interventions together with their implementation periods, allocated resources, and main actors.</p> <p>Annual <b>result conferences</b> will be organised by the Ministry of Transport, involving a large round of stakeholders (Austrian Road Safety Advisory Council), to analyse past and on-going as well as prepare new action plans. A new set of safety <b>performance indicators</b> will be collected and monitored (in accordance with EC initiative) – and set against an entirely newly adopted set of improvement targets.</p>			

\* <https://www.bmk.gv.at/themen/verkehr/strasse/verkehrssicherheit/publikationen/vss2030.html>

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Definition of a national minimal standard for road infrastructure safety rating for existing and new roads based on an evidence-based methodology</b> [TA1/national/standard]</p>	2021-2030	€50,000	BMK, FSV, KfV and other experts
<p><b>Explanatory notes:</b> <b>Why?</b> Risk rating is currently carried out only on Austrian motorways &amp; expressways (based on crash cost rankings), but not on the remaining network. There is so far no methodology in use which would include visual examination of in-built safety of roads (“safety rating”)</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 stresses that Safe System principles should be reflected in the Austrian guidelines. These include the principles of self-explanatory and forgiving roads (e.g. mitigation of roadside risks, prevention of tree accidents), risk-based and proactive safety work &amp; analysis and a uniform road hierarchy, i.e. design according to the road function: access, distribution, connection. The strategy also foresees the implementation of rankings based on uniform risk assessments.</p> <p><b>Timeframe and financial resources</b> 2021-2030, costs €50,000 for accompanying studies; n/a for work of standardisation groups</p> <p><b>Who?</b> The Ministry of Transport, BMK (Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology) in cooperation with the Austrian Research Association for Roads, Railways and Transport (FSV*), KfV and expert representatives of regions and authorities.</p>				
<p><b>Uptake Plan</b> Forming a (or tasking an existing) standards working group at the FSV Contracting accompanying studies on international good practices Setting up standard(s) and consultation with all national / regional / local target audiences Publishing, trainings, (pilot) implementations &amp; evaluation</p>				

\*FSV by way of its various its expert working groups produces the Austrian Guidelines for Planning, Construction and Maintenance of Roads (RVS)



Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Allocation of a certain portion of road infrastructure investments to road safety interventions</b></p> <p><a href="#">[TA1/national/investment]</a></p>			
	<p><b>Explanatory notes:</b> Is already implemented, however no concrete figures exist as a large part of infrastructure investments is considered as safety related. In addition, the new Austrian Road Safety Strategy 2021-2030 foresees the implementation of risk-based priority rankings for the treatment and maintenance of roads.</p>			
<p><b>Uptake Plan</b> n/a</p>				

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Institutionalisation of trainings for road safety auditors and road safety inspectors</b></p> <p><a href="#">[TA1/national/auditors]</a></p>			
	<p><b>Explanatory notes:</b> Is already implemented and part of the National Roads Act since 2011.</p>			
<p><b>Uptake Plan</b> n/a</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Transfer of the Safe System approach to local governments and local road authorities</b> <a href="#">[TA1 /national/vertical]</a>	2021-2030	€10,000	BMK, KfV, regions, municipalities, authorities
Investing in safe infrastructure National level	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Especially in the Austrian regions and municipalities, there is a need for knowledge transfer and financing of Safe System-related strategies and treatments.</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 is meant as is a strategy not only of the Ministry but of the whole government – and foresees the close cooperation and knowledge transfer process with the nine Austrian regions (federal states) as well as with Austria’s more than 2,000 municipalities. Across the strategy document, there are various <i>vertical</i> communication, training and quality assurance interventions outlined in this respect. In addition, an annual road safety results conference will be organised from 2022, where good practices will be exchanged as well as new interventions and their implement at various levels discussed – with regions and (representatives of) cities and municipalities present, as well as all members of the Austrian road safety Advisory Council.</p> <p><b>Timeframe and financial resources</b> 2021-2020; annual costs for conference &amp; handouts €10,000</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of regions, municipalities and authorities.</p>			
	<p><b>Uptake Plan</b></p> <p><i>Communication and dissemination concept</i></p> <p><i>Planning and pilot-testing of training at quality assurance interventions (e.g. directed at planners)</i></p> <p><i>Regular organisation of results conference and follow-up</i></p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Enlarging the scope of roads to be treated in accordance with Directive 2019/1936 to 2nd level roads (e.g., “regional roads”)</b> <i>[TA1 /national/secondary]</i>	2021-2030	n/a	BMK, KfV, regions, municipalities and authorities
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Currently, although a comparatively high infrastructure safety level is maintained in Austria across all types, none of the tools outlined in the RISM Directive is mandatory in Austria.</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 suggests implementation of risk-based priority rankings for the treatment and maintenance of roads. This would be a first step towards a network-wide (ex-post) safety assessment and include also regional roads, i.e., roads provided and / or maintained by the regions (federal states). First attempts to implement Road Safety Inspections (RSI) on regional roads have already been taken place, e.g., RSI for motorcycle routes<sup>2</sup>.</p> <p><b>Timeframe and financial resources</b> 2021-2030; no estimations for required financial resources are available.</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with KfV and expert representatives of regions, municipalities and authorities.</p>			
	<p><b>Uptake Plan</b> (Pilot)Implementation of risk-based priority rankings for the treatment and maintenance of roads (Pilot)Implementation of RSIs on the secondary road network, based on risk-based priority rankings</p>			

<sup>2</sup> <https://www.kfv.at/download/8-entwicklung-einer-methode-zur-durchfuehrung-von-motorrad-rsi/>

	Intervention	Time frame	Financial resources	Main actor(s)
Investing in safe infrastructure National level	<b>Institutionalisation of knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments</b> <a href="#">[TA1/national/good_practice]</a>	2021-2030	€10,000	BMK, KFV, regions, municipalities, authorities
	<p><b>Explanatory notes:</b> see also <a href="#">[TA1/national/vertical]</a></p> <p><b>Why?</b> Experience shows that practical implications such as of the highway code and relevant guidelines are not well enough accessible to stakeholders in regions and/or municipalities who either do not have the capacity to digest the material or not even the funds to assess these fee-based guidelines.</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 is meant as is a strategy not only of the Ministry but of the whole government – and foresees the close cooperation and knowledge transfer process with the nine Austrian regions (federal states) as well as with Austria’s more than 2,000 municipalities. Across the strategy document, there are various vertical communication, training and quality assurance interventions outlined in this respect. In addition, an annual road safety results conference will be organised from 2022, where good practices will be exchanged as well as new interventions and their implement at various levels discussed – with regions and (representatives of) cities and municipalities present, as well as all members of the Austrian road safety Advisory Council.</p> <p><b>Timeframe and financial resources</b> 2021-2020; annual costs for conference &amp; handouts €10,000</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KFV and expert representatives of regions, municipalities and authorities.</p>			
	<p><b>Uptake Plan</b> Communication and dissemination concept Planning and pilot-testing of training at quality assurance interventions (e.g. directed at planners) Regular organisation of results conference and follow-up</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Regional and local level	<p><b>Systematic road safety data collection and analysis to plan interventions/investments on most critical locations</b> [TA1/regional/data]</p>	2021-2030	€ 100,000	BMK, KfV, regions, municipalities, authorities, telecom & navigation providers
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Austria has established a high-quality police crash data recording system; however data are not regularly integrated with other safety-related data such as transport volumes.</p> <p><b>How?</b> As part of the new Austrian Road Safety Strategy 2021-2030, data collection and integration receive high priority. Currently black spot identification &amp; treatment, crash data should be integrated with – currently non-existing or not openly available (exception: motorways &amp; expressways) – data such as on traffic flows, and information on road layout and prevailing local regulations such as speed limits, ban of overtaking, use restrictions. Those shall be analysed and used in a harmonised way to identify those sections – usually a small part of the whole network – which have the priority for treatment.</p> <p><b>Timeframe and financial resources</b> 2021-2020; € 100,000 for accompanying pilot studies</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of (authorities of) regions &amp; municipalities. Telecom and navigation providers to be consulted as additional data providers.</p>			
	<p><b>Uptake Plan</b> Assessment study on data needs &amp; availability (Pilot) data acquisition and (pilot) implementation on selected parts of the network / selected regions/municipalities Presentation of results at annual results conference Roll-out of regular protocol on selected parts of the network</p>			

	Intervention	Time frame	Financial resources	Main actor(s)
Investing in safe infrastructure Road authorities	<b>Setting up of road safety funds for investments in road safety upgrades in terms of road safety equipment and measures at locations with most effectiveness</b> <a href="#">[TA1/authorities/funds]</a>	2021-2030		BMK, KFV, FSV, regions, municipalities, authorities
	<b>Explanatory notes:</b>  <b>Why?</b> Although resources for the treatment of high-risk sites are usually available, the same is not true when it comes to the proactive treatment of longer sections / routes. <b>How?</b> Road authorities have decades of experience with identification and treatment of high-risk sites (black spots). Funding for this kind of activity is usually available. Treatment of longer stretches of roads, and eventually the implementation of Safe System principles will require additional funds which – as consultations in the course of setting up the new Austrian Road Safety Strategy 2021-2030 revealed – are not yet in place, especially at the municipal level. This strategy also foresees a prioritisation based on data – which not yet exist, or are not yet available in integrated form (traffic flows & composition, road data)- see also <a href="#">[TA1/regional/data]</a> <b>Timeframe and financial resources</b> 2021-2030; no estimations for required financial resources are available. <b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KFV, representatives of relevant working groups of the FSV, and expert representatives of (authorities of) regions & municipalities.			
	<b>Uptake Plan</b> Assessment study on data needs & availability (Pilot) data acquisition and (pilot) implementation on selected parts of the network / selected regions/municipalities Presentation of results at annual results conference Roll-out of regular protocol on selected parts of the network			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Road authorities	<b>Observation of road safety trends and good practices to plan maintenance and upgrades of the existing road network in operation</b> <a href="#">[TA1/authorities/good_practice]</a>			
	<b>Explanatory notes:</b> On-going practice. Authorities have various means to survey road safety trends on their network – either provided by the Austrian Statistics Bureau or the KfV. Good practices are exchanged on a regular basis at expert level, e.g. in a standing cross-regional workshop. In addition, this exchange will be enforced in the course of the annual results conferences, organised by the BMK, which will involve, where considered useful, also experts from other countries to share their expertise and good practices.			
	<b>Uptake Plan</b> n/a			

	Intervention	Time frame	Financial resources	Main actor(s)
Investing in safe infrastructure Road authorities	<p><b>Use of methodologies for selecting most critical locations with highest potential savings.</b> <i>[TA1/authorities/methodologies]</i></p>	2021-2030	€ 100,000	BMK, KfV, regions, municipalities, authorities, telecom + navigation providers
	<p><b>Explanatory notes:</b> see also <i>[TA1/regional/data]</i></p> <p><b>Why?</b> Austria has established a high-quality police crash data recording system, however data are not regularly integrated with other safety-related data such as transport volumes.</p> <p><b>How?</b> As part of the new Austrian Road Safety Strategy 2021-2030, data collection and integration receive high priority. Currently black spot identification &amp; treatment, crash data should be integrated with – currently non-existing or not openly available (exception: state roads = motorways &amp; expressways) – data such as on traffic flows, and information on road layout and prevailing local regulations such as speed limits, ban of overtaking, use restrictions. Those shall be analysed and used in a harmonised way to identify those sections – usually a small part of the whole network – which should receive priority for treatment. In other words: The Strategy suggests deploying an exposure-based risk analysis on a gradually growing part of the road network, through integration of data which today only partly exists – or is not publicly available.</p> <p><b>Timeframe and financial resources</b> 2021-2020; € 100,000 for accompanying pilot studies</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of (authorities of) regions &amp; municipalities. Telecom and navigation providers to be consulted as additional data providers.</p>			
	<p><b>Uptake Plan</b> Assessment study on data needs &amp; availability (Pilot) data acquisition and (pilot) implementation on selected parts of the network / selected regions/municipalities Presentation of results at annual results conference Roll-out of regular protocol on selected parts of the network</p>			



Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Publication of the list of high accident concentration road sections / hot spots.</b> <a href="#">[TA1 /authorities/hotspots]</a>			
	<b>Explanatory notes:</b> The Austrian Bureau of Statistics publishes crash locations on a publicly accessible website (link). Information of high-risk sites and sections (as required by the Austrian Highway Code from all road authorities to be reported to the Transport Ministry annually, up to 2015) however, is currently not publicly available. The new Austrian Road Safety Strategy 2021-2030 however suggests a gradual, Austrian-wide harmonisation of the connected processes, which may eventually lead to open exchange of risk data – and knowledge on what works in terms of effective treatment.			
<b>Uptake Plan</b> n/a				

## 2) Provisions for vulnerable road users

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users National level	<p><b>Incorporation of the principles and concepts of the Safe System approach in relevant legislation and VRUs' countermeasures selection criteria</b></p> <p><a href="#">[TA2/national/SafeSystem]</a></p>	2021-2030	€ 50,000	BMK, KfV, FSV, regions, municipalities, authorities
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> To further increase the safety of VRUs, especially in times when active mobility gains additional importance, both due the climate crisis and (temporary?) modal shifts towards active transport modes, especially cycling.</p> <p><b>How?</b> Austria has already reached a fairly high level in VRU safety – and various targeted RVS guidelines take care of the individual (active) transport modes – pedestrians, cyclists, and powered 2wheeler riders. The COVID pandemic has at least temporarily – caused an increase in cycling and related fatalities, therefore cyclists require special attention. The new Austrian Road Safety Strategy 2021-2030 therefore lists VRU safety as first and most important field of action and proposes a great variety of solutions for improved VRU safety – from scrutinising the Highway Code to implementing the prevailing RVS guidelines to an extent as fully as possible in regions and municipalities – including initiatives to translate &amp; make more accessible the guidelines and Highway Code to decision makers, especially at local levels. The underlying principle of the whole strategy is the Safe System.</p> <p><b>Timeframe and financial resources</b> 2021-2030; € 50,000 for accompanying studies</p> <p><b>Who?</b> The Ministry of Transport (BMK, especially: legal department) in cooperation with the KfV, representatives of relevant working groups of the FSV, and expert representatives of (authorities of) regions &amp; municipalities.</p>			
<p><b>Uptake Plan</b></p> <p>International good practices study and assessment of prevailing deficiencies of current legislation and guidelines (potentially involving international peer experts) Round of targeted expert meetings with BMK and FSV representatives on study results; consultation with (authorities of) regions &amp; municipalities Follow-up &amp; integration in legislation and guidelines</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Development/Incorporation of a unified protocol for assessment of the risks of VRUs, which will ensure that results are understood and comparable between countries</b></p> <p><i>[TA2/ national /risk_assessment]</i></p>	2021-2030	€ 50,000	BMK, KFV, FSV, regions, municipalities, authorities
<p>Provisions for vulnerable road users National level</p>	<p><b>Explanatory notes:</b> to be seen in connection with <i>[TA2/national/SafeSystem]</i></p> <p><b>Why?</b> Currently no internationally comparable methods for the infrastructure-based risks of VRU are available.</p> <p><b>How?</b> Currently, risk assessment for different transport modes is carried out only on basis e.g., of fatalities per distance, number of trips or time spent in traffic. Infrastructure-related risk assessment for VRUs has not yet been undertaken so far, however the relevant implicit knowledge on in-built infrastructure safety by experts has been incorporated in the relevant guidelines. The new Austrian Road Safety Strategy's 2021-2030 recommendation to prioritise all road safety activities based on safety data shall in the future also entail the risk rating of roads and other facilities for VRUs – and will take onboard the results of current studies in the realm of the recent recast of the RISM Directive.</p> <p><b>Timeframe and financial resources</b> 2021-2030; € 50,000 for accompanying studies</p> <p><b>Who?</b> The Ministry of Transport (BMK, especially: legal department) in cooperation with the KFV, representatives of relevant working groups of the FSV, and expert representatives of (authorities of) regions &amp; municipalities.</p>			
	<p><b>Uptake Plan</b> Expert analysis of results of current studies in the realm of the recent recast of the RISM Directive with a view to implementation at different levels Round of targeted expert meetings with BMK and FSV representatives on study results; consultation with (authorities of) regions &amp; municipalities Follow-up &amp; integration in legislation and guidelines</p>			

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users National level	<p><b>Making sure that countermeasures' selection, prioritization and implementation process for VRUs should not be performed only based on subjective criteria but on official, standardized, objective methodology which considers all relevant road safety indicators (AADT, peak-hour pedestrian/cyclist flows, operating speed, traffic accidents characteristics)</b></p> <p><i>[TA2/ national /methodology]</i></p>			
	<p><b>Explanatory notes:</b> On-going practice. Evidence-based methodologies are embedded in various RVS guidelines, individually for VRU transport modes. In addition, the new Austrian Road Safety Strategy 2021-2030 foresees a data driven approach which shall also entail the collection and making available of data relevant for objective decision-making in relation to identification of problems and selection of the most appropriate countermeasures.</p>			
	<p><b>Uptake Plan</b> n/a</p>			

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users National level	<p><b>Definition of national minimal standard threshold values of relevant road safety indicators based on which high-risk road sections for VRUs will be identified</b></p> <p><i>[TA2/ national /standard]</i></p>			
	<p><b>Explanatory notes:</b> On-going practice. The identification of high-risk sites (sections, junctions), including threshold levels, is defined in detail in the RVS Guideline.</p>			
	<p><b>Uptake Plan</b> n/a</p>			

Provisions for vulnerable road users National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Ensuring that available funds are primarily invested in low-cost, high-impact countermeasures, e.g. by considering the concept of tactical urbanism</b></p> <p><i>[TA2/ national /funds]</i></p>			
	<p><b>Explanatory notes:</b></p> <p>On-going practice. Resource restrictions have always urged decision makers in Austrian (and elsewhere) to come up with both affordable &amp; effective solutions. The new Austrian Road Safety Strategy 2021-2030 especially argues for pragmatic solutions where they can save lives, and suggests that, e.g., by decree, simple solutions that may be faced with legal barriers, may still be implemented.</p>			
	<p><b>Uptake Plan</b></p> <p>n/a</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Development/restructuring and linking datasets on road traffic accidents and road network in order to increase their precision and provide free and easy access to all stakeholders</b> <a href="#">[TA2/ national /dataset]</a>	2021-2030	€ 100,000	BMK, KfV, regions, municipalities, authorities, telecom + navigation providers
	<b>Explanatory notes:</b> see also <a href="#">[TA1/regional/data]</a>  <b>Why?</b> Austria has established a high-quality police crash data recording system, however data are not regularly integrated with other safety-related data such as transport volumes. <b>How?</b> As part of the new Austrian Road Safety Strategy 2021-2030, data collection and integration receive high priority. Currently black spot identification & treatment, crash data should be integrated with – currently non-existing or not openly available (exception: motorways & expressways) – data such as on traffic flows, and information on road layout and prevailing local regulations such as speed limits, ban of overtaking, use restrictions. Those shall be analysed and used in a harmonised way to identify those sections – usually a small part of the whole network – which have the priority for treatment. <b>Timeframe and financial resources</b> 2021-2020; € 100,000 for accompanying pilot studies <b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of (authorities of) regions & municipalities. Telecom and navigation providers to be consulted as additional data providers.			
	<b>Uptake Plan</b> Assessment study on data needs & availability (Pilot) data acquisition and (pilot) implementation on selected parts of the network / selected regions/municipalities Presentation of results at annual results conference Roll-out of regular protocol on selected parts of the network			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Linking the police database on road traffic accidents with hospital data in order to minimize the VRUs accidents under-reporting issue</b></p> <p><a href="#">[TA2/ national /database_link]</a></p>			
	<p><b>Explanatory notes:</b> On-going practice. Already in the SafetyNet EU project (FP6), the KfV made attempts to link police and hospital data on road crashes (probabilistic linking); the method developed then was refined and is today used to produce MAIS3+ data for annual delivery to the European Commission. Further steps – especially a 1:1 link between databases – have been under review &amp; discussion for several years between Federal Ministries. The new Austrian Road Safety Strategy 2021-2030 explicitly argues in the same direction, i.e. to establish a link directly on database level – either nationally, or at least for representative samples.</p>			
	<p><b>Uptake Plan</b> n/a</p>			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Changing traffic culture and public awareness by disseminating relevant information to the public by various media sources</b></p> <p><a href="#">[TA2/ national /awareness]</a></p>			
	<p><b>Explanatory notes:</b> Has been common practice for decades. The spirit behind the new Austrian Road Safety Strategy 2021-2030 is that of communicating and solving road safety issues openly, especially by involving the public. The KfV has for decades taken the role of a communicator – between science &amp; analysis and the public. It can be assumed that in the decade until 2030, these efforts will be stepped up with the backing of all Federal Ministries involved in the road safety issue: Transport, Interior, Health.</p>			
	<p><b>Uptake Plan</b> n/a</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Knowledge transfer with demonstrations of good practices and approaches in VRU safety for road authorities and to regional/local governments</b> <i>[TA2/ national /vertical]</i></p>	2021-2030	€10,000	BMK, KFV, regions, municipalities, authorities
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Provisions for vulnerable road users National level</p>	<p><b>Explanatory notes:</b> see also <i>[TA1/national/vertical]</i></p> <p><b>Why?</b> Especially in the Austrian regions and municipalities, there is a need for knowledge transfer and financing of Safe System-related strategies and treatments, with a key focus on VRU safety.</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 is meant as is a strategy not only of the Ministry but of the whole government – and foresees the close cooperation and knowledge transfer process with the nine Austrian regions (federal states) as well as with Austria’s more than 2,000 municipalities. Across the strategy document, there are various <i>vertical</i> communication, training and quality assurance interventions outlined in this respect. In addition, an annual road safety results conference will be organised from 2022, where good practices will be exchanged as well as new interventions and their implement at various levels discussed – with regions and (representatives of) cities and municipalities present, as well as all members of the Austrian road safety Advisory Council.</p> <p><b>Timeframe and financial resources</b> 2021-2020; annual costs for conference &amp; handouts €10,000</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KFV and expert representatives of regions, municipalities and authorities.</p>			
	<p><b>Uptake Plan</b> Communication and dissemination concept Planning and pilot-testing of training at quality assurance interventions (e.g. directed at planners) Regular organisation of results conference and follow-up</p>			



Provisions for vulnerable road users Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Ensuring that results obtained by road safety assessments performed in individual municipalities at local level are standardized and comparable between different municipalities and on the National level</b> [TA2/ regional /standard]</p>	2021-2030	€ 50,000	BMK, KFV, FSV, regions, municipalities, authorities
<p><b>Explanatory notes:</b> to be seen in connection with [TA2/ national /risk_assessment]</p> <p><b>Why?</b> Currently no internationally comparable methods for the infrastructure-based risks of VRU are available.</p> <p><b>How?</b> Currently, risk assessment for different transport modes is carried out only on basis e.g., of fatalities per distance, number of trips or time spent in traffic. Infrastructure-related risk assessment for VRUs has not yet been undertaken so far, however the relevant implicit knowledge on in-built infrastructure safety by experts has been incorporated in the relevant guidelines. The new Austrian Road Safety Strategy's 2021-2030 recommendation to prioritise all road safety activities based on safety data shall in the future also entail the risk rating of roads and other facilities for VRUs – and will take onboard the results of current studies in the realm of the recent recast of the RISM Directive.</p> <p><b>Timeframe and financial resources</b> 2021-2030; € 50,000 for accompanying studies</p> <p><b>Who?</b> The Ministry of Transport (BMK, especially: legal department) in cooperation with the KFV, representatives of relevant working groups of the FSV, and expert representatives of (authorities of) regions &amp; municipalities.</p>	<p><b>Uptake Plan</b> Expert analysis of results of current studies in the realm of the recent recast of the RISM Directive with a view to implementation at different levels Round of targeted expert meetings with BMK and FSV representatives on study results; consultation with (authorities of) regions &amp; municipalities Follow-up &amp; integration in legislation and guidelines</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Regional and local level	<b>Systematic, high-quality road safety data collection and analysis to plan interventions/investments on most critical locations for VRU</b> <a href="#">[TA2/ regional /data]</a>			
	<b>Explanatory notes:</b> On-going activity: The Austrian initiative GIP currently maps all safety relevant data in a geo-referenced database which is (for a large part) public domain – with authorities at all levels as data providers. The new Austrian Road Safety Strategy 2021-2030 likewise advocates for a data driven approach for future safety related interventions; this will entail also VRU-related data.			
	<b>Uptake Plan</b> n/a			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<b>Use of official, standardized, objective methodology for selecting most critical locations for VRUs with highest potential savings</b> <a href="#">[TA2/ authorities /methodology]</a>	2021-2030	€ 100,000	BMK, KFV, regions, municipalities, authorities
	<p><b>Explanatory notes:</b> see also <a href="#">[TA1 /authorities/methodologies]</a></p> <p><b>Why?</b>            Austria has established a high-quality police crash data recording system, however data are not regularly integrated with other safety-related data such as transport volumes, especially when it comes to VRU safety.</p> <p><b>How?</b>            As part of the new Austrian Road Safety Strategy 2021-2030, data collection and integration receive high priority. Currently black spot identification &amp; treatment, crash data should be integrated with – currently non-existing or not openly available (exception: state roads = motorways &amp; expressways) – data such as on traffic flows, and information on road layout and prevailing local regulations such as speed limits, ban of overtaking, use restrictions. Those shall be analysed and used in a harmonised way to identify those sections – usually a small part of the whole network – which should receive priority for treatment. In other words: The Strategy suggests deploying an exposure-based risk analysis on a gradually growing part of the road network, through integration of data which today only partly exists – or is not publicly available. As active mobility is the prime field of action of the new Austrian Road Safety Strategy 2021-2030, this goes especially for VRU safety.</p> <p><b>Timeframe and financial resources</b>            2021-2020; € 100,000 for accompanying pilot studies</p> <p><b>Who?</b>            The Ministry of Transport (BMK) in cooperation with the KFV and expert representatives of (authorities of) regions &amp; municipalities.</p> <p><b>Uptake Plan</b>            Assessment study on data needs &amp; availability            (Pilot) data acquisition and (pilot) implementation on selected parts of the network / selected regions/municipalities            Presentation of results at annual results conference            Roll-out of regular protocol on selected parts of the network</p>			

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Ensuring that types of pedestrian/cyclist facilities and crossing arrangements are selected based on the operating speed of traffic flow and pedestrian, cyclists and vehicle peak-hour flow volumes</b></p> <p><a href="#">[TA2/ authorities /evidence_base]</a></p>			
	<p><b>Explanatory notes:</b> On-going activity. The relevant RVS guidelines, e.g., for cyclists and pedestrians, ensure that factors like operating speeds, and individual traffic mode's volumes are taken into account in the planning of infrastructure. In addition, the <i>new Austrian Road Safety Strategy 2021-2030</i> demands that the relevant knowledge reaches the relevant target groups among experts and decision makers and planners.</p>			
<p><b>Uptake Plan</b> n/a</p>				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Periodical collection of relevant supporting data on characteristic VRU crash locations on the road network and update of relevant databases</b></p> <p><a href="#">[TA2/ authorities /supporting_data]</a></p>			
	<p><b>Explanatory notes:</b> On-going activity: The Austrian initiative GIP currently maps all safety relevant data in a geo-referenced database which is (for a large part) public domain – with authorities at all levels as data providers. The new Austrian Road Safety Strategy 2021-2030 likewise advocates for a data driven approach for future safety related interventions; this will entail also supporting VRU-related data.</p>			
<p><b>Uptake Plan</b> n/a</p>				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Periodical analysis of effectiveness and efficiency of implemented countermeasures for VRUs</b> [TA2/ authorities /analysis]</p>			
	<p><b>Explanatory notes:</b> Current practice. Interventions taken in the course of high-risk site treatments have to be checked for their effectiveness by the relevant authority – or their service providers.</p>			
<p><b>Uptake Plan</b> n/a</p>				

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users Road authorities	<b>Engaging all stakeholders in the process of VRU-friendly road design (engineers need to collaborate with different stakeholders and NGOs)</b> <a href="#">[TA2/ authorities /stakeholders]</a>	2021-2030	€10,000	BMK, KfV, regions, municipalities, authorities, (local) NGOs, ...
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Especially in the Austrian regions and municipalities, there is a need for knowledge transfer and financing of Safe System-related strategies and treatments, which also entails the field of VRU-friendly road design.</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 is meant as is a strategy not only of the Ministry but of the whole government – and foresees the close cooperation and knowledge transfer process with the nine Austrian regions (federal states) as well as with Austria’s more than 2,000 municipalities. Across the strategy document, there are various <i>vertical</i> communication, training and quality assurance interventions outlined in this respect. In addition, an annual road safety results conference will be organised from 2022, where good practices will be exchanged as well as new interventions and their implement at various levels discussed – with regions and (representatives of) cities and municipalities present, as well as all members of the Austrian road safety Advisory Council.</p> <p><b>Timeframe and financial resources</b> 2021-2020; annual costs for conference &amp; handouts €10,000</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of regions, municipalities and authorities, as well as with (local) NGOs and other stakeholders.</p>			
	<p><b>Uptake Plan</b> Communication and dissemination concept Planning and pilot-testing of training and quality assurance interventions (e.g. directed at planners) in the field of VRU safety Regular organisation of results conference and follow-up</p>			

### 3) ITS and other techniques for speed management

	Intervention	Time frame	Financial resources	Main actor(s)
ITS and speed management National level	<b>Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches</b> <a href="#">[TA3/ national /guidelines]</a>			
	<b>Explanatory notes:</b> The Austrian Highway Code as well as the relevant RVS guidelines cover extensively the issue of speed management across the board both in terms of classical traffic calming approaches as well as variable (speed) message signs and section control.			
	<b>Uptake Plan</b> n/a			

ITS and speed management Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Exploitation of new ideas and recommendations:</b></p> <ul style="list-style-type: none"> <li>• Speed-activated warning signs (e.g. “Slow down” in the approach of bends and other dangerous locations);</li> <li>• Variable speed limit signs on high-level roads (traffic and/or weather-dependent);</li> <li>• Time-dependent speed limits, e.g. in the vicinity of schools during opening hours;</li> <li>• Transversal rumble strips in the approach of junctions or sharp bends;</li> <li>• Efficiency of administration of fines from automatic speed enforcement;</li> <li>• Lack of resources among authorities tasked with the issuing of fines;</li> <li>• Different degrees of automation (centralized &amp; nearly full automation in France. Inefficient manual processing in other countries ...)</li> </ul> <p>[TA3/ regional /ideas]</p>	2021-2030		BMK, BMI, KfV, all fine issuing authorities
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Administration and processes in the field of enforcement should be as efficient as possible. The new Austrian Road Safety Strategy 2021-2030 states that</p> <p><b>How?</b> Austria has a long-standing history in setting road safety interventions in the area of speed management. Therefore, all above-listed speed management interventions have already been implemented to some extent in Austria. Work still needs to be done in the field of administration of fines &amp; enforcement – therefore the new Austrian Road Safety Strategy 2021-2030 features, as one of its seven main fields of action “Effective legislation, control activities, administration, and information processes” and states that “There is a great deal of unused potential in the legal area and in enforcement and control activities that can contribute a great deal to increasing road safety.</p> <p><b>Timeframe and financial resources</b> 2021-2030; no estimations on involved costs can be given yet.</p> <p><b>Who?</b> The Ministry of Transport (BMK) in close cooperation with the Ministry of the Interior (BMI) and all authorities issuing fines, such as district authorities and magistrates of larger cities.</p>			



	<p><b>Uptake Plan</b> Assessment of state of the start in different levels of authorities issuing fines Collection &amp; exchange of best practices nationally and internationally (amongst others, in annual results conferences) Gradual Implementation in (pilot) municipalities/districts/regions</p>
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ITS and speed management Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Setting of speed limits: elaboration and continuous revision of guidelines &amp; systematic implementation</b> <i>[TA3/ authorities /guidelines]</i></p>			
	<p><b>Explanatory notes:</b> Already implemented; The Austrian guidelines RVS 02.02.37 (“Geschwindigkeitsbeschränkungen” - speed limits) provide a comprehensive vademecum for the setting of speed limits on all types of roads in Austria. All RVS guidelines are subject to continuous evaluation and update by working groups of experts from all levels of authorities and other organisations. There is, however, discussion on the general default speed limit on rural roads (currently at 100 km/h, as defined in the Highway Code), see also TA5.</p>			
<p><b>Uptake Plan</b> n/a</p>				

ITS and speed management Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Consistency of speed limits: differentiated speed limits depending on the function, alignment, volume and structure of traffic must be defined, in accordance with the reasonable local speed limits</b> <i>[TA3/ authorities /consistency]</i></p>			
	<p><b>Explanatory notes:</b> Already implemented; The Austrian Guideline RVS 03.01.11 (“Beurteilung des Verkehrsablaufs auf Straßen” - assessment of traffic flows) provides a comprehensive set of procedures to set speed limits on roads with different layouts, flow, numbers of lanes, both urban and interurban. There is, however, discussion on the general default speed limit on rural roads (currently at 100 km/h, as defined in the Highway Code), see also TA5.</p>			
<p><b>Uptake Plan</b> n/a</p>				

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Speed enforcement: implementation of section control, minimization of the obstacles in violation processing procedures</b></p> <p><a href="#">[TA3/ authorities /enforcement]</a></p>			
	<p><b>Explanatory notes:</b>            Already implemented and on-going. Following the fire in the Tauern motorway tunnel in 1999, Austrian authorities identified Section Control as the most promising intervention to minimise crash risk in tunnels. The first unit was installed in 2003 in the Kaisermühlentunnel in Vienna, on a 2.14 km section of the A22 motorway. Today (2021), there are six fixed units installed (mostly) in motorway tunnels and another 10 mobile units in motorway work zones. In addition, there are now three units in operation on rural roads. One remaining problem are lacking resources for authorities issuing fines → see also <a href="#">[TA3/ regional /ideas]</a></p>			
<p><b>Uptake Plan</b> n/a</p>				

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Speed data collection and analysis: systematic collection of speed data development in anonymized speed database. Further development of the methodology of analysis (for example speed development by road types, etc.)</b></p> <p><a href="#">[TA3/ authorities /data]</a></p>	2021-2030	€ 100.000	BMK, KfV, regions, municipalities, authorities, data providers
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> For meaningful road safety analysis &amp; activity, the integration of relevant data is prerequisite.</p> <p><b>How?</b> The KfV has been regularly assessing speeds of different vehicle classes on all road types and various speed limits for decades. The Austrian motorway provider ASFINAG operates a dense network of traffic counters and speed measurement devices. Regional and municipal authorities carry out such assessment mainly on project basis. What is common to all: there is not central repository where all these are stored. The new Austrian Road Safety Strategy 2021-2030 argues for an integration and regular analysis of safety-relevant data until 2030,</p> <p><b>Timeframe and financial resources</b> 2021-2030; € 100.000 for pilot studies and database integration work. No estimations available for technical facilities.</p> <p><b>Who?</b> The Ministry of Transport (BMK) in close cooperation KfV and other data providers, including from the navigation and telecom sector.</p>				
<p><b>Uptake Plan</b></p> <p>Assessment of potential data sources across the country, at all levels          Discussing the options for integration with data providers          Providing the technical facilities and access modalities (authorities, research, ...)          Populating the database on a regular basis and analysis for annual results conference</p>				

## 4) Safe infrastructure near schools

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Development and support of specific design guidelines for road sections in the vicinity of schools</b> <i>[TA4/ national /guidelines]</i>			
	<b>Explanatory notes:</b> Already implemented. The Austrian Guidelines for Planning, Construction and Maintenance of Roads RVS 03.03.14 (“ <i>Gestaltung des Schulumfeldes</i> ” – design/layout of areas around schools) provide a detailed set of assessment criteria as well as intervention for areas in the vicinity of schools.			
	<b>Uptake Plan</b> n/a			

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Definition of special speed limits in the Road Traffic Code to be applied on road sections in the vicinity of schools</b> <i>[TA4/ national /limits]</i>			
	<b>Explanatory notes:</b> In preparation/implementation. There is no explicit speed limit set out for areas around schools in the Highway Code, however the road provider (i.e. usually the municipality or the regional authority) are entitled by the Code to lower the general/default speed limit. The VSS, in line with the governmental programme 2020-2024, calls for speed limit reduction in town centres, in front of schools and as well as at high-risk sites (including along regional roads).			
	<b>Uptake Plan</b> n/a			

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools</b> <a href="#">[TA4/ national /funding]</a>			
	<b>Explanatory notes:</b> Under regular observation & implementation. Austria has a long-standing history of largely successful road safety interventions in the realm of schools & children. Only a small minority of schools is located alongside primary roads, and, although hard data is lacking, it can be safely presumed that the road providers (usually the federal state's road authority) have already in the past largely succeeded in – respectively are in the process of – making the necessary funds for adequate safety work around these schools available respectively.			
<b>Uptake Plan</b> n/a				

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Systematic collection of data on road crashes near schools and related casualties</b> <a href="#">[TA4/ national /data]</a>			
	<b>Explanatory notes:</b> Implemented. In 2012, Austria turned to digital crash data recording by the police, and since then every injury crash features a geo-reference. This made crashes in urban areas much better accessible for (black spot) analysis, especially those away from roads where chainage (i.e. road-kilometre-based) recording was not possible and therefore replaced by entering street names & house numbers or other inadequate localisation methods. This especially applied to crashes around schools which are predominantly located at municipal streets.			
<b>Uptake Plan</b> n/a				

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Systematic collection and publishing of key performance indicators on the road network around schools</b> <i>[TA4/ national /indicators]</i>			
	<b>Explanatory notes:</b> Behavioural road safety indicators have been regularly accessed by the KfV for many years (such as speeds, seatbelt and helmet use, distraction, interaction between pedestrians and passenger car drivers), however any nationwide collection of infrastructure-based safety indicators is currently non-existing and may (if at all) only be decided in the framework of the Baseline EU project. A collection of indicators especially around schools is currently not foreseen, and it would be too optimistic to expect such endeavour in the decade until 2030.			
	<b>Uptake Plan</b> n/a			

Safe infrastructure near schools Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Ensuring adequate funding for road safety interventions in local roads in the vicinity of schools</b> <i>[TA4/ regional /funding]</i>			
	<b>Explanatory notes:</b> Already in place. Why? The safety of (school) children has received strong focus in Austrian road safety work over the past decades; even in times of scarce resources for safety, municipalities (schools aside local roads) and regional authorities (in case of inner urban schools alongside federal state roads) have largely made available the necessary funds.			
	<b>Uptake Plan</b> n/a			

Safe infrastructure near schools Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Systematic collection of data on road crashes near schools and related casualties</b> [TA4/ regional /data]</p> <p><b>Explanatory notes:</b> see also [TA4/ national /data]</p> <p><b>Why?</b> Implemented. In 2012, Austria turned to digital crash data recording by the police, and since then every injury crash features a geo-reference. This made crashes in urban areas much better accessible for (black spot) analysis, especially those away from roads where chainage (i.e. road-kilometre-based) recording was not possible and therefore replaced by entering street names &amp; house numbers or other inadequate localisation methods. This especially applied to crashes around schools which are predominantly located at municipal streets.</p> <p><b>Uptake Plan</b> n/a</p>			

Safe infrastructure near schools Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Educational campaigns to promote safer transport to/from schools</b> [TA4/ regional /campaigns]</p> <p><b>Explanatory notes:</b> Taking place on a regular basis. There have been a multitude of initiatives to promote safe school trips, mostly at regional and local level. One initiative, piloted by KFV and deployed across Austria by the Austrian Worker's Compensation Board, are Safe-Way-To-School -Maps which outline safe routes to a specific school from various residential areas, also highlighting high-risk locations. The maps are available for all primary schools in Austria (<a href="https://schulwegplan.at/">https://schulwegplan.at/</a>).</p> <p><b>Uptake Plan</b> n/a</p>			

Safe infrastructure near schools Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Forming a special road safety fund dedicated for direct investments in road safety, to implement upgrades in the vicinity of schools</b> [TA4/ authorities /funding]</p> <p><b>Explanatory notes:</b> Existing. The Austrian Road Safety Fund (VSF, <a href="https://www.bmk.gv.at/themen/verkehr/strasse/verkehrssicherheit/vsf.html">https://www.bmk.gv.at/themen/verkehr/strasse/verkehrssicherheit/vsf.html</a>) generally supports projects that improve road safety, with a focus on practical interventions and the gaining of knowledge that supports safety work. In practice, this translates to applied research and other activities, often in the field of awareness raising, education and training. The Fund is therefore less likely to support investments such as in road furniture, as these are generally to be borne by the responsible municipality or regional authority.</p> <p><b>Uptake Plan</b> n/a</p>			

Safe infrastructure near schools Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Observation of road safety trends and good practices to plan maintenance and upgrades of existing road network in the vicinity of schools</b> [TA4/ authorities /good_practice]</p> <p><b>Explanatory notes:</b> On-going practice. Authorities, including municipal authorities and city magistrates, have various means to survey road safety trends on their network – either provided by the Austrian Statistics Bureau or the KfV. Good practices are exchanged on a regular basis at expert level, e.g. in a standing cross-regional workshop. In addition, this exchange will be enforced in the course of the annual results conferences, organised by the BMK, which will involve, where considered useful, also experts from other countries to share their expertise and good practices.</p> <p><b>Uptake Plan</b> n/a</p>			



Safe infrastructure near schools Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Use of appropriate methodologies to identify hazardous locations near schools and the causes of road safety problems, identify intervention priorities and implement countermeasures</b> [TA4/ authorities /methodology]</p>			
	<p><b>Explanatory notes:</b> Current practice, as long as ex-post identification of high-risk sites is concerned. Since 2012, Austria turned to digital crash data recording by the police, and since then every injury crash features a geo-reference. This made crashes in urban areas much better accessible for (black spot) analysis, especially those away from roads where chainage (i.e. road-kilometre-based) recording was not possible and therefore replaced by entering street names &amp; house numbers or other inadequate localisation methods. This especially applies to crashes around schools which are predominantly located at municipal streets.</p>			
	<p><b>Uptake Plan</b> n/a</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	<b>Carrying out of “before and after” studies to evaluate the road safety effect of implemented interventions</b> <i>[TA4/ authorities /impact]</i>	2021-2030	€ 100,000	BMK-VSF, KFV + research partners, regions, municipalities, authorities
	<b>Explanatory notes:</b>  <b>Why?</b> Safety impacts of interventions should be known, to invest resources in the most efficient way. <b>How?</b> The before-and-after evaluation of interventions has so far not taken place at a large scale. However, the new Austrian Road Safety Strategy 2021-2030 foresees that “wherever feasible, implemented measures should be evaluated. The results of such evaluations (possible supported by the Austrian Road Safety Fund) should be communicated widely, e.g. in the course of the annual results conferences. A number of pilot projects should launch the transformation process towards building an evaluation culture <b>Timeframe and financial resources</b> 2021-2030; € 100,000 for pilot evaluation studies <b>Who?</b> The Ministry of Transport (BMK) – especially their representatives of the Austrian Road Safety Fund – as well as research partners (for scientific evaluation) and representatives of (municipal or regional) authorities as “owners” of interventions.			
	<b>Uptake Plan</b> Questionnaire for authorities (all levels) on potential measures for evaluation (past, on-going and planned) Development of evaluation methodologies incl. manuals for non-experts Pilot evaluations Communication of results & feedback			

## 5) Transport Safety and COVID-19

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Revision of the default speed limit for rural roads and consider adaptations where necessary (possibly only on sub-sets of the network, e.g. roads with narrow cross-sections, or roads with vulnerable road user traffic), with a view to preventing collision forces that humans cannot survive or would cause serious injury.</b></p> <p><a href="#">[TA5/national/speed limit]</a></p>	2021-2030	€ 10,000	BMK, KfV, regions, municipalities, authorities, (local) NGOs
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Austria and Germany are the only two EU countries with a default rural speed limit of 100 km/h. This seems to contribute to the fact that the Austrian share rural road fatalities is among the highest in the EU.</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 clearly indicates that the currently prevailing default rural roads speed limit of 100 km/h is not in line with the current requirements of safety. Although the issue meets with unanimous agreement among experts, and the number of rural road fatalities is among the highest in Europe. a lowering of the default limit is of highly political nature - and therefore heavily disputed.</p> <p><b>Timeframe and financial resources</b> 2021-2030; € 10,000 for accompanying studies</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of regions, municipalities and authorities, as well as with (local) NGOs and other stakeholders.</p>	<p><b>Uptake Plan</b> EU&amp;EFTA wide re-assessment of rural roads limits and crash shares Developing options for further steps, together with representatives of national &amp; regional road authorities: lowering the limit on specific parts of the rural network – e.g. less than 6m cross sections, roads with shared use of VRUs Presentation &amp; discussion in regular results conferences Uptake – potentially in the framework of Pilot studies</p>			

Investing in safe infrastructure National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Implementation of a Safe System, with emphasis on rural roads, so that they eventually become self-explaining and forgiving to human error</b> [TA5/national/SafeSystem]</p>	2021-2030	€ 70,000	BMK, KfV, regions, municipalities, authorities, telecom + navigation providers
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> It can be safely claimed that a large part of the rural roads network is not yet fully in line with Safe System principles, hence it is largely not forgiving to human error.</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 has Safe System as underlying approach for all further activities. One of the strategy's main areas of action is safe rural roads. For rural roads, interventions are likely to entail e.g., the embedding of Safe System into the Austrian Guidelines for Road Planning, Construction and Maintenance (RVS), harmonised risk assessments, RSI and RSA also on the secondary network – based on risk-based prioritisation, evaluation of current rural default speed limits (100 km/h), and stricter enforcement with reduced fine tolerance margins.</p> <p><b>Timeframe and financial resources</b> 2021-2030; € 70,000 for accompanying studies</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of (authorities of) regions and municipalities and other expert stakeholders &amp; representatives of telecom or navigation providers.</p>	<p><b>Uptake Plan</b> Assessment of current situation in terms of data availability (especially flows and layouts) including new data sources (e.g. floating car data such as from telecom or navigation providers) Risk rating and identification e.g. of 10% of network (nation-wide or per federal state) with highest crash costs. Working groups with federal states to develop harmonised approach for treatment and/or speed limit changes</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<p><b>Provide police forces and other enforcement entities with adequate resources and legal precautions for re-instated &amp; intensified and effective speed enforcement; this may include section (average speed) controls – also on rural roads</b> [TA5/national/enforcement]</p>	2021-2030		BMK, BMI, all fine issuing authorities
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> From 2020 enforcement data it seems highly likely that enforcement density has largely decreased, not least contributing to increase of substantial speed infringements. Pre-pandemic enforcement levels should be re-established.</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 features, as one of its seven main fields of action “Effective legislation, control activities, administration, and information processes” and states that “There is a great deal of unused potential in the legal area and in enforcement and control activities that can contribute a great deal to increasing road safety.</p> <p><b>Timeframe and financial resources</b> 2021-2030; no estimations on involved costs can be given yet.</p> <p><b>Who?</b> The Ministry of Transport (BMK) in close cooperation with the Ministry of the Interior (BMI) and all authorities issuing fines, such as district authorities and magistrates of larger cities.</p>			
	<p><b>Uptake Plan</b> In-depth assessment of enforcement levels (Ministry of Interior, BMI) Needs assessment on side of BMI and identification of measures for increased effectiveness of enforcement (without necessarily increasing police staff) Implementation of measures, potentially in pilot districts or federal states</p>			

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Consider tougher legal sanctions for excessive speed violations, such as higher/income-dependent fines, licence withdrawal, and confiscation of vehicles</b></p> <p><i>[TA5/national/sanctions]</i></p>			
	<p><b>Explanatory notes:</b></p> <p>International comparison shows that Austrian speed fines are among the lowest in the European Region whereas speed tolerances granted by the police (&amp; authorities) are high. Following a severe fatal crash in 2020 which was feature by all media across the country, the Austrian government has therefore turned to stepped-up speeding sanctions:</p> <ul style="list-style-type: none"> <li>• Fines for extreme speeding raised (<math>\geq 30</math> km/h over the limit).</li> <li>• License withdrawal periods doubled for <math>\geq 40</math> (urban) or <math>\geq 50</math> (rural) over the limit: <ul style="list-style-type: none"> <li>○ e.g., 2 <math>\rightarrow</math> 4 weeks for 41-60 km/h over the limit (urban)</li> <li>○ For <math>\geq 60</math> km/h over the limit and recidivists (second offence within 4 years), withdrawal periods 6 weeks <math>\rightarrow</math> 3 months.</li> <li>○ Driving <math>\geq 80</math> km/h (urban) or <math>\geq 90</math> km/h (rural) over the limit: driver rehabilitation course, recidivists: medical and psychological assessment.</li> <li>○ Participating in illegal road races: withdrawal of at least 6 months, driver rehabilitation course and medical and psychological assessment.</li> </ul> </li> </ul> <p>Confiscation of vehicles is foreseen for extreme cases but will enter into force at a later stage, possibly in 2022.</p>			
<p><b>Uptake Plan</b> n/a</p>				

	Intervention	Time frame	Financial resources	Main actor(s)
Investing in safe infrastructure National level	<p><b>Encourage the use of seatbelts in passenger cars through awareness and enforcement measures</b> [TA5/national/seatbelt]</p>	2021-2030	€ 40,000	BMK, KFV, Austrian Road Safety Advisory Council, media and social media experts
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Austrian Seat belt wearing rates range among the highest in the EU, however there are still many unbelted car occupant fatalities.</p> <p><b>How?</b> The Austrian Road Safety Strategy 2021-2030 therefore picks this issue as one priority. It calls for interventions such as</p> <ul style="list-style-type: none"> <li>• awareness raising for the use of seat belts, especially among the target group of adult seat belt refusers</li> <li>• No longer accept seat belt offences as a trivial offence and consider tougher consequences for seat belt offences for car drivers: <ul style="list-style-type: none"> <li>○ Increase in penalty amounts.</li> <li>○ Stricter consequences in case of repetition, for example by including it in the catalogue of offences of the demerit point system</li> <li>○ Increased use of the existing possibilities to identify people not using seat belts on evidential photos of speeding offences.</li> </ul> </li> </ul> <p><b>Timeframe and financial resources</b> 2021-2030; € 40,000 for accompanying studies; 1 Mio € for campaign</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with members of the Austrian Road Safety Advisory Council (“Verkehrssicherheitsrat”), the KFV and expert media &amp; social media representatives.</p>			
	<p><b>Uptake Plan</b> Assessment of research results on reasons for non-use of seatbelts, where necessary carry out additional (opinion) surveys among passenger car occupant (both drivers and passengers!)</p> <p>Design of tailored awareness raising initiative for a) drivers, b) passengers; test with target groups as well as stepped up sanctions</p> <p>Roll-out of awareness raising initiative &amp; enforcement</p> <p>Evaluation</p>			

Investing in safe infrastructure Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Put high priority on enforcement and educational &amp; awareness-raising activity to curb inappropriate speeds</b></p> <p><a href="#">[TA5/regional/speed]</a></p>			
	<p><b>Explanatory notes:</b>            There are numerous initiatives at regional and local level to raise awareness for safety issue, among them appropriate speed choice, partly funded by the regional branches of the Austrian Road Safety Fund which receive 60% of the fund's budget. For enforcement activities, see national intervention on speed enforcement <a href="#">[TA5/national/enforcement]</a></p>			
<p><b>Uptake Plan</b>            n/a</p>				

Investing in safe infrastructure Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Consider the implementation of local safe zones (30 km/h) around educational and medical institutions, area-wide 30 km/h limits in urban areas (potentially excluding major urban thoroughfares) and other traffic calming measures</b></p> <p><a href="#">[TA5/regional/traffic_calming]</a></p>			
	<p><b>Explanatory notes:</b>            There is no explicit speed limit set out for areas around schools or medical institutions in the Highway Code, however the road provider (i.e., usually the municipality or the regional authority) are entitled by the Code to lower the general/default speed limit. The new Austrian Road Safety Strategy 2021-2030, in line with the governmental programme 2020-2024, calls for speed limit reduction in town centres, in front of schools and as well as at high-risk sites (including along regional roads).            A growing number of towns and cities have issued area-wide speed limits of 30 km/h (exception: main roads, most prominent example and worldwide forerunner of this process was the city of Graz with a population of 300,000, in 1992) or have taken a stepwise approach like Vienna, where about two thirds of the urban network are currently subject to a 30 km/h speed limit. Urban speed limits less than 50 km/h are usually accompanied by constructional traffic calming measures to ensure that lower speed levels are credible.</p>			
<p><b>Uptake Plan</b>            n/a</p>				



Investing in safe infrastructure Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Help making the increased usage levels of active mobility (walking, cycling) sustainable by providing them with safe facilities and an adequate share of road space</b> [TA5/regional/active_mobility]</p>	2021-2030		BMK, KfV, regions, municipalities, authorities, (local) NGOs
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> The growing share of active mobility (walking, cycling) needs and adequate and safe share of road space.</p> <p><b>How?</b> The first field of action of the new Austrian Road Safety Strategy 2021-2030 is on active, safe and climate-friendly mobility. The whole decade will be dedicated to bringing the ambitious targets to reality, among them</p> <ul style="list-style-type: none"> <li>• Peaceful and respectful coexistence of all modes</li> <li>• Road safety research should be linked more closely with mobility research</li> <li>• Safe walking and cycling should be treated as a main priority</li> <li>• A fairer distribution of road space and a separation of pedestrian and bicycle traffic</li> <li>• The speed level of motorised traffic should be reduced to increase road safety</li> <li>• The scope, quality, completeness, maintenance, and attractiveness of the infrastructure for walking and cycling (including new forms of mobility) should be significantly improved</li> <li>• The implementation of relevant guidelines, such as RVS 03.02.13 Cycling Traffic or RVS 03.02.12 Pedestrian Traffic, should be aimed for across the board in the Länder and municipalities.</li> <li>• The coordination of experts and the quality of planning should be improved nationwide, for example through training and further education of planners.</li> <li>• A safety package to improve truck safety is to be implemented.</li> </ul> <p><b>Timeframe and financial resources</b> 2021-2030; no estimations on involved costs can be given yet</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of (authorities of) regions, municipalities, as well as with (local) NGOs and other stakeholders.</p>				
<p><b>Uptake Plan</b> A package of measures will be defined and implemented in the course of national action plans of the Transport Ministry.</p>				

Investing in safe infrastructure Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Set the necessary promotive steps to re-establish the modal share of public transport – by far the safest and most sustainable transport mode – at least to pre-pandemic levels</b></p> <p><a href="#">[TA5/regional/public_transport]</a></p>			
	<p><b>Explanatory notes:</b> It is one of the main current missions of the Transport Ministry to establish a so-called <b>1-2-3 ticket</b> for all modes of public transport which shall bring about Austria-wide harmonisation of prizes: coverage of <b>1</b> federal state / year = 365 Euros, <b>2</b> (neighbouring) federal states = 730 Euros, <b>3</b> = the whole country of Austria / year will be 1,095 Euros. The first phase of the ticket's deployment is scheduled for October 2021.</p>			
<p><b>Uptake Plan</b> n/a</p>				

	Intervention	Time frame	Financial resources	Main actor(s)
Investing in safe infrastructure Road authorities	<p><b>Establish an evidence base to prioritise infrastructure investments based on safety indicators: crash locations, traffic flows, speed levels, road infrastructure design &amp; safety data.</b></p> <p><a href="#">[TA5/authorities/prioritisation]</a></p>	2021-2030	€ 100,000	BMK, KfV, regions, municipalities, authorities, telecom & navigation providers
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> It is currently difficult, if not impossible, to make decisions on investments based on harmonised safety evidence (risk assessments) in Austria.</p> <p><b>How?</b> The second field of action of the new Austrian Road Safety Strategy 2021-2030 is safety on rural roads, as these were identified as one of the most prominent current safety issues. Among the objectives for the decade, the following are mentioned: <i>“The basis for infrastructural improvement measures should be priority rankings based on uniform risk assessments [of accident data (in combination with other data/indicators)]. Accident blackspots are also to be analysed throughout Austria using a uniform methodology and their treatment evaluated.”</i></p> <p><b>Timeframe and financial resources</b> 2021-2030; € 100,000 for accompanying and feasibility studies</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of (authorities of) regions and municipalities and other expert stakeholders &amp; representatives of telecom or navigation providers.</p>			
	<p><b>Uptake Plan</b></p> <p>Assessment of current situation in terms of data availability (especially flows and layouts) including new data sources (e.g. floating car data such as from telecom or navigation providers)</p> <p>Risk rating and identification e.g. of 10% of network (nation-wide or per federal state) with highest crash costs.</p> <p>Working groups with federal states to develop harmonised approach for treatment and/or speed limit changes</p>			

	Intervention	Time frame	Financial resources	Main actor(s)
Investing in safe infrastructure Road authorities	<p><b>Make sure that for each road construction, reconstruction or maintenance project, the implementation of Safe System principles is considered</b></p> <p><a href="#">[TA5/authorities/SafeSystem]</a></p>	2021-2030		BMK, KFV, regions, municipalities, authorities
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> It can safely be claimed that Safe System principles are not applied in full by road authorities, partly simply due to lack of information and capacity.</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 emphasizes Safe System as follows: Austrian road traffic should be clearly characterised by the Safe System approach and thereby enable a profound cultural change. The implementation of the Austrian Road Safety Strategy 2021 – 2030 aims at comprehensive cooperation and coordination of all relevant Austrian institutions: Ministries, Federal States, municipalities, companies, and interest associations are to pull together for the best road safety in Austria. The involvement of all stakeholders at regional and local level is a particular concern, as the vast majority of serious accidents occur on provincial and municipal roads. Interest associations and umbrella organisations, mobility clubs, insurance companies and research organisations are in constant contact with the ministries, federal states and municipalities and can contribute significantly to the overall goal in their respective spheres of influence. For example, results conferences will serve to improve dissemination throughout Austria, i.e. improved communication of problems and measures in road safety work.</p> <p><b>Timeframe and financial resources</b> 2021-2030; no estimations on involved costs can be given yet</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KFV and expert representatives of (authorities of) regions and municipalities.</p>			
	<p><b>Uptake Plan</b> A package of measures will be defined and implemented in the course of national action plans of the Transport Ministry</p>			

## 6) Road Infrastructure Safety Management

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	In the process of definition of Primary road network, national authorities should encourage including roads where at least 50% of fatal and serious accidents occur <a href="#">[TA6/national/primary]</a>			
	<b>Explanatory notes:</b> <i>The definition of primary in the context of implementation of Directive 2019/1936 is currently subject to political consultation between the Ministry of Transport (BMK) and the federal states.</i>			
	<b>Uptake Plan</b> n/a			

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Country specific national classification criteria should be encouraged in order to enable proper classification of high, medium and low risk roads, based on accident reduction potential as a direct consequence of road infrastructure improvements</b></p> <p><i>[TA6/ national /classification]</i></p>	2021-2030	€ 100,000	BMK, KfV, FSV, regions, municipalities, authorities
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Provisions for vulnerable road users</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">National level</p>	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> It is currently difficult, if not impossible, to make decisions on investments based on harmonised safety evidence (risk assessments) in Austria.</p> <p><b>How?</b> The second field of action of the new Austrian Road Safety Strategy 2021-2030 is safety on rural roads, as these were identified as one of the most prominent current safety issues. Among the objectives for the decade, the following are mentioned: <i>“The basis for infrastructural improvement measures should be priority rankings based on uniform risk assessments [of accident data (in combination with other data/indicators)]. Accident blackspots are also to be analysed throughout Austria using a uniform methodology and their treatment evaluated.”</i></p> <p><b>Timeframe and financial resources</b> 2021-2030; € 100,000 for accompanying and feasibility studies</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the FSV and KfV and expert representatives of (authorities of) regions and municipalities and other expert stakeholders.</p>			
	<p><b>Uptake Plan</b></p> <p>Assessment of current situation in terms of data availability (especially flows and layouts) including new data sources (e.g. floating car data such as from telecom or navigation providers)</p> <p>Risk rating and identification e.g. of 10% of network (nation-wide or per federal state) with highest crash costs.</p> <p>Working groups with federal states to develop harmonised approach for treatment and/or speed limit changes</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>The Safe System concept should be built in in all road infrastructure related legal acts</b> <a href="#">[TA6/ national /SafeSystem]</a>			
	<b>Explanatory notes:</b> It can safely be claimed that this is on-going practice. Although the term <i>Safe System</i> is currently nowhere mentioned in Austrian legal acts or technical guidelines, the basic principles, such as forgiving and self-explanatory are, in principle, in place. In addition, the new Austrian Road Safety Strategy 2021-2030 claims that Austrian road traffic should be clearly characterised by the Safe System approach and thereby enable a profound cultural change.			
	<b>Uptake Plan</b> n/a			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Special attention needs to be given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure</b></p> <p><i>[TA6/ national /VRU]</i></p>	2021-2030		BMK, KfV, regions, municipalities, authorities, (local) NGOs
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Provisions for vulnerable road users National level</p>	<p><b>Explanatory notes:</b> see also <i>[TA5/regional/active_mobility]</i></p>			
	<p><b>Why?</b> The growing share of active mobility (walking, cycling) needs and adequate and safe share of road space.</p> <p><b>How?</b> The first field of action of the new Austrian Road Safety Strategy 2021-2030 is on active, safe and climate-friendly mobility. The whole decade will be dedicated to bringing the ambitious targets to reality, among them</p> <ul style="list-style-type: none"> <li>• Peaceful and respectful coexistence of all modes</li> <li>• Road safety research should be linked more closely with mobility research</li> <li>• Safe walking and cycling should be treated as a main priority</li> <li>• A fairer distribution of road space and a separation of pedestrian and bicycle traffic</li> <li>• The speed level of motorised traffic should be reduced to increase road safety</li> <li>• The scope, quality, completeness, maintenance, and attractiveness of the infrastructure for walking and cycling (including new forms of mobility) should be significantly improved</li> <li>• The implementation of relevant guidelines, such as RVS 03.02.13 Cycling Traffic or RVS 03.02.12 Pedestrian Traffic, should be aimed for across the board in the Länder and municipalities.</li> <li>• The coordination of experts and the quality of planning should be improved nationwide, for example through training and further education of planners.</li> <li>• A safety package to improve truck safety is to be implemented.</li> </ul>			
	<p><b>Timeframe and financial resources</b> 2021-2030; no estimations on involved costs can be given yet</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of (authorities of) regions, municipalities, as well as with (local) NGOs and other stakeholders.</p>			
	<p><b>Uptake Plan</b> A package of measures will be defined and implemented in the course of national action plans of the Transport Ministry</p>			



Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>All investment plans in road infrastructure safety improvements should be made based on cost/benefit analysis with modelling of savings in terms of fatal and serious injuries prevented</b> [TA6/ national /investment]</p>	2021-2030	€ 50,000	BMK, KfV, regions, municipalities, authorities, modelling & evaluation experts
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> A modelling and evaluation culture yet needs to be developed in Austrian road safety work – and interventions may sometimes be taken without scientific evidence</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 calls for “Measures that actually work: Measures and interventions that are set should be based on scientific knowledge. Measures should always be implemented based on the state of research (such as the decision support system for road safety created in the EU project SafetyCube: SafetyCube DSS – the European Road Safety Decision Support System). In addition, every measure taken should be evaluated, if possible.”</p> <p><b>Timeframe and financial resources</b> 2021-2030; € 50,000 for accompanying studies and pilot evaluations.</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of (authorities of) regions, municipalities, as well as with (local) NGOs and other stakeholders familiar with modelling and evaluation.</p>			
<p><b>Uptake Plan</b> A package of measures will be defined and implemented in the course of national action plans of the Transport Ministry; the package will need to provide a modular access for stakeholders at national, regional and local levels.</p>				

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Raise the minimal road safety design standards for new and existing road infrastructure.</b></p> <p><i>[TA6 / national / standards]</i></p>			
	<p><b>Explanatory notes:</b> On-going: All RVS guidelines are subject to continuous evaluation and update by working groups of experts from all levels of authorities and other (research) organisations, including the KfV.</p>			
<p><b>Uptake Plan</b> <i>n/a</i></p>				

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users Regional and local level	<p><b>Road safety audit and inspection procedures should be performed on regional road network based on crash occurrence analysis</b> [TA6/ regional /audit]</p>	2021-2030		BMK, KfV, regions & authorities, members of the Road Safety Advisory Board
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> On rural roads, where the majority of road fatalities occur, road safety audit and inspection procedures are currently not commonplace.</p> <p><b>How?</b> Road safety audits (RSA) and inspections (RSI) have fully been implemented on the Trans-European part of the Austrian motorway and expressway network by 2011 (by amendment to the Austrian State Roads Act). A manual for the carrying-out of road safety inspections (RSI) was developed by KfV together with the civil engineering company <i>nast consulting</i><sup>3</sup>, which covers also urban and rural roads away from motorways. In addition, the KfV developed a method for RSI of motorcycle routes<sup>4</sup>. In practice, however, only pilot implementations have so far been taking place for RSI and RSI on rural roads. One of the objectives of the new Austrian Road Safety Strategy 2021-2030, under the field of action “rural roads” is that “<i>Road Safety Inspections (RSI) and Road Safety Audits (RSA) are also to become standard for the rural road network in the medium term, with RSI being carried out gradually on the basis of a risk-based priority ranking. This includes standardised specifications for the safety assessment of the roadside and the design of the central reservation and goes hand in hand with the creation of a qualitative framework for road maintenance services.</i>” The Ministry of Transport will therefore, in the course of regular meetings of the Austrian Road Safety Advisory Board (“<i>Verkehrssicherheitsrat</i>”), and at annual road safety result conferences, discuss with federal authorities on further steps.</p> <p><b>Timeframe and financial resources</b> 2021-2030; estimations for required financial resources are available.</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KfV and expert representatives of (authorities of) regions and other members of the Road Safety Advisory Board.</p>			
	<p><b>Uptake Plan</b> A package of (pilot) measures will be defined and implemented in the course of national action plans of the Transport Ministry</p>			

<sup>3</sup> [https://www.bmk.gv.at/dam/jcr:017ef810-a122-4bb7-b893-270cff68f77a/38\\_rsi\\_handbuchEN.pdf](https://www.bmk.gv.at/dam/jcr:017ef810-a122-4bb7-b893-270cff68f77a/38_rsi_handbuchEN.pdf)

<sup>4</sup> <https://www.kfv.at/download/8-entwicklung-einer-methode-zur-durchfuehrung-von-motorrad-rsi/#>

Provisions for vulnerable road users Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Special attention needs to be given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure in urban and suburban areas</b></p> <p><i>[TA6/ regional /VRU]</i></p>	2021-2030		BMK, KFV, regions, municipalities, authorities, (local) NGOs
<p><b>Explanatory notes:</b> see also <i>[TA6/ national /VRU]</i></p> <p><b>Why?</b> The growing share of active mobility (walking, cycling) needs and adequate and safe share of road space.</p> <p><b>How?</b> The first field of action of the new Austrian Road Safety Strategy 2021-2030 is on active, safe and climate-friendly mobility. The whole decade will be dedicated to bringing the ambitious targets to reality, among them</p> <ul style="list-style-type: none"> <li>• Peaceful and respectful coexistence of all modes</li> <li>• Road safety research should be linked more closely with mobility research</li> <li>• Safe walking and cycling should be treated as a main priority</li> <li>• A fairer distribution of road space and a separation of pedestrian and bicycle traffic</li> <li>• The speed level of motorised traffic should be reduced to increase road safety</li> <li>• The scope, quality, completeness, maintenance, and attractiveness of the infrastructure for walking and cycling (including new forms of mobility) should be significantly improved</li> <li>• The implementation of relevant guidelines, such as RVS 03.02.13 Cycling Traffic or RVS 03.02.12 Pedestrian Traffic, should be aimed for across the board in the Länder and municipalities.</li> <li>• The coordination of experts and the quality of planning should be improved nationwide, for example through training and further education of planners.</li> <li>• A safety package to improve truck safety is to be implemented.</li> </ul> <p><b>Timeframe and financial resources</b> 2021-2030; no estimations on involved costs can be given yet</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KFV and expert representatives of (authorities of) regions, municipalities, as well as with (local) NGOs and other stakeholders.</p>				
<p><b>Uptake Plan</b> A package of measures will be defined and implemented in the course of national action plans of the Transport Ministry; this package will put specific emphasis on the enforcement of communication and exchange between the Transport Ministry and the regions &amp; municipalities.</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Regional and local level	<b>Promote and expand 30 km/h speed limit zones in residential areas</b> <a href="#">[TA6/ regional /residential]</a>			
	<b>Explanatory notes:</b> This is an on-going process: A growing number of Austrian towns and cities have issued area-wide speed limits of 30 km/h (exception: main roads, most prominent example and forerunner of this process was the city of Graz with a population of 300,000, in 1992) or have taken a stepwise approach like Vienna, where about two thirds of the urban network (predominantly residential) are subject to a 30 km/h speed limit. Urban speed limits less than 50 km/h are usually accompanied by constructional traffic calming measures to ensure that lower speed levels are credible. The VSS explicitly calls for “ <i>Shared space and area-wide 30 km/h zones (exception: main road network) which have proven their worth in numerous municipalities</i> ”			
	<b>Uptake Plan</b> n/a			

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Significantly increase weight of road safety priorities in investment and maintenance plans development</b> [TA6/ authorities /priorities]</p>	2021-2030	€ 50,000	BMK, KFV, regions, municipalities, authorities, (local) NGOs, modelling and evaluation experts.
<p><b>Explanatory notes:</b> see also [TA6/ national /investment]</p> <p><b>Why?</b> It is less of a question whether or not activities should be set in terms of road safety, it is rather the choice of the right intervention. Therefore, a safety modelling and evaluation culture yet needs to be developed in Austrian road safety work – and interventions may sometimes still be taken without scientific evidence</p> <p><b>How?</b> The new Austrian Road Safety Strategy 2021-2030 calls for “Measures that actually work: Measures and interventions that are set should be based on scientific knowledge. Measures should always be implemented based on the state of research (such as the decision support system for road safety created in the EU project SafetyCube: SafetyCube DSS – the European Road Safety Decision Support System). In addition, every measure taken should be evaluated, if possible.”</p> <p><b>Timeframe and financial resources</b> 2021-2030; € 50,000 for accompanying studies and pilot evaluations.</p> <p><b>Who?</b> The Ministry of Transport (BMK) in cooperation with the KFV and expert representatives of (authorities of) regions, municipalities, as well as with (local) NGOs and other stakeholders familiar with modelling and evaluation.</p>				
<p><b>Uptake Plan</b> A package of measures will be defined and implemented in the course of national action plans of the Transport Ministry; the package will need to provide a modular interface for road authorities.</p>				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Define clear strategy and action plan to reduce 50% of fatal and serious accident on managed road network by 2030</b> <i>[TA6/ authorities /strategy]</i>			
	<b>Explanatory notes:</b> Both the new Austrian Road Safety Strategy 2021-2030 and the Austrian motorway provider ASFINAG's Road Safety Programme 2021-2030 explicitly set reduction targets of 50% for road fatalities and serious injuries. It can safely be assumed that region's road authorities will follow suit with their regional RSPs and action programmes.			
	<b>Uptake Plan</b> n/a			

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Set internal guidelines above the minimal road safety standards</b> <i>[TA6/ authorities /guidelines]</i>			
	<b>Explanatory notes:</b> All RVS guidelines are subject to continuous evaluation and update by working groups of experts from all levels of authorities and other (research) organisations, including the KFV. They are largely considered as state of the art, and it is therefore unlikely to envisage that individual authorities would internally set higher standards – as they are considered difficult to meet by many, especially when it comes to retrofit of existing infrastructure.			
	<b>Uptake Plan</b> n/a			

## 6. Danube Infrastructure Road Safety Improvement Action Plan (DIRSIAP) for Croatia

This Action Plan has been created in the framework of the [RADAR project](#) which aims at raising road safety levels of countries in the Danube Region. It is structured along RADAR's four Thematic Areas:

- 1) Investing in safe infrastructure,
- 2) Provisions for vulnerable road users,
- 3) ITS and other techniques for speed management,
- 4) Safe infrastructure near schools,
- 5) Transport safety and COVID-19
- 6) Road Infrastructure Safety Management Directive 2019/1396/EC (RISM) in Danube area

and is adapted to the specific road safety requirements of Croatia. The interventions set out in this Action Plan are directed at all levels of road safety management, i.e., from national to regional and local level, with a special section on road authorities.



## 1) Investing in safe infrastructure

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Definition of a national minimal standard for road infrastructure safety rating for existing and new roads based on an evidence-based methodology</b> [TA1/national/standard]</p>	2021 - 2025	Depending on the scope of the targeted goal, financial resources needed for the intervention might vary, estimated on around 50.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
Investing in safe infrastructure National level	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Within National Road Safety Programme of The Republic of Croatia, it is emphasised that by the end of year 2030, all new roads should satisfy a minimum of three or more star safety rating, for all road users. Existing roads where a 75% of the traffic is conducted also need to be rated three or more safety rating stars for all road users which utilise the road (chapter 4 “Vision and goals”).</li> <li>• How – National Road Safety programme has determined a minimum safety rating of three or more stars for both new and existing high traffic roads. A network wide road safety analysis should be conducted, using an evidence-based methodology which closely follows the 2008/96/EC and the amending (EU) 1936/2019 RISM Directive. Consequently, critical segments which are below the agreed standard can be identified.</li> <li>• When – Timeframe for the intervention is set on the period between 2021-2025. Financial resources required for the intervention will depend on the goals which relevant main actors will find acceptable, but can be estimated on 50.000 EUR.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) should be involved. Research institutions should propose the methodology of defining the safety ratings based on previously performed activities and should finalise the proposal in coordination with ministries and agencies.</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions on the topic of determining the national minimal standard with main actors.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 7.9 “Safe infrastructure” and chapter 4 “Visions and goals” of the document contains measures, goals and activities supporting the mentioned intervention within the respective overview tables.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Allocation of a certain portion of road infrastructure investments to road safety interventions</b> <a href="#">[TA1/national/investment]</a>	2021-2030	Depending on the scope of the targeted goal, financial resources needed for the intervention might vary. Preparation for the intervention is estimated to be from 5.000 to 15.000 EUR	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – National Road Safety programme (chapter 4 “Vision and goals”) states that a goal value for the period of the programme is a 50% reduction in seriously injured in road crashes. In order to accomplish this goal, a portion of road infrastructure investments needs to be allocated towards the road safety interventions.</li> <li>• How – Establishing a clear understanding of the total socio-economic cost of road crashes and the true value of preventing deaths and serious injuries should be the first step, because in identifying this cost, it is possible to elevate the case for investment in road safety where identifiable savings can be made. A nationally recognised basis should be established with the goals of allowing project evaluation and enabling road safety programmes and projects to compete successfully with projects serving other policy aims. Examples from some countries within Europe indicate that funding is provided by the government and general revenue, which is then distributed towards a central agency responsible for the road safety. Examples such as this should be studied in detail and a national-level proposal which incorporates, adapts and builds on good practices should be drafted.</li> <li>• When – Timeframe for the intervention is set on the period between 2021-2030. Financial resources required for the intervention will depend on the goals which relevant main actors will find acceptable. Preparation for the intervention is estimated to be from 5.000 to 15.000 EUR.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) should be involved, and should work in unison in order to coordinate the intervention, as well as designate the scope of funding which should be allocated towards road safety interventions.</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• National uptake activities – Professional consultation, preparatory work for the intervention and preparation of legislative documentation in accordance with main actors should be conducted on the subject, where details concerning the allocation of a portion of road infrastructure investments towards road safety interventions should be identified, elaborated and assessed.</li> </ul>			

- Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 4 “Visions and goals” of the document contains vision goals (more specifically a reduction in seriously injured in road crashes) which can be potentially accomplished either partially or fully, by applying this intervention.

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice</b> <i>[TA1/national/SafeSystem]</i>	2021-2025	Financial resources for the intervention will depend on the scope and the number of activities. Preparation for the intervention is estimated to be from 5.000 to 15.000 EUR	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <i>Why</i> – National Road Safety programme states that a safe system based approach recognises the fact that road users have a tendency to make mistakes and reshapes the road safety policies accordingly, focusing primarily on a reduction of fatalities and serious injuries (Chapter 3.3 “Safe system approach”). In Safe system approach, mistakes committed by a road users should be “forgiven” and if accident do occur, they should not lead to deaths or serious injuries. National Road Safety Programme of The Republic of Croatia is based on a Safe System approach, and embedding of the Safe System approach towards the mainstream of road design/investment should therefore be updated accordingly.</li> <li>• <i>How</i> – An approach based on Safe System approach should involve constant and multidisciplinary action from various main actors, working towards the goal of elevating the level of traffic safety. All actors should coordinate the tasks and requirements regularly and accordingly, based on the situation. Aside from main actors, a key role in the embedding of the Safe System approach into the mainstream of road design belongs to various stakeholders such as legal entities, non-governmental organisations, insurance companies, research institutions, etc., which should be identified and involved into the Embedding process.</li> <li>• <i>When</i> – Timeframe for the intervention is set on the period between 2021-2025. Financial resources required for the intervention will depend on the goal which relevant main actors will find acceptable. Preparation for the intervention is estimated to be from 5.000 to 15.000 EUR.</li> <li>• <i>Who</i> – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) as well as other relevant stakeholders should be involved, and should work in unison in order to coordinate the intervention.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors should take place, where the incorporation of Safe System approach steps within their spheres of influence can be discussed in detail.</li> </ul>			

	<ul style="list-style-type: none"> <li>Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 3.3 “Safe system approach” of the document recognises the importance of Safe System approach, and states that the document is in accordance with the Safe System approach.</li> </ul>			
Investing in safe infrastructure National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Transfer of the Safe System approach to local governments and local road authorities</b> <i>[TA1/national/vertical]</i>	After “Embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice” intervention is incorporated	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 12.000 EUR.	Ministries, Research institutions, local governments and local road authorities, state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...,)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>Why – A unison cooperation of national, regional and local level bodies, interest groups and private sector within the field of traffic safety in Croatia can contribute significantly to an increase of road safety and related activities. For many road managers, particularly local governments, the approach to road safety is firmly embedded in the ‘conventional’ approach. As a result, the response of dealing with road safety in a proactive, harm minimisation way to achieve safe mobility falls short of what is necessary to make the step which is required for the national vision to be realised.</li> <li>How – Road safety should be a priority for local government and national authorities; the National Road Safety Programme lays out the vision and its framework should be followed in order to achieve delivery. But the experience suggests that local authorities struggle to make road safety a priority. Fundamentally there is a need for local governments to shift from a conventional, singular and reactive view of road crashes to a more proactive and system-based approach. Therefore, an emphasis should be made on the importance of consistent initiation of discussions, workshops and cooperation with the purpose of attributing a degree of responsibility towards local governments and local road authorities.</li> <li>When – Intervention should take place shortly after “Embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice” intervention is incorporated. Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on 12.000 EUR.</li> <li>Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) as well as local road authorities and local</li> </ul>			

	<p>governments should be involved, and should work in unison in order to coordinate the intervention.</p>
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors on benefits and implementation of a Safe System approach on local and regional levels should be held in order to successfully implement the intervention, the scope of work encompassing the elaboration of the intervention, establishment of the legal framework, implementation and evaluation of a Pilot project and implementation of necessary amendments.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 3.3 “Safe system approach” of the document recognises the importance of Safe System approach, as well as its transfer to local governments and local road authorities.</li> </ul>

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Enlarging the scope of roads to be treated in accordance with Directive 2019/1936</b> <i>[TA1/national/secondary]</i>	By 2023	Financial resources for the intervention will depend on the scope and the number of activities. Preparatory work can be estimated to be within the range of 3000 to 7000 EUR.	Ministries, Research institutions, state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – A large proportion of road accidents occur on a small proportion of roads where traffic volumes and speeds are high and where there is a wide range of traffic travelling at different speeds. Therefore, the extension of the scope of Directive 2008/96/EC to regional road networks should contribute significantly to the improvement of road infrastructure safety across Croatia.</li> <li>• How – In order to ensure that such extension of scope has the intended effect, the intervention should encompass all roads belonging to the highest category of road below the category ‘motorway’ in the national roads classification. Multiple national level consultations should be held with relevant main actors in order to designate the network which will be subject to treatment in accordance with Directive 2019/1936.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities. Planned period of the activity is by 2023. Preparatory work can be estimated to be within the range of 3.000 to 7.000 EUR.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) as well as other relevant stakeholders as regional road authorities should be involved, and should work in unison in order to coordinate the intervention.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions should be held in order to prepare the draft document which elaborates the intervention, and on which developing the methodology which assesses the road network as well as incorporating the intervention in existing legislation will be discussed in greater detail.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 7.9 “Safe infrastructure” mentions a measure which supports the intervention within the respective overview table.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
Investing in safe infrastructure National level	<b>Institutionalisation of knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments</b> <a href="#">[TA1/national/good_practice]</a>	2024-2026	Financial resources for the intervention will depend on the scope and the number of activities, but the scope of work can be estimated to be around 20.000 EUR	Ministries, Research institutions, local governments and local road authorities, state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Knowledge transfer with demonstrations of good practices and approaches is an important factor giving that it provides tangible outcomes represented by good practices, whereas knowledge transfer facilitates capacity development of the involved stakeholders. Institutionalising the knowledge transfer ensures a standardisation of good practice examples and approaches which can be drawn from by regional and local governments, therefore making it easier to achieve nationally set goals and visions.</li> <li>• How – Knowledge transfer must be grounded in actual practice in a 'learning by doing' model, backed with sufficient targeted investment to overcome the barriers presented by capacity weaknesses at the national, regional and local levels. Strong and sustained cooperation will be required in order to optimise knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments, as well as determining the desired approach.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities and can be estimated to be around 20.000 EUR. Planned period of the activity is 2024-2026.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) as well as other relevant stakeholders should be involved, and should work in unison in order to coordinate the institutionalisation.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors about identifying goals, challenges and important implementation steps (Such as the review of the training, tender and investment systems) which ultimately lead towards the implementation of the knowledge transfer institutionalisation.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 3.3 “Safe system approach” of the document recognises the importance of knowledge transfer and sharing of good practices, which it encourages.</li> </ul>			



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Systematic road safety data collection and analysis to plan interventions/investments on most critical locations</b> <a href="#">[TA1/regional/data]</a>	2021-2030	Financial resources for the intervention will depend on the scope and the number of activities. Preparation for the intervention can be estimated on 15.000 to 20.000 EUR	County road authorities, County governing bodies, local and regional stakeholders
Investing in safe infrastructure Regional and local level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – A positive effect on traffic safety increase as well as systematic road safety data collection can only be possible if relevant data on causations and circumstances of road crashes is efficiently collected and catalogued.</li> <li>• How – In order to collect the data efficiently, it is possible to conduct a detailed interdisciplinary analysis of traffic accident influence factors which encompass all potential elements which could have an influence on a road accident. After the traffic accident influence factor analysis, a regional and local level coordination with relevant stakeholders and governing bodies should be performed in order to determine optimal investment interventions on most critical locations within their respective authorities.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities but can be estimated on 15.000 to 20.000 EUR. Planned period of the intervention is 2021-2030.</li> <li>• Who – County road authorities and County governing bodies as well as other relevant stakeholders should work towards devising systematic road safety data collection system and perform subsequent analysis in order to form investment plans towards most critical locations.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Regional and local uptake activities – Multiple workshops, roundtables and discussions with main actors should be held, identifying the data and database related properties. A separate set of stakeholder consultations related activities should held with the topics concerning interventions and investment planning on critical locations, as well as on developing a legal background where needed as well as on eventual portal/software development.</li> <li>• Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 7.13 “Database and data collection” mentions a measure which supports the stated intervention within the respective overview table.</li> </ul>			

Investing in safe infrastructure Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Observation of road safety trends and good practices to plan maintenance and upgrades of the existing road network in operation</b> <a href="#">[TA1/authorities/good_practice]</a>	After “Institutionalisation of knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments” intervention	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 50.000 to 60.000 EUR	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Observing road safety trends, good practices and approaches is an important factor which can provide tangible outcomes, and form reliable foundations for determining optimal upgrades and maintenance of the existing road network in operation.</li> <li>• How – Road authorities should optimally have the ability to draw from nationally institutionalised knowledge which should be previously established as a separate national level intervention. Workshops and consultations should be held concerning identifying positive safety trends and good practices from knowledge base, which can be utilised in order to plan maintenance and upgrade standards as well as prioritisation.</li> <li>• When – Intervention period is shortly after “Institutionalisation of knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments” is implemented. Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 50.000 to 60.000 EUR.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) should work in unanimity towards the goal of sharing good practices and observations in order to optimise the upgrades and maintenance procedures over the road network under their respective jurisdictions.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors with the goals of identifying positive safety trends and good practice examples concerning maintenance and upgrades of the existing road network in operation, as well as preparing the action plan, collecting and publishing best practices, reviewing the legislation, amendments and technical regulations.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Road authorities	<b>Use of methodologies for selecting most critical locations with highest potential savings.</b> <i>[TA1/authorities/methodologies]</i>	2025-2029	Financial resources for the intervention will depend on the scope and the number of activities, but it can be estimated on around 25.000 EUR	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Use of methodologies for selecting most critical locations with highest potential savings should be conducted in order to eliminate any subjectivity from the selection criteria, since an evidence-based methodology will be utilised to select the critical locations.</li> <li>• How – Various Methodologies can be utilised for selecting most critical locations based on a number of relevant factors and available data, such as Benefit-cost ratio of investment, fatalities saved over the observed period, cost per fatalities saved, etc. Consultations and workshops should be held with relevant main actors, during which an assessment of various parameters and data availability per suggested methodology should be performed, with an appropriate methodology selected on later stages.</li> <li>• When – Planned period of the intervention is 2025-2029. Financial resources for the intervention will depend on the scope and the number of activities, but it can be estimated on around 25.000 EUR.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) and other relevant key actors should work in unanimity towards the goal of selecting the methodology which has the best chance to yield optimal and reliable results.</li> </ul>			
	<b>Uptake Plan</b> Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors with the goal of identifying and utilising the methodologies for selecting most critical locations with highest potential savings. Proposed discussion with main actors should therefore develop and present the methodology, explore legal necessities and prepare amendments to national legislation if necessary.			

## 2) Provisions for vulnerable road users

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Incorporation of the principles and concepts of the Safe System approach in relevant legislation and VRUs' countermeasures selection criteria</b> <i>[TA2/national/SafeSystem]</i>	2022-2030	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 25.000 EUR	Ministries, Research institutions, local governments and local road authorities, state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
Provisions for vulnerable road users National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – European Union in 2020 based its policy framework regarding traffic safety, in the period between 2021 and 2030, on the “Safe System Approach” in order to implement a holistic approach and increase traffic safety by targeting all relevant factors, including the safety of VRU's. Additionally, National Road Safety Programme of The Republic of Croatia is also based on a Safe System approach.</li> <li>• How – The Incorporation of the principles and concepts of the Safe System approach in relevant legislation and VRUs' countermeasures selection criteria should be defined by means of legal framework. Stakeholder consultations involving relevant key actors should be held on the topic, determining the legal framework in the process.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities and can be estimated on around 25.000 EUR. Planned period of the activity is 2022-2030.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Faculty of Transport and Traffic Sciences...) should be involved in the Incorporation of the principles and concepts of the Safe System approach in relevant legislation and VRUs' countermeasures selection criteria. Research institutions should propose guidelines based on European trends and good practices from neighbouring countries.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors where development, review and preparation of amendments to the legislation will be prepared.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project and supports the incorporation of the principles and concepts of the Safe System approach in relevant legislation and VRUs' countermeasures selection criteria. Chapter 3.3 “Safe System approach” of the document describes the importance of the Safe System approach with the description of involved and relevant road authorities.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Development/Incorporation of a unified protocol for assessment of the risks of VRUs, which will ensure that results are understood and comparable between countries</b> <a href="#">[TA2/ national /risk_assessment]</a>	2023-2030	Financial resources for the intervention will depend on the scope and the number of activities. Budget can be estimated on around 30.000 EUR	Ministries, Research institutions, local governments and local road authorities, state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Active modes of transport or Vulnerable road users represent a share of 32% in the serious injury accident statistics. Considering the sustainability of the transport system, a lot of focus has been given to VRU's in order to decrease the negative trend of traffic accidents. Having a unified protocol which ensures comparability between countries promotes road safety significantly, since data can be accessed and assessed more readily and can be substantially more applicable.</li> <li>• How – Over stakeholder consultations involving relevant key actors, national level actors should assess current best practices and case studies available in the EU and assess their applicability for Croatia. A special care must be taken when discussing the principles of incorporation concerning the topic of creating a unified protocol for assessment of the risks of VRUs, since it is needed to ensure that results are easily understood and comparable between countries. If possible, willing representatives from neighbouring countries should be included in the consultations.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 30.000 EUR. Planned period of the activity is 2023-2030.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Faculty of Transport and Traffic Sciences...) should be involved in the incorporation of a unified protocol for assessment of the risks of VRUs. Research institutions should propose procedures based on European trends and good practices from neighbouring countries.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors where defining the intervention requirements, developing the methodology and dissemination steps will be developed</li> </ul>			

and discussed.

- Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 7.5 “Safety of active forms of transport” makes a mention of a measure which supports the mentioned intervention within the respective overview table, legislation tab.

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Making sure that countermeasures' selection, prioritization and implementation process for VRUs should not in any case be performed only based on subjective criteria but primarily based on official, standardized, objective methodology which considers all relevant road safety indicators (AADT, peak-hour pedestrian/cyclist flows, operating speed, traffic accidents characteristics)</b></p> <p><a href="#">[TA2/ national /methodology]</a></p>	2022-2030	<p>Financial resources for the intervention will depend on the scope and the number of activities. Preparatory work can be estimated on 20.000 EUR</p>	<p>Ministries, Research institutions, local governments and local road authorities, state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)</p>
Provisions for vulnerable road users National level	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Within National Road Safety Programme of The Republic of Croatia, it is emphasised that by the end of year 2030, all new roads should satisfy a minimum of three or more star safety rating, for all road users. Existing roads where a 75% of the traffic is conducted also need to be rated three or more safety rating stars for all road users which utilise the road (chapter 4 “Vision and goals”). In order to achieve the target, countermeasures' selection, prioritization and implementation process for VRUs needs to be based on objective, evidence-based, scientific methodologies.</li> <li>• How – Policy-making and political decisions should be majorly influenced by the results of objective analysis and research. To compensate for a relatively weak theoretical basis and to improve the potential for objectivity, a number of issues will need further discussion on national level consultations involving relevant key actors. This includes before and after evaluation approach, a better understanding and extrapolation of historical trends and the transferability of research results. This type of approach cannot be realized without high-quality road safety data. Over stakeholder consultations, methodologies and good practices used within EU and other relevant regions should be assessed, with an emphasis on transferability. Research institutions should propose methodologies which closely follow the 2008/96/EC and the amending (EU) 1936/2019 RISM Directive.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities. Preparatory work can be estimated on 20.000 EUR. Planned period of the activity is 2022-2030.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Faculty of Transport and Traffic Sciences...) should make sure that countermeasures' selection, prioritization and implementation process for VRUs should not in any case be performed only based on subjective criteria but primarily based on official, standardized, objective methodology which considers all relevant road safety indicators.</li> </ul>			

	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>National uptake activities – Multiple workshops, roundtables and discussions with main actors where methodology will be developed and promptly disseminated.</li> </ul>
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Provisions for vulnerable road users National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Definition of a national minimal standard threshold values of relevant road safety indicators based on which high-risk road sections for VRUs will be identified</b> [TA2/ national /standard]</p>	2021-2023	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 15.000 EUR	Ministries, Research institutions, local governments and local road authorities, state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>Why – Definition of national minimal standard threshold values of relevant road safety indicators based on which high-risk road sections for VRUs will be identified is necessary in order to define investment priorities and assess road conditions which have an impact on the VRU safety.</li> <li>How – In the National Road Safety programme, a research which would assess the circumstances impacting the occurrence of road accidents with VRU's is proposed. A follow-up national level consultation involving relevant key actors should be held in order to more closely define minimal standard threshold values of relevant road safety indicators which will then enable the identification of high-risk road sections.</li> <li>When – Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on around 15.000 EUR. Planned period of the activity is 2021-2033.</li> <li>Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Faculty of Transport and Traffic Sciences...) should define national minimal standard threshold values of relevant road safety indicators based on which high-risk road sections for VRUs will be identified.</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>National uptake activities – Multiple workshops, roundtables and discussions with main actors where methodology for defining the national minimal standard will be defined and further developed.</li> </ul>			



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Development/restructuring and linking datasets on road traffic accidents and road network in order to increase their precision and provide free and easy access to all stakeholders</b> <i>[TA2/ national /dataset]</i>	2023-2028	Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on around 40.000 - 60.000 EUR	Ministries, Research institutions, local governments and local road authorities, state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
Provisions for vulnerable road users National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – From a road safety perspective, it is important to develop and link datasets on road traffic accidents and road network in order to gain insight on circumstances which influence road traffic accident occurrence and spot trends in road traffic accident number increase or potential decrease.</li> <li>• How – Relevant national road authorities should provide legal framework which would provide legal groundwork for the development of road traffic accident databases. This can be done over multiple stakeholder consultations on which the legal groundwork for linking structure and accessibility can be determined in more detail.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on around 40.000 - 60.000 EUR. Planned period of the activity is 2024-2028.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Faculty of Transport and Traffic Sciences...) should provide legal framework which would provide legal groundwork for the development of road traffic accident databases.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors where a national-level work group will be established, which can then proceed to develop the concept for linking datasets by preparing an operational, cost, implementation and development plans.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project and supports the development/restructuring and linking datasets on road traffic accidents and road network in order to increase their precision and provide free and easy access to all stakeholders. Chapter 7.13 “Database and data gathering” of the document describes the restructuring of the road traffic accidents database.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Linking the police database on road traffic accidents with hospital data in order to minimize the VRUs accidents under-reporting issue</b> <a href="#">[TA2/ national /database_link]</a>	2023-2028	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 45.000 EUR.	Ministries, Research institutions, local governments and local road authorities, state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Ministry of Health...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – At present, in Croatia, police database on road traffic accidents and hospital data database are not linked, leading to approximately 10% of underreporting of road traffic accidents.</li> <li>• How – A web-based solution should be developed by relevant authorities in order to facilitate the bridging process between datasets. Stakeholder consultations and workshops involving relevant actors should be held, on which database structure and relevant data properties can be more accurately assessed, as well as actual data availability and format.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on 45.000 EUR. Planned period of the activity is 2023-2028.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Ministry of Health, Faculty of Transport and Traffic Sciences...) should provide a web based solution in order to facilitate the bridging process between datasets.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors, where a development of methodology for linking the database will be done, through the feasibility study, concept and legal framework drafts.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Changing traffic culture and public awareness by disseminating relevant information to the public by various media sources</b> <i>[TA2/ national /awareness]</i>	2021-2030	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 40.000 EUR.	Ministries, Research institutions, local governments and local road authorities, state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...), local and national media.
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Traffic culture and public awareness have been observed to have a significant impact on traffic safety while at the same time, actions targeted on traffic culture change and increase of public awareness are being considered as soft measures which are relatively cheap and simple to perform.</li> <li>• How – Campaigns, events and other activities should be organized, targeting a broader audience and providing information which can positively impact road users. Relevant stakeholders such as local, national and regional media should be identified and included within stakeholder consultations concerning the implementation procedures, scope of information and communication methodologies.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on around 40.000 EUR. Planned period of the activity is 2021-2030.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Faculty of Transport and Traffic Sciences...) should provide materials used in campaigns and events. Local and national media should work in unison with other key actors in determining the optimal way to communicate the information to the broader public.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors, where the structure of campaigns, events and other dissemination activities will be drafted and discussed in detail per event.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project and supports the change in traffic culture and public awareness by disseminating relevant information to the public by various media sources. Chapter 7.5 “Vulnerable Road user’s safety” of the document proposes educational and promotional activities.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Knowledge transfer with demonstrations of good practices and approaches in VRU safety for road authorities and to regional/local governments</b> <i>[TA2/ national /vertical]</i>	2021-2030	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 40.000 EUR.	Ministries, Research institutions, local governments and local road authorities, state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Knowledge transfer with demonstrations of good practices and approaches is an important factor giving that it provides tangible outcomes represented by good practices, whereas knowledge transfer facilitates capacity development of the involved stakeholders. Knowledge transfer with demonstrations of good practices and approaches in VRU safety should ensure a standardisation of good practice examples and approaches since it can be utilised by regional and local governments more optimally, therefore making it easier to achieve national and regional safety goals.</li> <li>• How – Knowledge transfer must be grounded in actual practice in a 'learning by doing' model, backed with sufficient targeted investment to overcome the barriers presented by capacity weaknesses at the national, regional and local levels. Strong and sustained cooperation will be required in order to optimise knowledge transfer with demonstrations of good practices and approaches in VRU safety for road authorities and to regional/local governments as well as determining the desired approach. Therefore, multiple consultations involving relevant stakeholders and key actors should be held on the topic, with the goal of standardizing the knowledge transfer procedures.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 40.000 EUR. Planned period of the activity is 2021-2030.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) as well as other relevant stakeholders should be involved, and should work in unison in order to coordinate the intervention.</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors where the intervention and it's implementation will be discussed in detail.</li> </ul>			

Provisions for vulnerable road users Regional and local level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Ensuring that results obtained by road safety assessments performed in individual municipalities at local level are standardized and comparable between different municipalities and on the National level</b> <i>[TA2/ regional /standard]</i></p>	2022-2028	<p>Financial resources for the intervention will depend on the scope and the number of activities. Preparatory activities are predicted to be from 10.000 to 20.000 EUR.</p>	<p>County road authorities, County governing bodies, local and regional stakeholders.</p>
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Active modes of transport or Vulnerable road users represent a share of 32% in the serious injury accident statistics. Considering the sustainability of the transport system, a lot of focus has been given to VRU's in order to decrease the negative trend of traffic accidents.</li> <li>• How – Multiple stakeholder consultations involving relevant key actors, regional and local level actors should assess local level road safety assessment practices available in the neighbouring countries and incorporate a unified protocol for assessment of the risks of VRUs, which will ensure that results are understood and comparable between municipalities.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities. Preparatory activities are predicted to be from 10.000 to 20.000 EUR. Planned period of the activity is 2022-2028.</li> <li>• Who – Relevant regional and local level authorities should be involved in the incorporation of a unified protocol for assessment of the risks of VRUs, which will ensure that results are understood and comparable between municipalities.</li> </ul>			
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• Regional and local level uptake activities – Multiple workshops, roundtables and discussions with main actors, where the technical regulations will be studied in detail with regards to their implementation feasibility and scope extension, as well as developing the concept, costs and dissemination plans.</li> <li>• Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans.</li> </ul>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Systematic, high-quality road safety data collection and analysis to plan interventions/investments on most critical locations for VRU</b> <i>[TA2/ regional /data]</i>	2022-2030	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 50.000 EUR.	County road authorities, County governing bodies, local and regional stakeholders.
Provisions for vulnerable road users Regional and local level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – It is important to implement a systematic, high-quality road safety data collection and analysis to plan interventions on critical locations for VRU in order to gain insight on circumstances which influence road traffic accident occurrence and spot trends in road traffic accident number increase, or potential decrease.</li> <li>• How – Relevant regional and local road authorities should provide technical capabilities for the development of road traffic accident databases containing high-quality road safety data. Stakeholder consultation activities should be held with the goal of agreeing on the properties of data and collection methodology before implementation orientated consultations commence. Case studies with high availability and transferability from countries with similar conditions should also be looked into during stakeholder consultations.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on 50.000 EUR. Planned period of the activity is 2022 - 2030.</li> <li>• Who – Relevant regional and local level authorities should be involved in the systematic, high-quality road safety data collection, which will ensure the feasibility of data analysis to plan interventions/investments on most critical locations for VRU's.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Regional and local level uptake activities – Multiple workshops, roundtables and discussions with main actors, where safety indicators, software development, methodology, pilot actions and dissemination of the results will be considered and discussed in regard to their implementation feasibility.</li> <li>• Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project and supports the systematic, high-quality road safety data collection and analysis to plan interventions/investments on most critical locations for VRU. Chapter 7.13 “Database and data gathering” of the document describes the restructuring of the road traffic accidents database.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<b>Use of official, standardized, objective methodology for selecting most critical locations for VRUs with highest potential savings</b> <i>[TA2/ authorities /methodology]</i>	2022-2027	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated to be around 15.000 to 20.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Use of official, standardized, objective methodology for selecting most critical locations for VRU’s with highest potential savings should be conducted in order to eliminate any subjectivity from the selection criteria, since an evidence-based methodology will be utilised to select the critical locations.</li> <li>• How – Multiple stakeholder consultations which include main actors should be held, discussing various methodologies which can be utilised for selecting most critical locations. Discussion should be directed towards data availability which can serve as an input for discussed methodologies, as well as on a number of other relevant factors such as preferred benefit-cost ratios of investment, fatalities saved over the observed period, cost per fatalities saved, etc. Pilot actions for methodologies can be developed and implemented in order to best assess proposed methodologies.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities but can be estimated to be around 15.000 to 20.000 EUR. Planned period of the activity is 2022-2027.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) should work in unanimity towards the goal of selecting the methodology which has the best chance to yield optimal and reliable results.</li> </ul>			
<b>Uptake Plan</b> Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors, where the methodologies will be looked into and subsequently weighted. Pilot actions for methodologies will be discussed under the scope of workshops and roundtable discussions.				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<b>Ensuring that types of pedestrian/cyclist facilities and crossing arrangements are selected based on the operating speed of traffic flow and pedestrian, cyclists and vehicle peak-hour flow volumes</b> <a href="#">[TA2/ authorities /evidence_base]</a>	2022-2026	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 15.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Different road users must be segregated in order to shield vulnerable road users from other modes of transport which travel at greater speeds and have significantly greater mass in order to eliminate possible conflict points and decrease the consequences and the severity of a traffic accident.</li> <li>• How – Intervention should be implemented by following national rulebooks and implementing latest EU standards in infrastructure design available at the time of intervention. Stakeholder consultations involving relevant main actors should be held on the topic, determining data availability, data sources and available methodologies.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on around 15.000 EUR. Planned period of the activity is 2022-2026.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.).</li> </ul>			
	<b>Uptake Plan</b> Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors where the intervention steps and activities will be developed, and the action plan for their implementation will be drafted.			



	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users Road authorities	<p><b>Periodical collection of relevant supporting data on characteristic VRU crash locations on the road network on a mandatory basis and update relevant databases</b> [TA2/ authorities /supporting_data]</p>	2024-2025	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 30.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Periodical collection of relevant supporting data on characteristic VRU crash locations on the road network is necessary in order to gain insight on circumstances which influence road traffic accident occurrence and spot trends in road traffic accident number increase or potential decrease.</li> <li>• How – Relevant road authorities should perform periodical collection of relevant supporting data on characteristic VRU crash locations on the road network on a mandatory basis and update relevant databases. Data collection methodology, data properties and periods for which the data needs to be collected should be discussed in detail on stakeholder consultations which will include all relevant main actors needed for successful implementation of the intervention.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 30.000 EUR. Planned period of the activity is 2024-2025.</li> <li>• Who – <i>Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)</i></li> </ul>			
	<p><b>Uptake Plan</b> Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors will be held, where a work group will be established and charged with developing the priority methodology and legal framework for the intervention.</p>			

Provisions for vulnerable road users Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Periodical analysis of effectiveness and efficiency of implemented countermeasures for VRUs</b> <i>[TA2/ authorities /analysis]</i>	2021-2024	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 20.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Evaluation of any work is important because it demonstrates how effective that activity has been. There are many ways to evaluate improvements to road infrastructure to check that they are reducing risk. It is possible to monitor safety at particular locations or over networks as a whole. Over a long period of time, it is possible to check if the number of crashes has reduced at locations where infrastructure has been changed , which is the basic premise of periodical analysis of effectiveness.</li> <li>• How – Relevant road authorities should perform periodical analysis of effectiveness and efficiency of implemented countermeasures for VRUs. - It is necessary to ensure that any change to the road system has the desired effect and to know the effectiveness of the engineering countermeasures used. More generally, there is a need to know that countermeasures are effective in order to maximise benefits from limited budgets and assess whether targets have been met. Analysis of effectiveness also shows how a process can be improved, filling gaps in knowledge and ensuring that optimal countermeasures can be implemented in future projects. Consultations with the relevant key actors should be held in order to determine best approach towards periodical analysis of effectiveness, in which elements of the analysis should be determined. Afterwards, periodical analysis of effectiveness should be carried out and once the results are available, should be published and made available to the broader public. Result dissemination and the scope of communicating the results should also be decided within follow-up consultations including all relevant key actors.</li> <li>• When – Planned period of the intervention is 2021-2024. Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on 20.000 EUR.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) should be involved in carrying out periodical analysis of effectiveness and efficiency of implemented countermeasures for VRUs</li> </ul>			
	<b>Uptake Plan</b> Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors, where the development of a concept for the intervention will be drafted along with the funding and legal framework amendment plan.			

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Engaging all stakeholders in the process of VRU-friendly road design (engineers need to collaborate with different stakeholders and NGOs)</b>  <i>[TA2/ authorities /stakeholders]</i></p>	2021-2023	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 15.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Engaging all stakeholders in the process of VRU-friendly road design is necessary in order to create road infrastructure which does not discriminate users by design but motivates road users to shift from motorized transport on to more sustainable transport modes such as walking or cycling.</li> <li>• How – Engineers need to collaborate with different stakeholders and NGOs within the scope of various roundtables, consultations and workshops, in which an emphasis will be put on multidisciplinary approach to road designing. Results of mentioned stakeholder activities can serve as a basis for multidisciplinary road design framework and guidelines.</li> <li>• When – Planned period of the intervention is 2021-2023. Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 15.000 EUR.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)</li> </ul>			
	<p><b>Uptake Plan</b>            Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors, where a structure of a professional’s roundtable will be discussed, along with the criteria and inclusion system, as well as the development of regulations.</p>			

### 3) ITS and other techniques for speed management

	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches</b> <i>[TA3/ national /guidelines]</i>	2023-2027	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 40.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of Infrastructure, Ministry of the Interior, Croatian Auto Club...)
ITS and speed management National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – It is vital to elaborate national guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches in order to provide standardised framework for ITS implementation on lower levels. Presently, there is a lack of comprehensive legislative background defining the subject.</li> <li>• How – It is necessary to perform pilot projects, case studies and assess good practice examples within neighbouring countries in close cooperation with national stakeholders. Stakeholder consultations involving relevant main actors should be held in order to assess relevant pilot projects, case studies and good practice examples which should be studied, with an emphasis on transferability. This research would provide a stable groundwork for the elaboration of guidelines.</li> <li>• When – Planned period of the intervention is 2023-2027. Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 40.000 EUR.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) should be involved in the Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches. Research institutions should propose guidelines based on previously performed activities, and should finalise the proposal in coordination with ministries and agencies (which should approve the guideline).</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors should be held on the subject, aiming towards the identification of transferable pilot projects and good case studies which can be applied, and upon which a good groundwork for elaboration of the guidelines will be formed.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project and supports the improvement and enhancement of ITS solutions which positively affect road safety. Chapter 7.9 “Safe infrastructure” of the document contains measures and activities supporting the mentioned intervention within an overview table.</li> </ul>			

ITS and speed management Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Exploitation of new ideas and recommendations:</b></p> <ul style="list-style-type: none"> <li>• Speed-activated warning signs (e.g. “Slow down” in the approach of bends and other dangerous locations);</li> <li>• Variable speed limit signs on high-level roads (traffic and/or weather-dependent);</li> <li>• Time-dependent speed limits, e.g. in the vicinity of schools during opening hours;</li> <li>• Efficiency of administration of fines from automatic speed enforcement;</li> </ul> <p><a href="#">[TA3/ regional /ideas]</a></p>	<p>After “Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches” intervention is implemented.</p>	<p>Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on 125.000 to 150.000 EUR</p>	<p>County road authorities, County governing bodies, local and regional stakeholders.</p>
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Following the conclusions from the RADAR TA3 research, it was determined that average speeds were the lowest at locations with ITS system for automatic vehicle speed display and speed-activated traffic lights control. Lower speeds may have an impact on traffic calming and to the harmonization of traffic flow, which has a positive impact on traffic safety, especially on pedestrian safety. In case of violation of traffic rules according to the ITS system (e.g. passing through a red light), it is possible to install a camera that will record vehicles with speed violation, intending to conduct automatic offenders sanctioning in order to optimize the efficiency of the system of fines.</li> <li>• How – In order to exploit new ideas and recommendations, regional and local road actors should consult guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches (once they become available) and implement optimal traffic calming measures contained within the guidelines. Based on guidelines, a strategic plan for the implementation will be drafted and finalised, followed by Pilot Actions.</li> <li>• When – After the main national road actors elaborate the guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches. The budget will highly vary based on the scope of required interventions, but can be estimated on 125.000 to 150.000 EUR.</li> <li>• Who – County road authorities and County governing bodies should work towards the implementation of ITS solutions on the road network within their jurisdiction.</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• Regional and local uptake activities – Multiple workshops, roundtables and discussions with main actors, on which a strategic plan for implementation will be drafted and will include development and revision of Pilot Actions. Continuous monitoring of incorporated speed management will also be</li> </ul>			

discussed once the strategic plan is implemented.

- Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans.
- Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia. In chapter 7.1 “Safe speed” of the document, an overview table is given which contains measures and activities which support the mentioned interventions.

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Setting of speed limits: elaboration and continuous revision of guidelines &amp; systematic implementation</b> <i>[TA3/ authorities /guidelines]</i>	After “Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches” intervention is implemented.	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 25.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Control of speed is an important aspect in effective and safe management of traffic, which is why an involvement of road authorities in identifying speed-related, safety influence factors on specific locations under their control and subsequently developing guidelines for determining speed limits is important.</li> <li>• How – Speed zoning studies can be conducted to evaluate safety issues and identify appropriate speed limits for specific roadway segments. In addition to actual travel speeds, the data collected can be used to examine the speeds of free-flowing traffic, as well as information on roadway geometry, crash characteristics, etc. and can subsequently be used as an input for speed limit guidelines. Stakeholder consultation should be held involving all relevant main actors, with the purpose of determining the scope of studies and data to be collected, and subsequently, to elaborate the guidelines and systematic implementation based on collected data.</li> <li>• When – after the main national road actors elaborate the guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches. The budget for elaboration and continuous revision of guidelines as well as their systematic implementation will vary based on the scope of implementation projects and data needs, but can be estimated on 25.000 EUR.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) should work in unanimity towards the goal of elaborating the guidelines and developing a plan for their revision and systematic implementation.</li> </ul>				
<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors, the scope of which will be to prepare the action plan for the intervention, collecting and assessing the basic data, and analytical evaluation.</li> <li>• Targeted Road authority level document acknowledging the intervention – Internal company guidelines (if available).</li> <li>• Targeted national document acknowledging the intervention – National</li> </ul>				

Road Safety Programme of The Republic of Croatia. In chapter 7.1 “Safe speed” of the document, an overview table is given which contains measures and activities which support the mentioned interventions.



	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Consistency of speed limits: differentiated speed limits depending on the function, alignment, volume and structure of traffic must be defined, in accordance with the reasonable local speed limits</b> [TA3/ authorities /consistency]</p>	<p>After “Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches” intervention is implemented.</p>	<p>Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 60.000 EUR.</p>	<p>Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">ITS and speed management Road authorities</p>	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Speed limits play a great role from a traffic safety aspect. Differentiated speed limits can significantly improve traffic safety by reducing the speed of heavy vehicles which can in turn act more responsively and stop safely in case an unforeseen situation occurs.</li> <li>• How – Road authorities can perform road safety evaluations and determine road sections which could require the implementation of differentiated speed limits as well as perform constant speed monitoring in order to assess the share of drivers which attain to the speed limit thus gaining an insight in the coherence of the posted speed limit. Based on the results of evaluations, a legislative framework can be formed concerning differentiated speed limits which are depending on the function, alignment, volume and structure of traffic, in accordance with the reasonable local speed limits.</li> <li>• When – After the main national road actors elaborate the guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches. The budget for implementation of differentiated speed limits will vary based on the scope of implementation projects and data needs, but can be estimated on 60.000 EUR.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) should agree on a common principle for differentiated speed limit implementation in order to maintain consistency throughout the road network.</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors, where the development of a methodology for infrastructure revision will be structured and implemented.</li> <li>• Targeted Road authority level document acknowledging the intervention – Internal company guidelines (if available).</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia. In chapter 7.1 “Safe speed” of the document, an overview table is given which contains measures and activities which support the mentioned interventions.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
ITS and speed management Road authorities	<b>Speed enforcement: implementation of section control, minimization of the obstacles in violation processing procedures</b> <i>[TA3/ authorities /enforcement]</i>	After “Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches” intervention is implemented.	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 150.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Section control and fixed speed cameras aim to reduce the number of crashes by enforcing the posted speed limits. While fixed speed cameras measure the driving speed at one specific point, section control measures the average driving speed over a longer road section. Most research regarding speed cameras and section control suggests a favourable impact on road safety.</li> <li>• How – Identification and prioritisation of sites and sections where a violation of traffic rules is common should be followed by an ITS system incorporation which will record vehicles with speed violation, with the purpose of automatic speed violation identification and fining.</li> <li>• When – After the main national road actors elaborate the guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches. The budget for implementing the section control and minimization of the obstacles in violation processing procedures will vary based on the scope of implementation projects and optimisation needs for the procedures but can be estimated on 150.000 EUR.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) should work in unanimity towards the goal of standardising and optimising selection as well as system requirements.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors will take place, developing and implementing the measure.</li> <li>• Targeted Road authority level document acknowledging the intervention – Internal company guidelines (if available).</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia. In chapter 7.1 “Safe speed” of the document, an overview table is given which contains measures and activities which support the mentioned interventions.</li> </ul>			

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Speed data collection and analysis: systematic collection of speed data development in anonymized speed database. Further development of the methodology of analysis (for example speed development by road types, etc.)</b>  <i>[TA3/ authorities /data]</i></p>	<p>After “Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches” intervention is implemented.</p>	<p>Financial resources for the intervention will depend on the scope and the number of activities, but is estimated on around 35.000 EUR.</p>	<p>Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)</p>
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Speed data collection and analysis is an important aspect of road safety. By performing speed data analysis, road authorities gain better insight on the coherence of the posted speed limit signs, road user adherence to the posted speed limit as well as daily average speed fluctuations which could indicate potential problems.</li> <li>• How – Republic of Croatia’s Croatian Roads Ltd. already performs speed data collection and analysis on its road network, results of which are presented in an annual report. Development opportunities lay in the possibility of the process digitalization, which could consist in the development of an online database where road authorities could upload speed data for further analysis.</li> <li>• When – After the main national road actors elaborate the guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches. The budget for speed data collection and analysis system will vary based on the scope of implementation projects and data needs, but is estimated on around 35.000 EUR.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) should work in close cooperation in order to furtherly improve the existing speed data collection method or develop a common speed data collection and analysis database system.</li> </ul>	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors will take place, where the intervention planning, amendments to the legal framework and data collection activities will be further defined.</li> <li>• Targeted Road authority level document acknowledging the intervention – Internal company guidelines (if available).</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia. In chapter 7.13 “Database and data gathering” of the document, an overview table is given which contains measures and activities supporting the development of an integrated database containing traffic flow data.</li> </ul>			

## 4) Safe infrastructure near schools

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Development and support of specific design guidelines for road sections in the vicinity of schools</b> [TA4/ national /guidelines]</p>	2021-2024	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 20.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Safe infrastructure near schools National level</p>	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Children are vulnerable road users that are exposed to increased crash injury risk due to the concurring effects of multiple risk factors. The traffic environment around schools attracts a high number of students daily, and is quite complex for them. Croatia does not collect data specifically on road crashes near schools and there are no specific guidelines for road infrastructure safety around them. However, there are some measures “traditionally” used near schools aiming to enhance road safety.</li> <li>• How – By consulting best practices from the neighbouring countries which have developed the guidelines as well as relevant guidelines from the EU, it would be possible to hold national level workshops and consultations where most comparable best practices regarding design guidelines for road sections in the vicinity of schools can be identified and adapted for Croatia. Measures used “Traditionally” should also be assessed and incorporated into guidelines if acceptable on mentioned workshops and consultations.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 20.000 EUR. Planned period of the activity is 2021-2024.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) should be involved in Development and support of specific design guidelines for road sections in the vicinity of schools.</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors regarding best practices for design guidelines near school zones and incorporation of “traditional” solutions.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools National level	<b>Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools</b> <i>[TA4/ national /funding]</i>	2021- 2024	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 20.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Adequate funding is necessary in order to implement appropriate traffic calming and traffic safety measures thus increasing traffic safety on primary roads within the proximity of schools and shielding the most vulnerable road users.</li> <li>• How – Stakeholder consultation should be held with relevant main actors with the goal of identifying challenges and providing the legal framework which will ensure sufficient funding to implement all the necessary traffic safety measures, as well as the optimised development of tenders and tender systems.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities. The fund for School road safety amount should be determined thereafter, but the scope of work can be estimated on 20.000 EUR. Planned period of the activity is 2021-2024.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) should be involved in ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors should be performed in order to ensure adequate funding for road safety interventions on primary roads in the vicinity of schools.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Systematic collection of data on road crashes near schools and related casualties</b> <i>[TA4/ national /data]</i>	After “Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools” intervention is implemented	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 15.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
Safe infrastructure near schools National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – It is important to implement a systematic, high-quality road safety data collection and analysis to plan interventions/investments on most critical locations in school zones in order to gain insight on circumstances which influence road traffic accident occurrence and to spot trends in road traffic accident number increase or potential decrease.</li> <li>• How – Relevant national authorities should provide legal framework for the development of road traffic accident databases containing high-quality road safety data. Stakeholder consultation activities should be held with the goal of agreeing on the properties of data and collection methodology before the implementation-oriented consultations commence. Case studies with high availability and transferability from countries with similar conditions should also be looked at during stakeholder consultations.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities but can be estimated on 15.000 EUR. Planned period of the activity is a period shortly after “Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools” intervention is implemented.</li> <li>• Who – Relevant national main actors should be involved in the systematic, reliable road safety data collection, which will ensure the feasibility of data analysis to plan interventions/investments on most critical locations for school zones.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors should be conducted regarding the implementation of the intervention through the preparation of the action plan, defining the scope of the project, data collection and subsequent analysis.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools National level	<b>Systematic collection and publishing of key performance indicators on the road network around schools</b> <i>[TA4/ national /indicators]</i>	After “Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools” intervention is implemented.	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated to be from 40.000 to 60.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Key Performance Indicator (KPI) for road safety is any variable which is used in addition to statistics on accidents or injuries to measure changes in operational conditions. KPI’s use qualitative and quantitative information to help determine how well a road safety programme achieves its objectives.</li> <li>• How – By utilising and systematically studying key performance indicators in school zones, it will be possible to track progress over time and define effectiveness of the implemented countermeasures. Multiple stakeholder consultations which involve main key actors should be initiated in order to determine key performance indicators and the collection methodology. Publication of the results also needs be considered within later stages of stakeholder consultations in order to determine the optimal way of communicating the results which should have the highest impact, transparency and reach.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities but can be estimated to be from 40.000 to 60.000 EUR. Planned period of the activity is a period shortly after “Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools” intervention is implemented.</li> <li>• Who – Relevant national main actors such as Ministries, Research institutions and State agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) should be involved in the systematic collection and publishing of key performance indicators on the road network around schools.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors should be held on the topic of identifying and implementing strategic and legal framework, KPI collection methodology and scope as well as eventual software development and publishing concerning key performance indicators of the road networks around schools.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Regional and local level	<b>Ensuring adequate funding for road safety interventions in local roads in the vicinity of schools</b> <i>[TA4/ regional /funding]</i>	In accordance with “Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools” intervention or slightly after it’s implementation.	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 20.000 EUR.	County road authorities, County governing bodies, local and regional stakeholders.
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Adequate funding is necessary in order to implement appropriate traffic calming and traffic safety measures thus increasing traffic safety on local roads within the proximity of schools and shielding the most vulnerable road users.</li> <li>• How – Stakeholder consultation should be held with relevant main actors with the goal of identifying challenges and discussing on how best to utilise legal framework which ensures sufficient funding to implement all the necessary traffic safety measures.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities but can be estimated on 20.000 EUR. Available funds for funding the road safety interventions will be decided on Key Actor’s roundtables. Planned period of the intervention should be parallel with “Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools” national level intervention or slightly after it’s implementation.</li> <li>• Who – Relevant regional and local level authorities should be involved in ensuring adequate funding for road safety interventions within local roads in school’s proximity.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Regional and local uptake activities – Multiple workshops, roundtables and discussions with main actors should be held on a local level where the planned intervention will be studied and discussed in detail by main actors. Tender system which was developed within “Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools” intervention should be exploited.</li> <li>• Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans.</li> </ul>			



	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Systematic collection of data on road crashes near schools and related casualties</b> <a href="#">[TA4/ regional /data]</a>	After “Ensuring adequate funding for road safety interventions in local roads in the vicinity of schools” intervention is implemented.	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 15.000 EUR.	County road authorities, County governing bodies, local and regional stakeholders.
Safe infrastructure near schools Regional and local level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – It is important to implement a systematic, high-quality road safety data collection and analysis to plan interventions/investments on most critical locations in school zones in order to gain insight on circumstances which influence road traffic accident occurrence and to spot trends in road traffic accident number increase or potential decrease.</li> <li>• How – By utilising and systematically studying data on road crashes near school zones, it will be possible to track progress over time and define effectiveness of the implemented countermeasures and enable prioritisation. Multiple stakeholder consultations which involve main key actors should be initiated in order to determine data properties and collection methodology. Publishing of the results also needs be considered within later stages of stakeholder consultations in order to determine the optimal way of communicating the results which should have the highest impact, transparency and reach.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities but can be estimated on 15.000 EUR. Planned period of the activity is a period shortly after “Ensuring adequate funding for road safety interventions in local roads in the vicinity of schools” intervention is implemented.</li> <li>• Who – Relevant regional and local level authorities should be involved in systematic collection of data on road crashes near schools and related casualties.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Regional and local uptake activities – Multiple workshops, roundtables and discussions with main actors should be held on a local level where the planned intervention elements will be studied and discussed in detail by main actors, namely concept plan, defining the scope and locations for the project, data collection and filtering and subsequent data analysis.</li> <li>• Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Educational campaigns to promote safer transport to/ from schools</b> <i>[TA4/ regional /campaigns]</i>	After “Ensuring adequate funding for road safety interventions in local roads in the vicinity of schools” intervention is implemented.	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 35.000 EUR.	County road authorities, County governing bodies, local and regional stakeholders.
Safe infrastructure near schools Regional and local level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Traffic culture and public awareness have been observed to have a significant impact on traffic safety near schools while at the same time, actions targeted on traffic culture change and increase of public awareness are being considered as soft measures which are relatively cheap and simple to perform.</li> <li>• How – Campaigns, events and other activities should be organized, targeting a broader audience, namely broader public, relevant NGO’s and parents as well as children with the goal of providing information which can positively impact road users. Main actor’s consultations and workshops should be conducted beforehand in order to determine the scope and target of activities assumed under this intervention.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities but can be estimated on around 35.000 EUR. Planned period of the activity is a period shortly after “Ensuring adequate funding for road safety interventions in local roads in the vicinity of schools” intervention is implemented.</li> <li>• Who – Relevant regional and local level authorities should be involved in educational campaigns planning with the goal of promoting safer transport to/ from schools.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Regional and local uptake activities – Multiple workshops, roundtables and discussions with main actors should be held in order to accurately assess the scope and the reach of the campaigns, with the focus on elaborating the themes, developing the legal frameworks and building capacity.</li> <li>• Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools Road authorities	<b>Observation of road safety trends and good practices to plan maintenance and upgrades of existing road network in the vicinity of schools</b> <i>[TA4/ authorities /good_practice]</i>	2023 - 2024	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 35.000 EUR	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Observing road safety trends, good practices and approaches is an important factor which can provide tangible outcomes, which can form a reliable foundations for determining optimal upgrades and maintenance of the existing road network in the vicinity of schools.</li> <li>• How – Knowledge transfer must be grounded in actual practice in a 'learning by doing' model, backed with sufficient targeted investment. Strong and sustained cooperation will be required in order to optimise knowledge transfer with demonstrations of good practices and approaches for road authorities, by utilising resources and support services to their maximum potential. Workshops and consultations should be held concerning identifying positive safety trends and good practices from identified knowledge bases, which can be utilised in order to plan maintenance and upgrades standards as well as prioritisation.</li> <li>• When – Intervention period should be between 2023-2024. Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on 35.000 EUR.</li> <li>• Who – <i>Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) should be involved in observation of road safety trends and good practices to plan maintenance and upgrades of existing road network in the vicinity of schools.</i></li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors with the goals of identifying positive safety trends and good practice examples concerning maintenance and upgrades of the existing road network in the vicinity of schools, namely through organising an expert’s communication platform, case studies repository and defining the minimum standards.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools Road authorities	<p><b>Use of appropriate methodologies to identify hazardous locations near schools and the causes of road safety problems, identify intervention priorities and implement countermeasures</b> [TA4/ authorities /methodology]</p>	2022-2023	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 15.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• <i>Why – Use of appropriate methodologies to identify hazardous locations near schools should be conducted in order to eliminate any subjectivity from the selection criteria, since an evidence-based methodology will be utilised to select the critical locations.</i></li> <li>• <i>How – Various methodologies can be utilised for selecting most critical locations based on a number of relevant factors and available data, and parameters such as benefit-cost ratio of investment, fatalities saved over the observed period, cost per fatalities saved, etc. Consultations and workshops should be held including relevant main actors, on which assessing various parameters and data availability per suggested methodology should be performed, with an appropriate methodology selected in later stages.</i></li> <li>• <i>When – Planned period of the intervention is 2022-2023. Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on 15.000 EUR.</i></li> <li>• <i>Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) and other relevant key actors should be involved in the identification and utilisation of appropriate methodologies which identify hazardous locations near schools and the causes of road safety problems.</i></li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors with the goal of identifying and utilising the methodologies to identify hazardous locations near schools and the causes of road safety problems, as well as intervention priorities identification and countermeasure implementation, with the focus on preparing the intervention actions, defining the area and the scope, as well as data collection, filtering and analysis.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	<b>Carrying out of “before and after” studies to evaluate the road safety effect of implemented interventions</b> <i>[TA4/ authorities /impact]</i>	2023-2026	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 125.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Evaluation of any work is important because it demonstrates how effective that activity has been. There are many ways to evaluate improvements to road infrastructure to check that they are reducing risk. It is possible to monitor safety at particular locations or over networks as a whole. Over a long period of time, it is possible to check if the number of crashes has reduced at locations where infrastructure has been changed which is the basic premise of “before and after” studies.</li> <li>• How – It is necessary to ensure that any change to the road system has the desired effect and to know the effectiveness of the engineering countermeasures used. More generally, there is a need to know that countermeasures are effective so as to maximise benefits from limited budgets and assess whether targets have been met. “Before and after” studies also show how a process can be improved, filling gaps in knowledge and ensures that optimal countermeasures can be implemented in future projects. Consultations with the relevant key actors should be held in order to determine best approach towards “Before and after” studies, in which elements of the studies should be determined. Afterwards, “Before and after” studies should be carried out and once the results are available, should be published and made available to the broader public. Result dissemination and the scope of communicating the results should also be decided within follow-up consultations including all relevant key actors.</li> <li>• When – Planned period of the intervention is 2023-2026. Financial resources for the intervention will depend on the scope and the number of activities but can be estimated on 125.000 EUR.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) should be involved in carrying out of “before and after” studies to evaluate the road safety effect of implemented interventions.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors with the goal of carrying out of “before and after” studies to evaluate the road safety effect of implemented interventions.</li> </ul>			

## 5) Transport safety and COVID-19

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Reviewing the default speed limit for rural roads and adapting where necessary, with a focus on preventing collision forces that humans cannot survive or would cause serious injury</b>  <i>[TA5/ national / speed limit]</i></p>	2022-2024	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on 20.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
Transport safety and COVID-19 National level	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Recent research investigating the relation between population density and deaths from traffic collisions in COVID19 era points out that rural areas where roads are less crowded, account for a disproportionately high share of traffic fatalities (higher than in urban area), shrinking the gap in death rates between rural areas and cities in 2020. This intervention is in accordance with the “Harmonization of speed limits on roads” measure, listed in chapter 7.1 “Safe speed” of National Road Safety Programme of The Republic of Croatia.</li> <li>• How – An expert work group should be established, with the goal of reviewing speed limits in rural area of Croatia, on rural roads where a high risk of an accident occurring exists. Speed limits on rural roads should be assessed in a relation to a number of accidents where inadequate driving speed was a primal causation of an accident leading to a death or serious injury on rural roads. Stakeholder consultation should be held afterwards and should include all relevant main actors in order to further discuss the topic. Consultations should elaborate the results published by the work group and should ensure adequate tools for a stakeholder feedback loop, after which interventions can be prioritised.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of total activities, but can be estimated on 20.000 EUR. Planned period of the intervention is 2022-2024.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) should be involved in reviewing the default speed limit for rural roads in Croatia.</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• National uptake activities – After establishing the main work group for the task and publishing the results, multiple workshops, stakeholder consultations and discussions with main actors should be performed in order to ensure a smooth and adequate implementation of default speed limit for rural roads intervention through developing the action plan for the intervention, collecting and assessing the basic data, and analytical evaluation.</li> </ul>			

- Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 7.1 “Safe speed” of the document recognises the importance reviewing speed limits on road sections where speed is the primary cause for road accidents.

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Setting the necessary steps to implement a Safe System, with special emphasis on rural roads, so that they eventually become self-explaining and forgiving to human error</b> <i>[TA5/ national / SafeSystem]</i>	2021-2025	Financial resources for the intervention will depend on the scope and the number of activities. Preparation for the intervention is estimated to be from 5.000 to 15.000 EUR	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
Transport safety and COVID-19 National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – In COVID 19 era, it was found out that the number of fatalities was reduced less than the reduction rate of kilometres driven (hence fatality risk increased). Some of the countries even reported an increase of fatalities on rural roads. In Safe system approach, mistakes committed by a road users should be “forgiven” and if accident do occur, they should not lead to deaths or serious injuries. National Road Safety Programme of The Republic of Croatia is based on a Safe System approach.</li> <li>• How – Establishing steps needed for a Safe System approach should involve constant and multidisciplinary action from various main actors, working towards the goal of preparing the groundwork for elevating the level of traffic safety. All actors should coordinate the tasks and requirements regularly and accordingly, based on the situation. Aside from main actors, a key role of laying out the foundation for a Safe System approach belongs to various stakeholders such as legal entities, non-governmental organisations, insurance companies, research institutions, etc., which should be identified and involved into the process.</li> <li>• When – Timeframe for the intervention is set on the period between 2021-2025. Financial resources required for the intervention will depend on the goal which relevant main actors will find acceptable. Preparation for the intervention is estimated to be from 5.000 to 15.000 EUR</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) as well as other relevant stakeholders should be involved, and should work in unison in order to coordinate the intervention.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors should take place, where the incorporation of Safe System approach steps within their spheres of influence can be discussed in detail.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 3.3 “Safe system approach” of the document recognises the importance of Safe System approach, and states that the document is in accordance with the Safe System approach.</li> </ul>			



	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Providing police forces and other enforcement entities with adequate resources and legal precautions for re-instated &amp; intensified and effective speed enforcement</b> [TA5/ national / enforcement]</p>	2022-2026	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 30.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Transport safety and COVID-19 National level</p>	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Recent research shows that a proportion of extensive violations with driving speed levels was three times higher since the beginning of the COVID-19 pandemic. Furthermore, speeding-related deaths rose by 23% in some countries. This intervention is in accordance with the “Optimising speed control enforcement” measure, listed in chapter 7.1 “Safe speed” of National Road Safety Programme of The Republic of Croatia</li> <li>• How – National level framework should be established, determining the scope, availability and procedures regarding Providing police forces and other enforcement entities with adequate resources and legal precautions for re-instated &amp; intensified and effective speed enforcement. Workshops and stakeholder consultations should be held with relevant administrative and national bodies, as well as with other key actors, which will determine the resource allocation scope and available sources.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of total activities, but can be estimated on 20.000 EUR. Planned period of the intervention is 2022-2026.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) should be involved in determining the framework for providing police forces and other enforcement entities with adequate resources and legal precautions for re-instated &amp; intensified and effective speed enforcement</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, consultations and discussions with main actors should be conducted on the subject, where details concerning the provision of police forces and other enforcement entities with adequate resources and legal precautions will be covered by ensuring the legislative framework and drafting of the documentation which will enable the decision making regarding the intervention.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 7.1 “Safe speed” of the document recognises the importance of adequate speed enforcement.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Transport safety and COVID-19 National level	<b>Considering tougher legal sanctions for excessive speed violations, such as higher and income-dependent fines, prolonged licence withdrawal, and confiscation of vehicles</b> <i>[TA5/ national / sanctions]</i>	2022-2025	Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 30.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Speed enforcement aims to prevent drivers exceeding the speed limit by penalizing those who do. This not only affects the speed violators who actually get caught (specific deterrence), but also those who see or hear that others got caught (general deterrence). Speed enforcement will remain an essential speed management measure as long as the speed problem is not solved in a structural way by road design, engineering measures or in-vehicle technology. Police enforcement can be a very effective measure, even though the effects are limited both in time and place. Placing an emphasis on tougher legal sanctions for drivers who are caught in excessive speeding can have a very positive effect by deterring the other drivers who would otherwise be inclined to speed themselves, as well as preventing the violator to repeat the speeding.</li> <li>• How – The Incorporation of tougher legal sanctions for excessive speed violations should be defined by means of legal framework. Stakeholder consultations involving relevant key actors should be held on the topic, determining the legal framework in the process.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities, but can be estimated on around 30.000 EUR. Planned period of the activity is 2022-2025.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) should be involved in consideration regarding tougher legal sanctions for excessive speed violations, such as higher and income-dependent fines, prolonged licence withdrawal, and confiscation of vehicles.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors regarding the establishment of legal framework concerning tougher legal sanctions for excessive speed violations will be conducted, with an emphasis on defining the implementation activities and analysing relevant national documents, conducting a risk analysis, developing a sanction proposal package and amending the relevant legal framework.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Encouraging the use of seatbelts in passenger cars through awareness and enforcement measures</b> <i>[TA5/ national / seatbelt]</i>	2022 - 2025	Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on around 15.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
Transport safety and COVID-19 National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – International research states that while collisions declined overall in 2020 compared to 2019 (by 24%), the share of collisions involving not wearing a seatbelt increased in 2020 compared to the years before. A notable proportion of drivers indicated that they were more likely to engage in risky behaviours during the pandemic than before. Regarding seatbelt usage, 7.1% of drivers were more likely to not wear a seatbelt. This intervention is in accordance with the “Enforcement” measure, listed in chapter 7.12 “Reinforcing the capacities of traffic police and inspection services” of National Road Safety Programme of The Republic of Croatia</li> <li>• How – National stakeholder consultations and workshops should be planned, involving all relevant key actors and media, with the goal of assessing the scope of seatbelt usage awareness campaigns. At the same time, work group should be formed with all the relevant key actors in order to provide legal framework for assessing the current practice as well as optimising enforcement measures which should contribute to increasing the seatbelt usage.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of total activities, but can be approximated on around 15.000 EUR. Planned period of the intervention is 2022-2025.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) should be involved in encouraging the use of seatbelts in passenger cars through awareness and enforcement measures.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, consultations and discussions with main actors should be conducted on the subject, where details concerning the encouraging of the use of seatbelts in passenger cars through awareness and enforcement measures should be identified, elaborated and assessed, with a special emphasis on listing the implementation activities, studying relevant national and global research and case studies, and promotional activities.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the</li> </ul>			

	RADAR project. Chapter 7.12 “Reinforcing the capacities of traffic police and inspection services” of the document recognises the importance of seatbelt usage.
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	Intervention	Time frame	Financial resources	Main actor(s)
Transport safety and COVID-19 Regional and local level	<b>Placing high priority on enforcement and educational &amp; awareness-raising activity to curb inappropriate speeds</b> <i>[TA5/ regional /speed]</i>	2023-2026	Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on 3.500.000 EUR	County road authorities, County governing bodies, local and regional stakeholders.
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Recent research shows that a proportion of extensive violations with speed levels was three times higher since the beginning of the COVID-19 pandemic. Furthermore, speeding-related deaths rose by 23% in some countries.</li> <li>• How – Stakeholder consultations and workshops should be planned, involving all relevant key actors and media, with the goal of assessing the scope of educational and awareness raising activities and campaigns on regional and local levels. At the same time, regional and local level work group should be formed with all the relevant key actors in order to assess provided national-level framework concerning enforcement measures, and their applicability for a given region. Scope of actions should include developing a detailed structure of implementation activities, amending relevant national documents, developing a national program against speeding, development and implementation of a campaign, preparation of legal framework legislation.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities, but can be approximated on 3.500.000 EUR. Planned period of the intervention is 2023-2026.</li> <li>• Who – Relevant regional and local level authorities should be involved in placing high priority on enforcement and educational &amp; awareness-raising activity to curb inappropriate speeds intervention.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Regional and local uptake activities – Multiple workshops, roundtables and discussions with main actors should be held on a local level where the planned intervention will be studied and discussed in detail by main actors.</li> <li>• Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Transport safety and COVID-19 Regional and local level	<p><b>Considering the implementation of a 30 km/h limit in urban areas (potentially excluding major urban thoroughfares) and other traffic calming measures</b>  <a href="#">[TA5/ regional /traffic_calming]</a></p>	2023-2025	Financial resources for the intervention will depend on the scope and the number of activities, but the scope of the preparatory work can be approximated on 15.000 EUR.	County road authorities, County governing bodies, local and regional stakeholders.
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Research has shown that reducing driver speeds in built-up areas reduce injuries for all road users, including motorists, bicyclists, and pedestrians. The link between vehicle speed and pedestrian crash severity has been established by research studies, with crash severity increasing as a function of motor vehicle speeds. If a vehicle hits a pedestrian while traveling 24 km/h most pedestrians will survive a crash, often sustaining only minor injuries. Minor increases in impact speed have been shown to have a profound effect on crash severity. At 40 km/h almost all crashes result in severe injuries and roughly half are fatal.</li> <li>• How – Stakeholder consultation should be held with relevant main actors with the goal of identifying challenges and discussing on how best to form legal framework regarding the implementation of 30/km speed limits in urban areas. Regional and local feasibility studies should then be carried out, with the purpose of identifying challenges and proposing solutions for regarding specific urban areas.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities but the scope of the preparatory work can be approximated on 15.000 EUR. Planned period of the intervention is 2023-2025.</li> <li>• Who – Relevant regional and local level authorities should be involved in the implementation consideration of a 30 km/h limit in urban areas, and other traffic calming measures.</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• Regional and local uptake activities – Multiple workshops, roundtables and discussions with main actors should be held on a local level where the planned intervention will be studied and discussed in detail by main actors.</li> <li>• Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Transport safety and COVID-19 Regional and local level	<b>Aiding in achieving the apparently higher usage levels of active mobility (walking, cycling) sustainable by providing them with safe facilities and an adequate share of road space</b> <a href="#">[TA5/ regional /active_mobility]</a>	2023-2025	Financial resources for the intervention will depend on the scope and the number of activities, but the scope of the activity is approximated on 25.000 EUR.	County road authorities, County governing bodies, local and regional stakeholders.
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Research results indicate that while traffic (with regard to all motor vehicles) decreased during COVID-19 lockdown, walking and cycling traffic shares have increased significantly. In order to support and maintain this share, safe facilities and an adequate share of road space should be attributed for both active mobility modes.</li> <li>• How – Consultations and workshops which will involve all relevant local and regional stakeholders, as well as relevant key actors should be carried out in order to assess how best to secure sustainability of active mobility modes.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities but the scope of the activity is approximated on 25.000 EUR. Planned period of the intervention is 2023-2025.</li> <li>• Who – Relevant regional and local level authorities should be involved in activities related to the implementation of achieving the apparently higher usage levels of active mobility (walking, cycling) sustainable by providing them with safe facilities and an adequate share of road space.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Regional and local uptake activities – Multiple workshops, roundtables and discussions with main actors should be held on a local level where the planned intervention will be studied and discussed in detail by main actors.</li> <li>• Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Transport safety and COVID-19 Regional and local level	<b>Setting the necessary promotive steps to re-establish the modal share of public transport – by far the safest and most sustainable transport mode – at least to pre-pandemic levels</b> <i>[TA5/ regional /public_transport]</i>	2023-2025	Financial resources for the intervention will depend on the scope and the number of activities, but the scope of the activity is approximated on 400.000 EUR.	County road authorities, County governing bodies, local and regional stakeholders.
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – During COVID-19 pandemic, a drop in people using public transport with the beginning of measures imposed by the governments has significantly dropped. After pandemic restrictions were lifted, research suggests that all modes of transport have begun slowly recovering whereas the increase in public transport was considerably lower and it remained significantly reduced with the slowest recovery rate.</li> <li>• How – Consultations and workshops which will involve all relevant local and regional stakeholders, as well as relevant key actors including public transport representatives, should be carried out in order to assess how best to ensure the recovery of public transport modes.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities, but the scope of the activity is approximated on 400.000 EUR. Planned period of the intervention is 2023-2025.</li> <li>• Who – Relevant regional and local level authorities should be involved in Setting the necessary promotive steps to re-establish the modal share of public transport at least to pre-pandemic levels</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Regional and local uptake activities – Multiple workshops, roundtables and discussions with main actors should be held on a local level where the planned intervention will be studied and discussed in detail by main actors, with an emphasis on establishing a work group, reviewing and updating the tariff systems for public transport and awareness raising/promotional activities.</li> <li>• Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
Transport safety and COVID-19 Road authorities	<b>Establishing an evidence base to prioritise infrastructure investments based on safety: crash locations, traffic flows, speed levels, road infrastructure design &amp; safety data</b> <i>[TA5/ authorities /prioritisation]</i>	2021-2030	Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on 20.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd. , Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Establishment of an evidence base which can be used for prioritising infrastructure investment should be conducted in order to eliminate any subjectivity from the selection criteria of the investment, since an evidence base will be utilised to select the most appropriate locations.</li> <li>• How – Various stakeholder consultations which involve all relevant key actors should be conducted, on which a proper evidence base structures can be determined. Established Base should be utilised for selecting most critical locations based on a number of relevant factors and available data, such as crash locations, traffic flows, speed levels, road infrastructure design &amp; safety data, etc. Following the initial stakeholder consultation, a follow-up Consultations and workshops should be held with relevant main actors, during which an assessment of various parameters and data availability should be determined.</li> <li>• When – Planned period of the intervention is 2021-2030. Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on 20.000 EUR.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) and other relevant key actors should work in unanimity towards the goal of selecting the methodology which has the best chance to yield optimal and reliable results.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors, with the goal of establishing an evidence base to prioritise infrastructure investments based on safety.</li> </ul>			



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Transport safety and COVID-19 Road authorities	<b>Ensuring that for each road construction, reconstruction or maintenance project, the implementation of Safe System principles is considered</b> <i>[TA5/ authorities /SafeSystem]</i>	2021-2024	Financial resources for the intervention will depend on the scope and the number of activities, but preparation can be approximated on 15.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – European Union in 2020 based its policy framework regarding traffic safety, in the period between 2021 and 2030, on the “Safe System Approach” in order to implement a holistic approach and increase traffic safety by targeting all relevant factors, including the safety of VRU’s. Additionally, National Road Safety Programme of The Republic of Croatia is also based on a Safe System approach.</li> <li>• How – Ensuring that for each road construction, reconstruction or maintenance project, the implementation of Safe System principles is considered should be defined by means of legal framework. Stakeholder consultations involving relevant key actors should be held on the topic, determining the legal framework in the process.</li> <li>• When – Planned period of the intervention is 2021-2024. Financial resources for the intervention will depend on the scope and the number of activities, but preparation can be approximated on 15.000 EUR.</li> <li>• Who – Main Road authority actors (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.) and other relevant key actors should work in unanimity towards the goal of selecting the methodology which has the best chance to yield optimal and reliable results.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions with main actors, with the goal of ensuring that for each road construction, reconstruction or maintenance project, the implementation of Safe System principles is considered.</li> </ul>			

## 6) Road Infrastructure Safety Management Directive 2019/1396/EC (RISM) in Danube area

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
RISM in Danube area National level	<b>Defining the Primary road network, including roads where at least 50% of fatal and serious accidents occur</b> <i>[TA6/ national /primary]</i>	By 17 December 2021	Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on 10.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – A large proportion of road accidents occur on a small proportion of roads where traffic volumes and speeds are high and where there is a wide range of traffic travelling at different speeds. Each Member State is required to deliver to EC, by 17 December of 2021, the list of motorways and primary roads on its territory and, thereafter, any subsequent changes which are made to the primary road network.</li> <li>• How – Multiple national level consultations should be held with relevant main actors in order to designate the primary road network which will be subject to treatment in accordance with Directive 2019/1936. Primary roads other than motorways should include all roads belonging to the highest category of road below the category ‘motorway’ in the national roads classification. Network should also include roads where at least 50% of fatal and serious accidents occur.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on 10.000 EUR. Planned period of the activity is by 17 December 2021.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) as well as other relevant stakeholders as regional road authorities should be involved, and should work in unison in order to coordinate the intervention.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions should be held in order to accurately define the Primary road network.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 7.9 “Safe infrastructure” mentions a measure which supports the intervention within the respective overview table.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
RISM in Danube area National level	<b>Setting up a country specific national classification criteria in order to enable proper classification of high, medium and low risk roads, based on accident reduction potential as a direct consequence of road infrastructure improvements</b> <i>[TA6/ national /classification]</i>	2021-2024	Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on 60.000 EUR	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – A large proportion of road accidents occur on a small proportion of high-risk roads. Setting up country specific national classification criteria in order to enable proper classification of levels of risk on national network is important, since policies and funding aimed towards targeting high risk roads with frequent accidents can be achieved more easily, once an unified classification is established.</li> <li>• How – In order to ensure that such classification has been properly conducted, multiple national level consultations should be held with relevant main actors in order to designate the proper methodology for classifying the road network based on risk. Multiple risks variations should be assessed, such as individual and community risks.</li> <li>• When – Timeframe for the intervention is set on the period between 2021-2024. Financial resources required for the intervention will depend on the classification methodology and the input data which will be required and which relevant main actors will find acceptable, but can be approximated on 60.000 EUR.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) as well as other relevant stakeholders should be involved, and should work in unison in order to coordinate the intervention.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors should take place, where the classification of a national road network based on based on accident reduction potential as a direct consequence of road infrastructure improvements can be discussed in detail, with an emphasis on preparing an evaluation material for stakeholders and key actors, possibility of incorporating iRAP methodology, as well as revising and amending the legal framework.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
RISM in Danube area National level	<b>Ensuring that Safe System concept is built-in in all road infrastructure related legal acts</b> <i>[TA6/ national /SafeSystem]</i>	2021-2024	Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on 10.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – National Road Safety programme of The Republic of Croatia states that a safe system based approach recognises the fact that road users have a tendency to make mistakes and reshapes the road safety policies accordingly, focusing primarily on a reduction of fatalities and serious injuries (Chapter 3.3 “Safe system approach”). In Safe system approach, mistakes committed by a road users should be “forgiven” and if accident do occur, they should not lead to deaths or serious injuries. National Road Safety Programme of The Republic of Croatia is based on a Safe System approach, and therefore, embedding of Safe System concept in all road infrastructure related legal acts should be ensured.</li> <li>• How – Incorporating the Safe System approach in all road infrastructure related legal acts should involve constant and multidisciplinary action from various key actors on multiple stakeholder consultations, where exact steps for the intervention will be determined. All actors should coordinate the tasks and requirements regularly and accordingly, based on the situation. Aside from main actors, a key role in the incorporating the Safe System approach in all road infrastructure related legal acts belongs to various stakeholders such as legal entities, non-governmental organisations, insurance companies, research institutions, etc., which should be identified and also involved into the process through various stakeholder consultations.</li> <li>• When – Timeframe for the intervention is set on the period between 2021-2024. Financial resources required for the intervention will depend on the goal which relevant main actors will find acceptable, but can be approximated on 10.000 EUR.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) as well as other relevant stakeholders should be involved, and should work in unison in order to coordinate the intervention.</li> </ul>			
<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors should take place, where the incorporation of Safe System approach steps within road infrastructure related legal acts and legal framework amendments can be discussed in detail.</li> </ul>				

	<ul style="list-style-type: none"> <li>Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 3.3 “Safe system approach” of the document recognises the importance of Safe System approach, and states that the document is in accordance with the Safe System approach.</li> </ul>
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RISM in Danube area National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Ensuring that special attention is given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure</b> <i>[TA6/ national /VRU]</i>	2024-2026	Financial resources for the intervention will depend on the scope and the number of activities, and can be approximated on 15.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>Why – Active modes of transport or Vulnerable road users represent a share of 32% in the serious injury accident statistics. Considering the sustainability of the transport system, a lot of focus needs to be given to VRU's in order to decrease the negative trend of traffic accidents.</li> <li>How – Campaigns, events and other activities should be organized, targeting a broader audience and providing information which can positively impact Active modes of transport. Relevant stakeholders, key actors and authorities should be identified and included within stakeholder consultations concerning the impact and the application of selected vulnerable road user road infrastructure.</li> <li>When – Financial resources for the intervention will depend on the scope and the number of activities, and can be approximated on 15.000 EUR. Planned period of the activity is 2024-2026.</li> <li>Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) as well as other relevant stakeholders should be involved, and should work in unison in order to coordinate the intervention.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>National uptake activities – Multiple workshops, roundtables and discussions with main actors by drafting and implementing the possibilities of extending technical regulation, estimation of the expected resource requirements, and development of the concept action document.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
RISM in Danube area National level	<p><b>Ensuring that all investment plans in road infrastructure safety improvements should be made based on cost/benefit analysis with modelling of savings in terms of fatal and serious injuries prevented</b></p> <p><i>[TA6/ national /investment]</i></p>	2025-2029	Financial resources for the intervention will depend on the scope and the number of activities, but it can be estimated on around 25.000 EUR	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – A positive effect on traffic safety increase can only be possible if resources which are attributed to road safety are invested effectively. This can be achieved through investment plans in road infrastructure safety improvements, which should be made based on cost/benefit analysis with modelling of savings in terms of fatal and serious injuries prevented.</li> <li>• How – A series of national level consultations should be held, involving all relevant key actors and stakeholders in order to determine the exact properties of road infrastructure investment plans. Investment plans should contain a prioritised list of countermeasures that can cost-effectively improve road safety and reduce infrastructure-related risk. The plans should be based on an economic analysis of a range of countermeasures, which is undertaken by comparing the cost of implementing the countermeasure with the reduction in crash costs that would result from its implementation. The plans should contain extensive planning and engineering information such as road attribute records, countermeasure proposals and economic assessments of a road network. The plan should also estimate how many lives and serious injuries are likely to be saved along with economic analysis, if the suggested treatments are implemented.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities, but it can be estimated on around 25.000 EUR. Planned period of the activity is 2025-2029.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) as well as other relevant stakeholders should be involved, and should work in unison in order to coordinate the intervention.</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions with main actors. Discussion with main actors should develop and present the methodology, explore legal necessities and prepare amendments to national legislation if necessary.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
RISM in Danube area National level	<b>Raising the minimal road safety design standards for new and existing road infrastructure</b> <i>[TA6/ national /standards]</i>	2023 - 2026	Financial resources for the intervention will depend on the scope and the number of activities, but it is approximated on 300.000 EUR.	Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Within National Road Safety Programme of The Republic of Croatia, it is emphasised that by the end of year 2030, all new roads should satisfy a minimum of three or more star safety rating, for all road users. Existing roads where a 75% of the traffic is conducted also needs to be rated three or more safety rating stars for all road users which utilise the road (chapter 4 “Vision and goals”). This goal can partially be achieved through accordingly raising minimal road safety design standards on a national level.</li> <li>• How – National Road Safety programme has determined a minimum safety rating of three or more stars for both new and existing high traffic roads. Consequently, minimal road safety design standards for new and existing road infrastructure should be raised, bearing this in mind. Minimal road safety design standards establishment for a national level can be achieved through establishing a stakeholder consultation with all relevant key actors and stakeholders.</li> <li>• When – Timeframe for the intervention is set on the period between 2023-2026. Financial resources required for the intervention will depend on the goals which relevant main actors will find acceptable, but it is approximated on 300.000 EUR.</li> <li>• Who – Relevant Ministries, Research institutions and state agencies (i.e. Ministry of the Sea, Transport and Infrastructure, Ministry of the Interior, Croatian Auto Club...) should be involved.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• National uptake activities – Multiple workshops, roundtables and discussions on the topic of determining the national minimal standard for road designs with main actors should be held, with an emphasis on identifying and defining the implementation activities, proposing amendments to relevant national documents, reviewing technical regulation, analysing accident data and collection best practices.</li> <li>• Targeted national document acknowledging the intervention – National Road Safety Programme of The Republic of Croatia recognised the RADAR project. Chapter 7.9 “Safe infrastructure” and chapter 4 “Visions and goals” of the document contains measures, goals and activities supporting the mentioned intervention within the respective overview tables.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
RISM in Danube area Regional and local level	<b>Ensuring that road safety audit and inspection procedures should be performed on regional road network based on crash occurrence analysis</b> <i>[TA6/ regional /audit]</i>	2022-2024	Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on 1.000.000EUR	County road authorities, County governing bodies, local and regional stakeholders.
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Most new roads will improve road safety – but maybe not to the maximum extent possible. Even if the standards for new roads and the roads in use are fulfilled, certain factors might still impact road safety negatively on some sections. While RISM directive dictates the usage of RSA and RSI on TEN-T and primary national road networks, regional roads will still largely benefit from the procedures in terms of improved road safety, especially when utilised on segments where crash risk is high.</li> <li>• How – The procedure has to be determined on a regional-level stakeholder consultation which will include all relevant key actors. The existing procedures can be adapted, and the new procedures should be included in the existing programmes with as little disruption as possible. Responsibilities have to be defined and guidelines have to be developed or, since international guidelines are available already, these can be adapted to the regional needs.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on 1.000.000 EUR. Planned period of the activity is 2022-2024.</li> <li>• Who – Relevant regional and local level authorities should be involved in ensuring that road safety audit and inspection procedures should be performed on regional road network based on crash occurrence analysis.</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Regional and local level uptake activities – Stakeholder consultations, workshops, roundtables and discussions with main actors should be held, with an emphasis on defining implementation activities, identifying high risk sections and the appropriate methodology, developing proposals and plans and amending the relevant legal framework.</li> </ul>			



RISM in Danube area Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Ensuring that Special attention is given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure in urban and suburban areas</b> [TA6/ regional / VRU]</p>	2025-2030	Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on 500.000 EUR	County road authorities, County governing bodies, local and regional stakeholders.
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Active modes of transport or Vulnerable road users represent a share of 32% in the serious injury accident statistics. Considering the sustainability of the transport system, a lot of focus needs to be given to VRU's in order to decrease the negative trend of traffic accidents within urban and suburban areas.</li> <li>• How – Campaigns, events and other activities should be organized, targeting a broader audience and providing information which can positively impact Active modes of transport. Relevant stakeholders, key actors and city authorities should be identified and included within stakeholder consultations concerning the impact and the application of selected vulnerable road user road infrastructure in urban areas through a series of Pilot Projects, with an emphasis on transferability.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of activities, but can be approximated on 500.000 EUR. Planned period of the activity is 2025-2030.</li> <li>• Who – Relevant regional and local level authorities should be involved in ensuring that special attention is given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure in urban and suburban areas</li> </ul>			
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• Regional and local level uptake activities – Stakeholder consultations, workshops, roundtables and discussions with main actors, with an emphasis on studying good practice case studies with a high degree of transferability, applying it through the Pilot Actions in Croatia, and subsequently setting up a legal framework for widespread incorporation of measures.</li> </ul>				

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Promoting and expanding 30 km/h speed limit zones in residential areas</b> [TA6/ regional / residential]</p>	2023-2024	Financial resources for the intervention will depend on the scope and the number of activities, but are approximated on 150.000 EUR.	County road authorities, County governing bodies, local and regional stakeholders.
<p>RISM in Danube area Regional and local level</p>	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Research has shown that reducing driver speeds in built-up areas reduce injuries for all road users, including motorists, bicyclists, and pedestrians. The link between vehicle speed and pedestrian crash severity has been established by research studies, with crash severity increasing as a function of motor vehicle speeds. If a vehicle hits a pedestrian while traveling 24 km/h most pedestrians will survive a crash, often sustaining only minor injuries. Minor increases in impact speed have been shown to have a profound effect on crash severity. At 40 km/h almost all crashes result in severe injuries and roughly half are fatal.</li> <li>• How – Stakeholder consultation should be held with relevant main actors with the goal of identifying challenges and discussing on how best to form legal framework regarding the implementation of 30/km speed limits in residential areas. Regional and local feasibility studies should then be carried out, with the purpose of identifying challenges and proposing solutions for regarding specific residential areas, accompanied by promotional activities and campaigns.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities, but are approximated on 150.000 EUR. Planned period of the intervention is 2023-2024.</li> <li>• Who – Relevant regional and local level authorities should be involved in promoting and expanding 30 km/h speed limit zones in residential areas</li> </ul>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• Regional and local uptake activities – Multiple workshops, roundtables and discussions with main actors should be held on a local level where the planned intervention will be studied and discussed in detail by main actors, with an emphasis on defining intervention specific activities, developing and publishing the guidelines, and amending the legal framework.</li> <li>• Targeted regional document acknowledging the intervention – Local and regional sustainable urban mobility plans, as well as traffic master plans</li> </ul>			

RISW in Danube area Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Significantly increasing the weight of road safety priorities in investment and maintenance plans development</b>  <i>[TA6/ authorities / priorities]</i></p>	2021-2024	Financial resources for the intervention will depend on the scope and the number of activities. Preparation activities are approximated on 10.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• Why – Road investment will increase exposure to the risk of road traffic deaths and injuries, unless a proportional portion of road safety funds is also put in place. The Commission for Global Road Safety recommends that at a minimum 10% of all road infrastructure projects should be committed to road safety and that this principle should be rigorously and consistently applied.</li> <li>• How – Involve and influence all transport policy makers to increase road safety together through strategies, activities, promotions, maintenance and investment in various projects, the scope of which will be decided on stakeholder consultation including all relevant key actors.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities. Preparation activities are approximated on 10.000 EUR. Planned period of the intervention is 2021-2024.</li> <li>• Who – Relevant road authorities at regional and local level, as well as other parties with an impact on road traffic, should strive to significantly increase the weight of road safety priorities in investment and maintenance plans development.</li> </ul>	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Stakeholder consultations, workshops, roundtables and discussions with main actors, with an emphasis on planning promotions, political documents and strategies.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
RISM in Danube area Road authorities	<b>Defining clear strategy and action plan to reduce 50% of fatal and serious accident on managed road network by 2030</b> <i>[TA6/ authorities /strategy]</i>	2022-2030	Financial resources for the intervention will depend on the scope and the number of activities, but the financial investment is approximated on 40.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.), as well as Ministry of the Interior
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – Every human life is important, and it is necessary to take all measures to reduce the number of fatal and serious accidents on European roads. Concerning road infrastructure, such goals are issued at the level of the European Union through Road Infrastructure Safety Management Directive 2019/1396/EC (RISM), and Croatia, as a member state, is obliged to incorporate them on a national level through a series of measures, interventions and legislative acts.</li> <li>• How – By basing the strategy and action plans on the National Road Safety Programme of the Republic of Croatia for the period from 2021. to 2030., whose main goal is to reduce the number of fatal and seriously injured persons in traffic.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities, but the financial investment is approximated on 40.000 EUR. Planned period of the intervention is 2022-2030.</li> <li>• Who – Ministry of the Interior as well as other key authorities at a regional level.</li> </ul>			
<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions between regional and local road authorities where the planned intervention will be studied and discussed in detail.</li> <li>• Targeted national document acknowledging the intervention - National Road Safety Programme of the Republic of Croatia for the period from 2021. to 2030.</li> </ul>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
RISM in Danube area Road authorities	<b>Establishing internal guidelines above the minimal road safety standards</b> <i>[TA6/ authorities /guidelines]</i>	2023-2027	Financial resources for the intervention will depend on the scope and the number of activities, and is approximated on 400.000 EUR.	Local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• Why – In order to ensure better conditions for all road users when designing the road infrastructure and reconstruction of the existing ones, all with the aim of reducing the risk of a traffic accident and mitigating the consequences when a traffic accident occurs.</li> <li>• How – Each relevant authority should create a working group tasked to establish internal guidelines which would apply to each subsequent project in the future.</li> <li>• When – Financial resources for the intervention will depend on the scope and the number of planned activities and is approximated on 400.000 EUR. Planned period of the intervention is 2023-2027.</li> <li>• Who – Each of local road authorities and concessionaires, as well as other relevant road authorities (Croatian Roads Ltd., Croatian Motorways Ltd., The Croatian Association of Toll Motorways Concessionaires, etc.)</li> </ul>			
	<b>Uptake Plan</b> <ul style="list-style-type: none"> <li>• Road authorities Uptake activities – Multiple workshops, roundtables and discussions aimed at establishing internal guidelines above the minimal road safety standards, with an emphasis on defining the implementation activities, revising the relevant national legislative framework, and developing instructions and guidelines for minimal safety standards.</li> </ul>			

## 7. Danube Infrastructure Road Safety Improvement Action Plan (DIRSIAP) for the Czech Republic

This Action Plan has been created in the framework of the [RADAR project](#) which aims at raising road safety levels of countries in the Danube Region. It is structured along RADAR's six Thematic Areas:

- 1) Investing in safe infrastructure,
- 2) Provisions for vulnerable road users,
- 3) ITS and other techniques for speed management,
- 4) Safe infrastructure near schools,
- 5) Transport safety and COVID-19,
- 6) Road infrastructure safety management,

and is adapted to the specific road safety requirements of the Czech Republic. The interventions set out in this Action Plan are directed at all levels of road safety management, i.e., from national to regional and local level, with a special section on road authorities.

## Investing in safe infrastructure

National level Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Definition of a national minimal standard for road infrastructure safety rating for existing and new roads based on an evidence-based methodology</b> <a href="#">[TA1/national/standard]</a>	2021 - 2023	SFDI	Ministry of Transport CR
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?            For the existing roads, there is no minimal standard for road infrastructure safety rating. All technical standards are valid for newly constructed roads and for reconstruction with some limited extend. Existing roads are not evaluated at all. The only exemption is the periodic execution of Road Safety Inspection, applied on the TEN-T network based on the European Directive 2008/96/ES. Road Safety Inspections and Roads Safety Audits are applied to the extent defined by the DIR 2008/96/ES only, where the national law is using the term: “Safety of the roads of Trans European Road network” (other roads are not mentioned). Regular inspections of existing roads are fixed in the national Road Law 13/1997 version 40 (related to roads, not traffic), where operators are mandatory to provide regular and irregular physical control of operability of roads in terms of pavement, traffic signs, no blockade by trees, landslide, tree fall etc. It is more or less confirmation of standard operability, without any evaluation of safety level (operability § 26). Central road evidence is registering the sections of TEN roads with high frequency of road accidents with fatality related to traffic volumes. <p>Regular controls according to law 104/1997 (related to 13/1997) are made:</p> <ul style="list-style-type: none"> <li>Motorways – every working day;</li> <li>First class roads – 2 times a week;</li> <li>Secondary roads – Twice a month;</li> <li>Tertiary roads – once a month;</li> </ul> <li><b>How</b> will it be implemented (what steps are required in the process)?            Firstly, the objective and comparable evaluation of safety level for road users to be defined. Then, such evaluation to be applied on all motorways and first-class roads minimally!  <b>“Road Safety Strategy 2021 – 2030”</b> was approved by Czech government by resolution no. 8 on 4<sup>th</sup> January 2021. It consists from:           <ul style="list-style-type: none"> <li>Strategy;</li> <li>Appendix 1 – Action Plan;</li> <li>Appendix 2 – Analytical data and KPI;               <ul style="list-style-type: none"> <li>Action Plan contains 45 actions:                   <ul style="list-style-type: none"> <li><b>Road users:</b> <ul style="list-style-type: none"> <li>1 – Speed supervision (PČR 2021-2022);</li> <li>2 – Speed section control (ŘSD, PČR, ORP 2021-2022);</li> <li>3 – Risk prevention activities (MD, PČR, ČKP 2021);</li> <li>4 – Electronic drivers tests (MD 2021);</li> <li>5 – Improvements of driver’s education and testing (MD,</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </li></ul>				

PČR 2022);

- 6 – Video – education (MD, AAČR, PČR 2021);
- 7 – Simulation of traffic conditions for education (MD, AAČR, PČR 2022);
- 8 – Limited number of repeated exams (MD 2022);
- 9 – Programme for lecturers (MD, AAČR, PČR 2022);
- 10 – Education for students of secondary schools (MŠMT, MD, CDV 2022);
- 11 – Warning on disturbance of in-car systems (MD, PČR, CDV, CSPSD 2022);
- 12 – Youngster’s traffic education (MŠMT, MD 2022);
- 13 – Education of teachers of traffic behaviour (NPI ČR, MD, MŠMT 2021);
- 14 – Vulnerable road users: seat belts, helmets, mobile phones, headsets (MD, CSPSD, PČR 2022);
- 15 – Risk users rehabilitation courses (MD, CDV 2022);
- 16 – Behaviour of users with repeated traffic offences (ČKP, MD, MV, PČR 2021);
- 17 – Alcohol and drugs at driving (MZD, MD, 2022);
- 18 – Seat belts and child restraint systems (MD, CSPSD, PČR 2022);

▪ **Road infrastructure:**

- 19 – **Central evidence of blackspots** (MD, CDV, PČR 2021);
- 20 – **Mobile application for announcing the safety deficits to road operator** (PČR 2021);
- 21 – **EU DIR 2019/1936 Transposition to all primary roads** (MD 2021);
- 22 – **Financial resources** from SFDI to regional governments for 2<sup>nd</sup> and 3<sup>rd</sup> class roads 100 mil. CZK yearly (MD, SFDI 2022);
- 23 – **Elimination of blackspots in year 2021 and 2022** (Owners and operators, SFDI, MD, CDV, PČR, 2022);
- 24 – Trees – elimination of accidents spots in year 2021 – 2022 (Owners and operators, SFDI, MD, CDV, PČR);
- 25 – Trees – guardrail protection along new trees at speed higher than 60 km/h (Owners and operators, 2022);
- 26 – Railroad crossings – gantries at 2<sup>nd</sup> class roads min. 50 pieces/year (SŽ 2022);
- 27 – 90 % of railroad crossings on 1<sup>st</sup> class roads equipped by barriers to 2022 (SŽ 2022);
- 28 – Railroad crossings – renovation of signs and marking at regional roads (Owners and operators, SFDI, 2021 – 2022);
- 29 – Understandable roads – anti-skid surface and motorcycle friendly barriers at curves on blackspots (Owners and operators, SFDI, CDV, MD, 2021 – 2022);
- 30 – Signing: 30 km/h zones on C class local roads at



	<p>commercial and residential areas (ORP, SMO, MD, CDV, 2022);</p> <ul style="list-style-type: none"> <li>• 31 – Keep distance signs on motorways and 1<sup>st</sup> class roads (ŘSD, MD, PČR, 2021 – 2022);</li> <li>• 32 – C-ITS units on selected locations (ŘSD, operators, MD, 2022);</li> <li>• 33 – <b>Digital maps for map web site of Ministry of Transport</b> (MD, 2022 – 2023);</li> </ul> <ul style="list-style-type: none"> <li>▪ <b>Advanced Technologies:</b> <ul style="list-style-type: none"> <li>• 34 – Analysis of benefits of Advanced systems on road safety (ČKP, 2021);</li> <li>• 35 – Research on influence of new modes/drives/automation on road safety (CDV, MD, 2022);</li> </ul> </li> <li>▪ <b>Systematic activities:</b> <ul style="list-style-type: none"> <li>• 36 – Local police supervision on alcohol, drugs, restraint system use, motorcyclist’s behaviour, priority, overtaking, keeping lane, concentration on driving (Police + Local Police 2021, 2022);</li> <li>• 37 – Low speed weighing in motion (PČR + CSPSD 2022);</li> <li>• 38 – Amendment to Law improving traffic control (MD, CSPSD, PČR, 2022);</li> <li>• 39 – Increase number of road controls in passenger, cargo and dangerous goods control (PČR, MD, CSPSD, 2022);</li> <li>• 40 - Increased responsibility of car owner for the violation of law (MD, ORP, MV, PČR, 2022);</li> <li>• 41 – Analysis of electronic payment order (MV, GŘC, 2022);</li> <li>• 42 – Harmonised reporting of serious injuries in traffic for hospitals (MZD, PČR, 2022);</li> <li>• 43 – New capacities for truck parking and traffic control (ŘSD, 2022);</li> <li>• 44 – <b>Best practice Manual for implementation of Road Safety Strategy</b> (MD, CDV, AK, SMO ČR, SMS ČR, 2022);</li> <li>• 45 - <b>Post-accident care data and reporting</b> (MZD, CDV, 2021);</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? – see above!</li> </ul> <p>Unfortunately, no definition of a national minimal <u>standard for road infrastructure safety rating</u> for existing and new roads based on an evidence-based methodology is planned to be adopted either in the updated National Road Safety Strategy, neither in the planned revision of national law “For Roads”, trying to adopt EU DIR 2019/1936</p> <ul style="list-style-type: none"> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? See above!</li> </ul> <p>Proposal of adoption EU DIR 2019/1936 contains the duty to evaluate roads (under the Directive) into 3 safety levels, (high, medium and low safety level), where is no description what objective measures shall be used. It is expected, that it will be based on the Road Safety Inspection.</p>
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	<p><b>Uptake Plan</b> <i>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</i></p> <p>National uptake activity is based on 2 pillars:</p> <ul style="list-style-type: none"><li>• National strategy – adoption of EU DIR 2019/1936;</li><li>• Revision of national law “For Roads”.</li></ul>

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Allocation of a certain portion of road infrastructure investments to road safety interventions</b> <i>[TA1/national/investment]</i>	2021 – 2030	SFDI budget; Regional budgets; Municipal budgets	SFDI; Regional governments; Municipal budget
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Existing infrastructure, which was not constructed based on the latest safety standards, includes lot of safety deficits, which are identified by RSI (so far only on TEN-T), or by cumulation of accidents with high FSI. Generally, there is deficit in the width of hard and soft shoulders and unprotected rigid obstacles along the roads.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? The prioritisation is based mostly on the black-spot identification, or on general reconstruction due to high traffic volumes. In the official National Road Safety Action Plan, activities 22, 23, 24, 25, 26, 27, 28 and 29 are addressed to the elimination of safety deficits on roads. Other road safety activities are bottom-up initiatives – application to SFDI for the subsidy for safety improvements.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? All roads' operators have own budget for regular maintenance. Investment budgets are approved by SFDI/regional government/community budget.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? All road operators and owners are planning the maintenance and investments for years. But special targeted system of safety improvements depends on the initiative of the owner and operator. Some of regions have their own plan for the road safety improvements, planning the treatment of specific sections, black-spots, junctions, pedestrian crossings, sidewalks, cycle paths etc. Often, they apply for the subsidy at the SFDI.</li> </ul>			
	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>Czech roads minimal star rating standards <u>recommendation</u>:</p> <ul style="list-style-type: none"> <li>1<sup>st</sup> class motorways – new: minimal star rating 4 stars!</li> <li>1<sup>st</sup> class motorways – existing: minimal star rating 4 stars!</li> <li>2<sup>nd</sup> class motorways – new: minimal star rating 4 stars!</li> <li>2<sup>nd</sup> class motorways – existing: minimal star rating 3 stars!</li> <li>1<sup>st</sup> class roads – new: minimal star rating 4 stars!</li> <li>1<sup>st</sup> class roads – existing: minimal star rating 3 stars!</li> <li>1<sup>nd</sup> class roads – new: minimal star rating 3 stars!</li> <li>1<sup>nd</sup> class roads – existing: minimal star rating 4 stars!</li> </ul> <p>Unfortunately, only 3-levels safety evaluation is planned by Law!</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice</b> <a href="#">[TA1/national/SafeSystem]</a>	2022 - 2024	SFDI, budget of Ministry of Transport	MD
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Safe System Approach is completely unknown in the Czech Republic. No safety standards are applied to the operated roads. Safety Inspection is known for the TEN-T Network only. Identified safety deficits are eliminated two ways:               <ul style="list-style-type: none"> <li>As the result of RSI on TEN-T: evidence base slow progress of elimination of safety deficits;</li> <li>As the identification of Black-spot locations or sections – reactive system with prioritisation of most dangerous sections based on in-depth studies;</li> </ul> </li> <li><b>How</b> will it be implemented (what steps are required in the process)? Road Safety management to be included in the “Road Law” and relevant detailed legislative regulations. Implementation of the Amendment to Directive about road safety management will be delayed after the November 2021.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? After November 2021, if the “Safe System Approach” will be accepted. There are 4 potential financial resources: Traffic infrastructure Fund (defined by law), state budget (approved by parliament), regional budgets (defined by law, governed by regional governments) and European Funds.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Ministry of Transport should initiate, Government should approve the Law modification, Parliament should adopt, President should sign!</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention Road safety experts, traffic engineers and universities have the teams of experienced road safety auditors, regularly re-trained. Road Safety conferences should emphasize the need of systematic road safety management. There is a system of design standards, which are time-to-time updated and system of Technical Conditions, approved by the Ministry of Transport, which can increase the care about the safety (for example walls at culverts, guardrails shock absorption level etc.).			

Investing in safe infrastructure National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Institutionalisation of trainings for road safety auditors and road safety inspectors</b> <i>[TA1/national/auditors]</i>	20 <sup>th</sup> October 2011	Paid by auditors/ audits paid by road operators	MD – exams, first certificates, regular re-training by approved bodies
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why</b> is it necessary (what is the current problem)? No current problem, used for TEN-T only, for other roads recommended by National safety strategy, but when ordered, financial control is defining this action as not mandatory expenses.</li> <li>• <b>How</b> will it be implemented (what steps are required in the process)? Running, institutionalisation is O.K., expansion for 1<sup>st</sup> class road expected after adoption of amendment to Directive.</li> <li>• <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? No need to another institutionalisation of training, approved bodies for training are identified.</li> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? MD – exams and certificates, no need to another action!</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention. Plenty of accredited auditors with different quantity of experience, which are every 3 years re-trained, more opportunity for audits and inspections after adoption of EU DIR 2019/1936.			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Transfer of the Safe System approach to local governments and local road authorities</b> <a href="#">[TA1 /national/vertical]</a>	2022 - 2024	SFDI, self-financing	MD, regional governments, Certified bodies
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li> <b>Why</b> is it necessary (what is the current problem)?            General knowledge about Safe System Approach is poor. Some regions were active and produced own regional Road Safety Strategy and Action Plans. National Action Plan activities are controlled centrally, yearly, the tasks related to regional governments are reported, general progress poor, depends on the level of regional Departments of Transport and Regional Traffic Police.         </li> <li> <b>How</b> will it be implemented (what steps are required in the process)?            Safe System Approach to be included in the “Road Law” and consequent executive directives. There is no chance to expect, that it will be included in the revision of “Road Law”, which will be presented to the parliament at the end of the year. Systematic processes to be included into executive directives and additional dedicated financial support to be fixed into Law related to sharing Taxes.         </li> <li> <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            If it is not mandatory, no progress to be expected. When mandatory, education to be organised by seminars and conferences, relevant detailed manuals to be prepared and distributed. Special budget for this education to be defined by SFDI or by regional budgets. Experts, who are able to educate on regional level, are available (CDV, Transport Faculties, Safety experts!         </li> <li> <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            To include the Safe System Approach to Legislation is the process starting from Ministry of Transport to the Government and to the Parliament.         </li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention Education of administrative staff at the “Transport Departments” on all levels using lessons about Safe Road System, role of Roads into road accidents and Best Practice Manual should be mandatory to increase the understanding to role of road in the road safety. Experience is very different around the country.			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Enlarging the scope of roads to be treated in accordance with Directive 2019/1936 to 2nd level roads (e.g., “regional roads”)</b> <a href="#">[TA1 /national/secondary]</a>	2022 - 2024	SFDI, regional budget, EU subsidy	MD, Government, Parliament
Investing in safe infrastructure National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Length of 1<sup>st</sup> class roads is 5826 km, yearly killed is 203, FSI is 592. Length of 2<sup>nd</sup> class roads is 14550 km, yearly killed is 135, FSI is 544.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? To convince the Ministry, Government and Parliament to expand the validity of EU directive above mandatory TEN-T, motorways, 1st class roads and roads financed by EU funds to secondary roads (surplus around 250%) and to provide regions with relevant financial sources for regular rating of safety and accompanying safety improvements! To increase the importance of safety related to the importance of environmental protection of trees around the roads (93 killed).</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Such proposal was included in the previous National Strategy 2011-2020, but without visible effect, because what is not mandatory is not executed. Latest National Strategy 2021 – 2030 is not proposing and the adoption of new EU DIR is not mentioning the secondary roads.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Ministry of Transport (if mandatory) or regional governments, based on local road safety action plans and initiatives.</li> </ul>			
	<b>Uptake Plan</b> <i>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention.</i> Road Safety experts should point on relatively poor safety level of secondary roads and annual road accidents statistics, and also on poor position of Czech Republic in KPI related to number of killed in road accidents. EU should provoke countries under EU average to increase the effort in the better road safety.			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Institutionalisation of knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments</b> <a href="#">[TA1/national/good_practice]</a>	2021 - 2030	State and regional budget	Ministry of Transport, Ministry of Education
Investing in safe infrastructure National level	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?  <b>Knowledge transfer is not institutionalised at all! For director of transport department, university is required.</b>            Problems of further training in public administration in the Czech Republic deals with the problems of civil servants training, particular attention is paid to the training system in the municipal authorities. The current system of further training, its components, legislation and interested stakeholders, civil servants training in municipal authorities identified the problem like lack of funding, the problem of return on investment in education, low or inappropriately oriented motivation of public servants to further education, the quality of some educational institutions, respectively lecturers, difficult evaluation of the results and effects of education, ineffective rule of mandatory 18 training days for 3 years, proficiency test, position of management authorities to education and low effectiveness of e-learning education. The training is mostly oriented on the legal acts and not on the special knowledge related to the Safe Road System.</li> <li><b>How</b> will it be implemented (what steps are required in the process)?            Special “Road Safety Minimum Manual” should be developed as the general European practice for the road administration on local level. At the Police, there are trained and experienced “Road engineers”, which are often useful for the discussion how to improve road design or existing road situation.            Legislation is very strict on knowledge of private operators in transport, but general education for administrative staff of departments of transport responsible for safety of roads was not identified. At the road operators, mostly civil engineers are in managing positions.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Specific road safety education is not planned. Some of the staff members are participating on yearly road conferences with the block dedicated to road safety. Some of them (rare) absolved the lessons for road safety auditors.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            Universities, research centres, road safety specialists, under condition, that such education to be mandatory on some decision positions in administration of roads and traffic.</li> </ul>			
	<p><b>Uptake Plan</b>            Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention            No such uptake plan is known.</p>			



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Regional and local level	<b>Systematic road safety data collection and analysis to plan interventions/investments on most critical locations</b> <a href="#">[TA1/regional/data]</a>	2021 - 2030	Data: Ministry of Interior/Traffic Police Analysis and plan: infrastructure owners	MV, MD, ŘSD, Regions; Municipalities;
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Road data collection is on the very good level in the Czech Republic. Regular traffic counts are made every 5 years. Special counts are made in Prague and big cities. Automatic traffic counters are installed on motorway profiles. Counting and localisation of accidents is also on the excellent level. Identification of critical locations is on good level. Planning and execution of effective interventions is on very pure or very slow level.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Accident's data do not need any improvements. Accident's analysis and treatment proposals are very limited and need substantial improvement and more publicity.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Initialisation is unfortunately very reactive after tragical accident, when treatment is proposed and after couple of years executed. More important than financial resources are usually bureaucratic obstacles, building law and property rights.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Owner of the infrastructure, department of transport, traffic police</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention In the National road safety action plan, there is activity 19 – Central evidence of blackspots and 23 – Elimination of blackspots.			

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Setting up of road safety funds for investments in road safety upgrades in terms of road safety equipment and measures at locations with most effectiveness</b> [TA1/authorities/funds]</p>	2021 - 2030	SFDI, Regional governments, Local authorities	Ministry of Transport/SFDI
Investing in safe infrastructure Road authorities	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Specific fund at SFDI is very small and it provides the subsidy (application form) for: <ul style="list-style-type: none"> <li>Safety improvements, barrier-less solutions and sidewalks treatments;</li> <li>Safety on the roads of 2<sup>nd</sup> and 3<sup>rd</sup> class.</li> </ul> Some of the safety improvements are included in the main budget, but very limited. </li> <li><b>How</b> will it be implemented (what steps are required in the process)? Most of budget is allocated to the projects related to motorways, roads, modernisation of railways and small amount is targeted to the inland navigation. There is no identified chapter allocated directly to systematic safety improvements of existing roads. It is necessary to convince SFDI/Government/Governmental Council for Road Safety, that much more budget to be strictly allocated to the systematic road safety improvements. </li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? The political will is needed, road safety is not a systematic priority. Financial sources are only taxes (7 different taxes) distributed by law between state, regions and municipalities and then EU Funds. SFDI has income from petrol taxes and toll also. Government has around 65 % of all taxes. (Law 243/2000 and 358/2020) </li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Ministry of transport/government/parliament should propose the change of SFDI budget, which is directly dedicated for transport infrastructure.</li> </ul>			
	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention Powerful initiative should increase the interest about road safety, road safety management and systematic improvement and modernisation of existing roads.</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Road authorities	<b>Observation of road safety trends and good practices to plan maintenance and upgrades of the existing road network in operation</b> <a href="#">[TA1/authorities/good_practice]</a>	2021 - 2030	SFDI, Traffic Police	Traffic Police; Road owners (state, regions, municipalities)
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?            Observation of road safety trends is on very good level. Based on the very good register of road accidents, yearly reports, analyses and trends are produced by Traffic Police Directorate, available to public. Maps with locations of accidents including relevant data should be filtered for any use. Evidence of black-spots is activity no. 19 of the new action plan. Digital map of blackspots is on MD pages on “infobesi.dopravniinfo.cz”. But activity seems to be dead, because calculation is only for 2013 – 2015!            Planning the elimination of accidents sections (black-spot treatment) is not systematic. Black-spot treatment is activity number 23 in the national action plan. System of prioritisation of elimination of blackspots is depending on the activities of regional police, department of transport and regional road operator based on accidents statistics.</li> <li><b>How</b> will it be implemented (what steps are required in the process)?            Systematic programme including relevant budget should be activated based on the activity number 23.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Till now, no systematic activity for identification of safety deficits, only reactive actions after investigation of repeated or tragic accidents. Then signing, warning, skid resistance and slowing traffic is implemented mostly. Funds from the maintenance budget of road owner.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            Police, local transport department, road owner.</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National action plan for identification, prioritisation and elimination of safety deficits not based on the heavy accidents, but preventive, based on network road safety evaluation and rating, needs to be activated.			

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Use of methodologies for selecting most critical locations with highest potential savings.</b> <a href="#">[TA1/authorities/methodologies]</a></p>	2021 - 2023	International methodologies available	MD
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Methodology for selection most critical locations is based on theoretical “Accident prediction models and road safety impact assessment” as the result of research, financed by ministry of transport. But there is no available evidence about systematic programme for selection of most critical locations. ÚAMK with technical assistance of AFRY produced set of risk maps for all 1<sup>st</sup> class roads in Czech Republic. Similar, non-governmental activity is produced by Alliance Insurance Company. Any systematic selection of critical locations is not identified on the pages of MD or MV.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Adoption of internationally accepted methodology (PIARC) to the system of technical conditions approved and registered by MD;</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Budget of MD or SFDI, implementation is not known, it should be activated by 21<sup>st</sup> or 23<sup>rd</sup> activity of Action plan 2021 – 2030.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Ministry of transport, road owners.</li> </ul>				
<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention Department of BESIP on MD should initiate the need of internationally recognised methodology approved and applied in the Czech Republic.</p>				

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Publication of the list of high accident concentration road sections / hot spots.</b> <a href="#">[TA1/authorities/hotspots]</a></p>	2021 - 2023	MD	MD, Traffic Police
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? High accident concentration road sections (hot spots) is possible to calculate based on available map “Dopravní nehody v ČR”. All accidents should be identified by location, ID, date and kind. All details are available, filtering and reporting possible. But calculation of “high accident concentration road sections” is not a function of that publicly available map. Public presentation of hot spots shall generate the public pressure on the safety treatment organised by owner of road.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? It is necessary to update not functioning map application of HOT SPOTS, which was paid from public funds. Afterwards, the qualified list of hot spots to be published. Or, better, standard routine crash risk maps iRAP to be produced again and presented on the official pages of MD.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Easiest way would be small contract of MD with ÚAMK for yearly production of crash risk maps in more detailed sections including the main secondary roads.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Ministry of transport, department BESIP.</li> </ul>				
<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention Push the MD to generate publicly available maps with calculation of most critical road sections, because the available map “Dopravní nehody” is not practical for any prioritisation and public uptake.</p>				

## Provisions for vulnerable road users

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Incorporation of the principles and concepts of the Safe System approach in relevant legislation and VRUs' countermeasures selection criteria</b> <a href="#">[TA2/national/SafeSystem]</a>	2021 - 2024	MD	MD, MMR, MV
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Very strict rules for new projects and reconstructions related to disabled, barrier-less access and orientation system for blind. Implementation is not systematic, mostly in the local extend, project extend with gaps in comprehensive system; No care about "normal" vulnerable road users outside urban areas – no space and no protection on the roads (parallel cycle and pedestrian paths are rare, access to bus stops in rural areas are mostly very poor).</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Legislation and standards are valid for "new" projects only. Do nothing scenario is prevailing. Minimal safety standard on existing roads and streets will need new approach in legislation – star rating for VRU mainly in the movement along primary and secondary roads and in safe access to strategic points of interest.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? The right for the save movement on roads like in the Sweden is not existing. More focus is put on different environmental duties and restrictions on existing infrastructure than in the transport infrastructure. Better situation is in the rolling stock, where most of advanced arrangements is installed into new buses, trains and trams. It needs strong legislative initiative.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Ministry of Transport, of Interior, Local Development, NGO, ÚAMK, should uptake initiative for minimal safety standards on existing roads.</li> </ul>				
<p><b>Uptake Plan</b></p> <p>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>Step by step, new pedestrian and cycle paths are built along busy roads connecting nearby villages and local centres. Focus on such paths is often oriented on "international cycle routes" more than on daily used connections. It is necessary to change this policy.</p>				

Provisions for vulnerable road users National level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Development/Incorporation of a unified protocol for assessment of the risks of VRUs, which will ensure that results are understood and comparable between countries</b> <a href="#">[TA2/ national /risk_assessment]</a>	2021 - 2024	MD	MD
<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? No such protocol is available. For new projects, standard rules are included, base on the minimal number of pedestrians, when some action (path, sidewalk) is proposed. Specific problem is on bridges/overpasses outside urban areas, with the guardrails and no protection to pedestrian, if there is not identified strong pedestrian flow.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Basic safety evaluation is included in iRAP star rating for pedestrian and cyclists: provision for driving/walking along and provision for safe crossing. Such criteria should be included more in detail in the list of RSI guidelines checked items.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? It needs EU supervision to be included in the mandatory road safety evaluation in the Czech practice. Implementation needs no extra budget, but relevant improvements for safe movement of VRU outside cities needs special programme with strong subsidy focused strictly on such actions.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Regions, municipalities, NGOs, Ministry of Transport, Parliament.</li> </ul>				
<b>Uptake Plan</b> <i>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</i> Evaluation of the safety level for VRU shall be executed on the international level, like the iRAP/EURORAP initiative, or by the projects like RADAR.				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Making sure that countermeasures' selection, prioritization and implementation process for VRUs should not in any case be performed only based on subjective criteria but primarily based on official, standardized, objective methodology which considers all relevant road safety indicators (AADT, peak-hour pedestrian/cyclist flows, operating speed, traffic accidents characteristics)</b> <a href="#">[TA2/ national /methodology]</a>	2021 - 2025	MD, Czech Grant Agency, MŠMT	Traffic engineers, Auto-moto-clubs, NGOs;
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why</b> is it necessary (what is the current problem)?            Mostly, countermeasures are planned and adopted after tragic accidents (more killed, children), under long pressure of public and as the part of any wider rehabilitation programme;</li> <li>• <b>How</b> will it be implemented (what steps are required in the process)?            Theoretically, countermeasures are proposed by ViDA iRAP in the formulation of SRIP Plan (where iRAP methodology is adopted), practically any objective prioritisation is missing and individual projects are prepared, approved and financed on the local, regional and state level based on activities of public, transport or police department.</li> <li>• <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Methodology to be financed by MD or Czech Grant Agency, the implementation should be financed by owners of relevant infrastructure from their dedicated budget.</li> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            Initiative should come bottom-up, because the Ministry of Transport is relatively very passive in the road safety. Because of the prioritisation criteria should be same on European or Danube roads, such methodology should be prepared by international team of experts and approved on the EU strategic level as the part of "National Road Safety strategies and action plans".</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention Because of universal usage of such methodology for prioritisation of countermeasures, recommended procedure should be prepared internationally as part of "Road Safety Toolkit", tailored for European roads.			



	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Definition of a national minimal standard threshold values of relevant road safety indicators based on which high-risk road sections for VRUs will be identified</b> <i>[TA2/ national /standard]</i>	2021 - 2025	MD, Czech Grant Agency, MŠMT	EU Mobility and Transport, MD, iRAP
Provisions for vulnerable road users National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li> <b>Why</b> is it necessary (what is the current problem)?            Safety of the VRU groups should be guaranteed on 3-star level along all primary and secondary road, where no alternative safe route is available for daily commuting of people to work/school/shopping all year around. There is plenty of cases, where regular commuting of VRU is in risky conflicts with motor traffic due to missing space for parallel and crossing move.         </li> <li> <b>How</b> will it be implemented (what steps are required in the process)?            The programme of minimal safety for VRU on regular year-round trips should be launched with defined budget and prioritisation. Municipalities and employers should apply for grants on VRU facilities improvements;         </li> <li> <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Immediately after the handbook how to evaluate minimal safety standard for daily commuting purposes is issued and approved as the human right for safety on roads.         </li> <li> <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            Safety level for VRU is not in the focus of politicians and authorities. More concern is given to the cyclists, using bicycle often for leisure and sport activities. Situation is much better in urban environment, where street space is organised with sidewalks. All road authorities should be responsible for the existence of parallel footpaths or soft shoulders for the access to houses in the perimeter of settlements.         </li> </ul>			
	<b>Uptake Plan</b> <i>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</i> National uptake activities: <ul style="list-style-type: none"> <li>No such threshold is identified</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>The revised Action plan for 2021 – 2030 indicates activity 14 related VRU, but it is focused on helmets, airbags, concentration on driving.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Ensuring that available funds are primarily invested in low-cost, high-impact countermeasures, by considering the concepts of tactical urbanism and space-wise planning</b> [TA2/ national /funds]</p>	2021 - 2025	Establish VRU budget at SFDI and regional governments	MD, relevant law approved by parliament, VRU budget at SFDI
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Provisions for vulnerable road users National level</p>	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? VRU needs to be safely protected against conflict with high-speed motorised traffic. It is problem everywhere where traffic volume and speed is in contradiction with the VRU needs, where pedestrian flows are relatively low (so according to existing standards no specific provision for VRU is necessary or existing status of road is not matter of improvements.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? The separation of VRU space from motorised traffic is the cheapest solution at all. Crossing opportunity should be arranged on places with good sight distance. For crossings there is a full scale of solutions from very simple to very expensive. Effective solution should be prioritised, for example pedestrian underpass or bridge is cheaper than road tunnel to solve pedestrian crossing.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Building VRU infrastructure should be the priority everywhere where alternative connection between settlements is missing. The save access to houses, schools, bus-stops and social services at the urban and sub-urban area should be the norm, giving right to be financed from state, regional or municipal budget.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? The minimal safety standard should be regulated by European or state technical standard. The application of standard on the safe opportunity for VRU to be initiative of communities, asking for protection of citizens. Duty to build relevant infrastructure to be passed on road authorities. Traffic police officers should initiate the relevant action.</li> </ul>			
	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>SFDI fund for safety improvements with budget 1 017 mil. CZK for actions related to safety and fluency of traffic and accessibility for disabled, in fact only 92 mil. CZK approved.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Not identified.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Development/restructuring and linking datasets on road traffic accidents and road network in order to increase their precision and provide free and easy access to all stakeholders</b> [TA2/ national /dataset]</p>	In operation	MV, MD	MV, MD
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Provisions for vulnerable road users National level</p>	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? The access to the accidents database and localisation on accidents on the roads via GPS positioning is the strong point in the Czech Republic. The database should be filtered by many ways and parameters, including long time series.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? No action needed. Only selection and calculation of “hot-spots” was made like a “pilot project” and is not in function than originally calculated period.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? No special action needed! Potential improvement should be proposed in the connection of traffic counting map and accident map in the regular generation of “Crash Risk Maps” according to iRAP standard;</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Police presidium, Directorate of roads and motorways and CDV, Risk maps generated occasionally by AFRY under supervision of UAMK, financial support is missing.</li> </ul>			
	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Accident database localisation on web.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Elimination of accidents location is subject of activities 19 – 23 of valid action plan.</li> </ul>			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Linking the police database on road traffic accidents with hospital data in order to minimize the VRUs accidents under-reporting issue</b> <a href="#">[TA2/ national /database_link]</a></p>	2021 - 2023	MV	MD, MV, MZ
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? It is already activity 42 in the approved national action plan. Till now, reporting is based on 24-hours data about mortality or serious injury, so statistics is facing better than general practice, but there is the corrective table, how many people died within 24-hours to 30 days. But these people were primarily categorised as seriously injured. Police evidence is every time, when injury was caused by 3<sup>rd</sup> party, so potential underreporting is possible at VRU self-injury without presence of police.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Connection of statistics and evidence of injuries treated in hospitals with the evidence of police.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Internal budget of MZ and Police.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Ministry of transport, Ministry of Interior, Ministry of health, State statistical office;</li> </ul>				
<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Activity 42 of National action plan.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Not identified.</li> </ul>				

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Changing traffic culture and public awareness by disseminating relevant information to the public by various media sources</b> [TA2/ national /awareness]</p>	2021 - 2030	MD, insurance funds	BESIP, ÚAMK, Motorists associations
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Provisions for vulnerable road users National level</p>	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Educating/warning actions are regularly placed at TV like TV-spots about tragic accidents, over speeding, railway crossing on red, for example “If you do not think, you will pay!” But still there is lot of drivers with aggressive behaviour, and drivers with low experience. More effort is still necessary.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? More TV spots to be financed by MD, insurance companies and state authorities, related to endangered groups: young drivers, unexperienced, mistaken, etc. More actions to be organised against drink and drugs driving.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Immediately and regularly, from the state budget, dedicated to safety behaviour campaigns;</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Advertisement in TV, Radio, magazines, ordered by MT, ministry of Education and Ministry of healthcare, supported by Insurance companies, auto moto clubs and motorist magazines;</li> </ul>			
	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Activities 3, 6, 10, 11, 12, 13, 14, 17 and 18 are educational for children, young drivers and generally public for education.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Different TV spots and education materials.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Knowledge transfer with demonstrations of good practices and approaches in VRU safety for road authorities and to regional/local governments</b> <i>[TA2/ national /vertical]</i>	2021 - 2025	State budget	Ministry of Transport, Ministry of Interior, Ministry of regional development
Provisions for vulnerable road users National level	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?            The general knowledge about VRU safety needs is poor outside standard urban schemes. Roads are not ready for safe use by VRU. In small settlements, streets and through roads are often without sidewalks. Traffic calming is rare, but in slow progress in smaller settlements.</li> <li><b>How</b> will it be implemented (what steps are required in the process)?            There is very complicated manual for infrastructure for disabled and blind, which is strictly used at the investment schemes. Any minimal safety standard at existing infrastructure is long time process. Basic legislation and guide for minimal level of protection of VRU in existing road network is necessary and such material should be developed for Danube region countries for common use. The different scheme is applicable for the historical centres and different for village suffering by through road.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            It needs to be implemented without delay, financed by state budget, by dedicated road safety fund, which is not existing;</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            MD, department BESIP, road safety experts, auto moto clubs, NGOs;</li> </ul>			
	<b>Uptake Plan</b> <i>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</i> National uptake activities: <ul style="list-style-type: none"> <li>No specific knowledge transfer identified.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>Special safety program on 3 years study for safety in road transport with diploma for fire fighters, police, military police, state employees offer special school in Jihlava.</li> </ul>			

Provisions for vulnerable road users Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Ensuring that results obtained by road safety assessments performed in individual municipalities at local level are standardized and comparable between different municipalities and on the National level</b> <a href="#">[TA2/ regional /standard]</a>	2021 - 2024	SFDI, regional budget,	Regional and local transport departments
<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Any road safety assessments are made mostly on TEN-T network only, because it is not mandatory. Any safety evaluations are made at the black-spots (reactive) or on specific reasons. What is not mandatory is not executed.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Manuals for RSA and for RSI are available, auditors have the relevant capacity, there is missing law or directive to save results of safety evaluations. Audits are not publicly available, there is no evidence of RSA and RSI, even what was accepted and realized.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? After adopting relevant directive to regional transport departments asking to co-finance, co-ordinate and store the systematic road safety assessment, there will be no progress. It should be paid from traffic department's budget.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Traffic departments on regional and municipal level should investigate regularly the safety level of roads and streets in their competence, according to standards, issued by ministry of transport. It needs initiative either bottom-up, or EU-down.</li> </ul>				
<b>Uptake Plan</b> <i>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</i> National uptake activities: <ul style="list-style-type: none"> <li>No activity identified.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>Not known, some seminars are organised by CDV.</li> </ul>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Regional and local level	<b>Systematic, high-quality road safety data collection and analysis to plan interventions/investments on most critical locations for VRU</b> <a href="#">[TA2/ regional /data]</a>	2021 - 2024	MV, Police, infrastructure owners	MV, Police, infrastructure owners
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?            High quality road safety data (accidents database) are collected and available, traffic volumes from latest traffic counting are also available, calculation (selection) of accidents localities is project finished and frozen. Any systematic programme for selection of critical locations for VRU is not known or available. Systematic measurement of skid resistance is more or less minimised;</li> <li><b>How</b> will it be implemented (what steps are required in the process)?            All road users have their investment or maintenance plan and budget, which is approved by relevant authority and covered by finance, if it has all relevant approvals. Specific publicly available systematic plan of interventions for VRU safety is not published and not known. Situation is quite different to EIA, where you can find list of all impact assessment with full explanation, why and under what conditions any road investment can be exercised. The system is necessary to develop and implement;</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Road safety intervention planning should be implemented as quickly as possible, financial resources should be born from road operator budget.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            Planning the interventions and prioritisation plan should be responsibility of the owner of infrastructure, relevant transport department and the operator. Accident and traffic data are available, system is missing.</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>Elimination of accident black spots is priority area of national action plan activities 20 – 23.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>Project IDEKO, database of accidents, seminars and articles.</li> </ul>			



	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users Road authorities	<b>Use of official, standardized, objective methodology for selecting most critical locations for VRUs with highest potential savings</b> <a href="#">[TA2/ authorities /methodology]</a>	2021 - 2024	Maintenance and investment budget of road owners/operators	MD,
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why</b> is it necessary (what is the current problem)?            No standardised methodology is approved for selecting most critical location than definition, what is accident locality and what is accident section. Even technical conditions of MD do not have category “Safety”, closer is category “Environment”. There are “Safety zones (means rescue for trucks)”, “Living and pedestrian zones”, “anti-skid” safety, “Safety in tunnels”. No system for selection most crucial locations.</li> <li>• <b>How</b> will it be implemented (what steps are required in the process)?            Project IDEKO, paid by safety research fund of Ministry of interior was finished 2012 and is not functioning. New calculator based on relevant parameter’s should be uploaded to the web page with accident data system. Then the selection of critical locations should be automated and easy. But system of standardised methodology should be implemented on all levels – state, regional and local.</li> <li>• <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Due to importance, system should be implemented quickly, under support of ministers of interior, transport and local development. Financial resources should use their budget.</li> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            MV, MD, MMR, road safety experts, auto moto clubs, European structures (methodology).</li> </ul>			
<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>• Dopravniinfo.cz is the portal, where project INFOBESI is presented.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>• Definition what is accident location: 3 accidents with injuries within one year, or 3 accidents with injuries of same character within 3 years or 5 accidents same type within 1 year. Map application “Nehodová místa”.</li> </ul>				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Ensuring that types of pedestrian/cyclist facilities and crossing arrangements are selected based on the operating speed of traffic flow and pedestrian, cyclists and vehicle peak-hour flow volumes</b></p> <p><a href="#">[TA2/ authorities /evidence_base]</a></p>	2021 - 2024		MD, Insurance, EU DG
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?</li> </ul> <p>There are several methodologies related to pedestrian and cycling facilities (TP 103 – Pedestrian and housing zones, TP 131 + TP 145 – Design of through roads, TP 132 – Traffic calming on local streets, TP 179 – Design of cycling paths, TP 218 – Design of zones 30 km/h, but there is no guaranty about the correct application of pedestrian and cyclist protection in the contact with motorised traffic under different circumstances (urban, interurban);</p> <ul style="list-style-type: none"> <li><b>How</b> will it be implemented (what steps are required in the process)?</li> </ul> <p>Simple application manual for application of different speed/traffic volume/locality/users focused on VRU safety based on international experience would be very useful.</p> <ul style="list-style-type: none"> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?</li> </ul> <p>Benefit from such manual shall be immediate, actual practice is problematic with use of pedestrian crossing, place to cross, traffic signals and different 2<sup>nd</sup> generation applications, which are very expensive with problematic effects. Should be financed by MD, insurance companies, auto moto clubs or from grant agency. Recommended solution respecting central European traffic rules should be applied.</p> <ul style="list-style-type: none"> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?</li> </ul> <p>PIARC, RADAR or any other institution should raise initiative!</p>				
<p><b>Uptake Plan</b></p> <p>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Application of technical methodologies.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>TP 103, 131, 132, 145, 179, 218.</li> </ul>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<b>Periodical collection of relevant supporting data on characteristic VRU crash locations on the road network on a mandatory basis and update relevant databases</b> <a href="#">[TA2/ authorities /supporting_data]</a>	2021 - 2024	Police budget	Police
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why</b> is it necessary (what is the current problem)?            Detailed accident statistic with exact locations and basic type of accident identification is available updated regularly on the publicly available map, where filtering is possible. But relevant actions are not spontaneous or preventive. Some years ago, Police Presidium completed list of dangerous pedestrian crossings on primary roads, but even the authors have no evidence of the progress and relevant treatments. Instead of prevention, there is usually action after tragical accidents with pedestrian, especially children. Then, speed reduction, speed monitoring and traffic signals are installed.</li> <li>• <b>How</b> will it be implemented (what steps are required in the process)?            In the official Road Safety Action Plan, approved on January this year, there is activity 19 – Central evidence of black spots, 23 – Elimination of blackspots, 30 – Implementation of 30km speed zones. But no systematic in-depth analysis of VRU crash locations.</li> <li>• <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Immediately, financed from the not existing “Road Safety Prevention Fund”, which should participate on the SFDI budget.</li> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            Any international practice, EU countries practice should be followed, but main actor would be Police Presidium and Insurance companies.</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>• Yearly accident report of Police Presidium, map with accident locations and data.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>• Elimination of black spots in national action plan.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<b>Periodical analysis of effectiveness and efficiency of implemented countermeasures for VRUs</b> <a href="#">[TA2/ authorities /analysis]</a>	2021 - 2024	SFDI, Road Safety Fund	MV, MD
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?            There is no central evidence of implemented countermeasures, because there are state roads, regional roads and municipal roads with the separate budgets. So, the evidence should be limited on the history of financial subsidies for the safety measure if paid by SFDI, or in separate chapters of road operators' budgets. No systematic analysis available for other users or followers is known.</li> <li><b>How</b> will it be implemented (what steps are required in the process)?            The central evidence of actions directly related to VRU safety improvements should be organised based on the practice, that yearly reporting about activities related to the National Road Safety Action Plan are requested and stored. Some evaluations are published as articles at "National Road Safety Observatory" by authors from CDV, BESIP, MD. Some results are available at <a href="http://www.vyzkumnehod.cz">www.vyzkumnehod.cz</a>, <a href="http://www.czrso.cz">www.czrso.cz</a>;</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Budget of BESIP/ministry of transport or SFDI;</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            BESIP, dedicated department of Ministry of Transport, which is more or less personally empty and not efficient;</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>Yearly reporting about activities related to national safety strategy.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>Project IDEKO, portal "Dopravni info".</li> <li>Rules SFDI for subsidy up to 85 % for specified road safety improvements.</li> </ul>			

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Engaging all stakeholders in the process of VRU-friendly road design (engineers need to collaborate with different stakeholders and NGOs)</b> <i>[TA2/ authorities /stakeholders]</i></p>	2021 – 2024	Investment and maintenance budgets	Operators of roads, RSD, regional Transport departments, Municipalities
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? At new design, standard rules and legal requirements are kept. But mostly, at road construction/reconstruction no specific pedestrian and cyclist infrastructure is built, when their volume is evaluated as low.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Minimal safety standards and safe space to be defined along the roads, even when the calculated volume of users is low. Normally, along roads there is no space other than traffic lane or very narrow shoulder;</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Revision of the design standards to secure the safe lane for VRU on roads and especially bridges to be implemented as quickly as possible, because the process of preparation of construction/reconstruction is extremely long and so effects would be visible after many years;</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Initiative should start from bottom up (auto clubs, insurance companies, public, NGO, who would point on the safety deficits and risks for pedestrian to walk after dark from village to village.</li> </ul>				
<p><b>Uptake Plan</b> <i>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</i></p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Education of road safety auditors and their activities in RSA, RSI.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Technical standards and methodologies.</li> </ul>				

## ITS and other techniques for speed management

ITS and speed management National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches</b> [TA3/ national /guidelines]</p>	2021 - 2024	SFDI, MV, road operators	MV, MD
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? In the official Road Safety Action Plan, there are activities: 1 – Speed supervision, 2 – Speed section control, 30 – Implementing 30 km zones. At the Technical conditions of MD, there are TP 85 – Speed reduction bumps, TP 165 – Variable message signs, TP 182 – Traffic telematics on the roads, TP 205 – Rules for variable traffic signs. There are professional books about ITS. ITS is applied on the newly built motorways and every time in road tunnels. Traffic calming signs and monitoring of speed is installed on the lot of approaches to the villages. But automatic radars with cameras, car registration and automatic penalisation are very rare, often dismantled (compared for example to Poland or Great Britain) where should work as the effective tool for traffic calming.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Greater application of automated warning signs on places with higher risk of accident and greater application of speed measurement devices with automatic producing penalty would decrease of number of accidents and general level of over speeding. Where speed cameras are in operation, respect to the traffic rules is evidently much better.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Speed cameras and warning signs should be installed as quickly as possible, when relevant instructions shall be given to road operators. In practice, there were cases when municipalities ordered installation of speed cameras on hidden and not expected places with speed reduction to 30 with primary aim to receive income to local budget. Practice with clear warning “Speed measurement” like in Poland is much more educative. It should be financed from dedicated “Road Safety Fund”, which is not established.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? If relevant programme for road safety including the subsidy would be announced by SFDI, including exact rules where it is effective, fair and applicable, the installation of speed cameras will be installed by road operators. Power should be from solar panels and transmission of data should be wireless.</li> </ul>	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>ITS is identified in the Road law 13/1997 (version 1.1.2020).</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Directive 2010/40/EU is applied in Czech technical standards 28701, 14813, 21217, CEN/TC 278, ISO/TC 204.</li> </ul>			

ITS and speed management Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Exploitation of new ideas and recommendations:</b></p> <ul style="list-style-type: none"> <li>• Speed-activated warning signs (e.g. “Slow down” in the approach of bends and other dangerous locations);</li> <li>• Variable speed limit signs on high-level roads (traffic and/or weather-dependent);</li> <li>• Time-dependent speed limits, e.g. in the vicinity of schools during opening hours;</li> <li>• Transversal rumble strips in the approach of junctions or sharp bends;</li> <li>• Efficiency of administration of fines from automatic speed enforcement;</li> <li>• Lack of resources among authorities tasked with the issuing of fines;</li> <li>• Different degrees of automation (centralized &amp; nearly full automation in France. Inefficient manual processing in other countries ...)</li> </ul> <p>[TA3/ regional /ideas]</p>			
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• <b>Why</b> is it necessary (what is the current problem)?</li> </ul> <p><b>Speed-activated warning signs</b> (e.g. “Slow down” in the approach of bends and other dangerous locations) are known, but installations are very rare, more often is the installation of radar display or red lights on the approaches to the villages;</p> <p><b>Variable speed limit signs</b> on high-level roads (traffic and/or weather-dependent) are installed at newly build motorways, at the tunnels and at some city arterials;</p> <p><b>Time-dependent speed limits</b>, e.g. in the vicinity of schools during opening hours are installed at some locations, probably due to parents pressure on authorities. Unfortunately, experience shown, that lower limit was not used at the access/egress hours of children, but also at no children hours. Strict rules for operation should be necessary;</p> <p><b>Transversal rumble strips</b> in the approach of junctions or sharp bends were used on very conflict junctions with high-speed approach of cars and series of heavy accidents;</p> <ul style="list-style-type: none"> <li>• <b>How</b> will it be implemented (what steps are required in the process)?</li> </ul> <p>Programme, motivation, road safety inspections, road safety assessment should be the most effective trigger together with the subsidy programme produced by MV, MD, BESIP or SFDI. Till now, more care is given to noise protecting walls, toll</p>				

	<p>system and high-speed railways.</p> <ul style="list-style-type: none"> <li>• <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?</li> </ul> <p>Effectivity of implementation shall be given by accident reduction. Systematic road safety programme should be emphasized, financial resourced should be born from Road Safety Fund, identified in the SFDI budget;</p> <ul style="list-style-type: none"> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?</li> </ul> <p>Road operators, departments of transport on initiative of Traffic Police, identification of accident location and motivation from insurance companies, resulting from the publicly available road safety assessment results.</p>
	<p><b>Uptake Plan</b></p> <p><i>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</i></p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>• Technical conditions MD no. 165, 172, 182, 205.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>• See above.</li> </ul>



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
ITS and speed management Road authorities	<b>Setting of speed limits: elaboration and continuous revision of guidelines &amp; systematic implementation</b> <a href="#">[TA3/ authorities /guidelines]</a>	2021 - 2024	MD	MD, MV
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?            In the Czech Republic, there are too many speed limits: roads 90, MW 110, MW 130, urban 50, urban motorways 80, tunnels 80 rural, 70 urban and then local arrangement by signs (70, 40, 30 etc.) Very often, to identify the combination of road/motorway/rural/urban/tunnel/90/50/130/80/70 is confusing, because there are no signs confirming what speed is valid. Sometimes speed reduction is not relevant to traffic situation or to road parameters. General warning sign giving right to driver to accommodate speed to real safe driving is practically not used. Guidelines, describing when to apply what speed reduction and when speed sign should be “informative” or “Confirmative” would give more satisfaction to the driver.            Very often, some parliament members groups are trying to increase speed limit on highways on 160 km, but fortunately professionals are protesting that the design was made actually for 120 km.            Often, sight distance over central barrier or bridge piers are not enough for permitted speed 130, what users did not know.</li> <li><b>How</b> will it be implemented (what steps are required in the process)?            Guidelines, improving the information deficits, fixing some technical rules what speed limit to be signed, would be appreciated.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Technical paper should be prepared and approved as mandatory for all road operators, transport department and police, including road designers.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            MV, Traffic police, activity of EU to coordinate the rules in the small European space.</li> </ul> <p><b>Uptake Plan</b>            Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention            National uptake activities:</p> <ul style="list-style-type: none"> <li>Valid Czech traffic law.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>Measuring and prevention as the activity 1-3 of national action plan.</li> </ul>			

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Consistency of speed limits: differentiated speed limits depending on the function, alignment, volume and structure of traffic must be defined, in accordance with the reasonable local speed limits</b> [TA3/ authorities /consistency]</p>	2021 - 2024		
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Speed limits are fixed in the relevant law 361/2000 Sb. In the actual update version, with 137 paragraphs. Speed limits in general are in the § 18, (3), (4), with local changes given by signs up or down (6), (7). There is limit for cars till 3,5 T and buses (90/110/130) and for other vehicles (max 80). So, the speed difference on motorway is 50 km/h. There is no differentiation of speed limits other than category (road 90, motorway II. class 110 and motorway 1st class 130, and urban (50 or 80). No identification related to function, alignment, volume or structure of traffic. Speed at railway crossing is at § 28, (3). Speed at towing vehicles 60 is defined at § 34,(1). Speed in the tunnels is fixed by traffic signs, usually 80 in rural and 70 on urban motorway. In first Czech motorway tunnel on D5 speed 100 is tested.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Manual based on international or European practice shall coordinate rules for speed limits and for variable speed limits based on weather, rain density, visibility, traffic congestions in tunnels etc.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? To be implemented after careful coordination with neighbouring countries to support common practice in the central Europe with standard rules. Financial resources shall bear from the budget of MD.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? MD, MV, research organisations and traffic engineers.</li> </ul>				
<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities:</p> <ul style="list-style-type: none"> <li>Czech traffic law.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Measuring speed, police supervision, prevention, warning radars.</li> </ul>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
ITS and speed management Road authorities	<p><b>Speed enforcement: implementation of section control, minimization of the obstacles in violation processing procedures</b> <i>[TA3/ authorities /enforcement]</i></p>	2021 - 2024	MV, MD, Road Safety Fund of SFDI	MV, MD
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Speed harmonisation is decreasing number of traffic conflicts. Over speeding is the main trigger of tragic accidents (nearly 30 % of car accidents with killed people). More than 40 % of drivers is driving faster than permitted.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Compared to other European countries, there is minimal implementation of section control outside urban areas. Road sections with high crash record, high level of over speeding and risky overtaking shall be indicated and reconstructed to 2+1 sections with speed section control. New IT technologies should make car number plate identification easier and violation process with easy way to pay penalty with lower penalty when paid immediate and higher when paid after term should motivate driver to keep speed limits and to pay without bureaucracy problems.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? To be implemented immediately under support of national action plan activity no 1 – Speed supervision and 2 – Speed section control.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? MD, MV, road operators.</li> </ul>			
	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Czech traffic law.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Spot and section speed control, priority area of national road safety strategy 2021 – 2030.</li> </ul>			

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Speed data collection and analysis: systematic collection of speed data development in anonymized speed database. Further development of the methodology of analysis (for example speed development by road types, etc.)</b></p> <p>[TA3/ authorities /data]</p>	2021 - 2024	Maintenance budget	Road operators, municipalities
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Speed data are available in very limited extent and are stored for penalisation only. Speed is measured by microwaved radars installed on police cars, movable laser equipment on tripods, stationary radars in iron boxes on poles, by loops installed in pavements, by scanners on gantries or poles along roads. There is no systematic data store for speed variations and statistics. For traffic engineering studies, temporary installations of radar boxes Sierzega are used. Some villages bought speed displays with speed figure or smiling red and green. Data storage is rare and speed database is poor. Data from automatic loops are stored at RSD. In Prague, section speed measurement is installed on 60 stretches, spot speed measurement was conducted on 38 locations.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Speed data collection system for analysis to be developed on the whole country bases to provide data for analysis and strategy how to increase road safety. Publicly available database, similar to traffic counting and evidence of accidents is completely missing. No, system is used locally, for penalisation of drivers. Building the system is necessary.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? It would be implemented on national scale as quickly as possible to start with the logical sampling of roads of different categories, parameters, traffic volumes and environment. Central data store to be built either at MD, or Police Presidium, data available at internet.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Main actors to be road owners, system to be operated on the MV servers, under central governmental IT system.</li> </ul>				
<p><b>Uptake Plan</b></p> <p>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Project HADN (detailed analysis of traffic accidents in road traffic).</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Over speeding as the important trigger for road accidents in police year book of accidents.</li> </ul>				

## Safe infrastructure near schools

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Development and support of specific design guidelines for road sections in the vicinity of schools</b> <i>[TA4/ national /guidelines]</i>	2021 - 2024	Road owners	Ministry of education, ministry of healthcare
<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?            Lot of schools is located along busy streets, some of them along 1st class or 11nd class roads. Some schools are located along streets with heavy cargo traffic, some along busy urban streets. There is no “School zone” system, there is only sign “Beware, children”. Safety measures are installed case by case without any specific guidelines. There are materials for children, but not for infrastructure.</li> <li><b>How</b> will it be implemented (what steps are required in the process)?            International (European) best practice to be collected, with the solution flexible for very different situation on place, concerning on safe access to school by all modes, including bus and tram stops, crossings, car parking, kiss and go, school buses, bicycle parking etc.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Manual to be edited by Ministry of education, MV, MD in cooperation with NGO, parental organisations, teachers etc. based on wide campaign, collecting data from different areas and cases.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            MŠMT, MD, MV, NGO, road engineers and road safety experts, with the use of the programme Star Rating for Schools.</li> </ul>				
<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>No specific guidelines or rules.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>BESIP education, education for children, methodology of NGO “Prague mothers” and some schools.</li> </ul>				

	Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools National level	<b>Definition of special speed limits in the Road Traffic Code to be applied on road sections in the vicinity of schools</b> <i>[TA4/ national /limits]</i>	2021 - 2024	MV, MD	MV, MD, MŠMT, NGO
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Missing complex definition of School zones, including traffic sign, and modification of Traffic law, defining behaviour at the school zone and the relevant speed limit, reacting on the morning hours, access to school etc. Studying of the US system of school zones and school buses, which is used in many countries worldwide.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Development of comprehensive manual for road sections along schools and access to schools, because now we have Tempo 30 zones, Pedestrian zones but not school zones. Debate to be presented in Parliament, what day time and school operating conditions the speed to be decreased from 50 to 40 and 30.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? The Road Traffic code is updated many times for much less important reasons, that such modification should be included in the traffic law within one year.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Ministry of Transport in cooperation with ministry of Interior.</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>No specific rules, speed 30 applied on some locations.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>No specific documents identified.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools</b> <i>[TA4/ national /funding]</i></p>	2021 - 2024	Regional budget, municipal budget, Roads directorate budget	Infrastructure owners with the school authorities
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Safe infrastructure near schools National level</p>	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Safety around schools is not primary target of public and authorities' interests. Safety problems around and in vicinity of schools are solved on the local level between school authorities, parents and local government. The universal rules and manuals what measures to be applied at school environment with respect of the location, access and category of road passing the school area to be approved on national level.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? The definition of "School Zones" is not known in the Czech legislation and practice. It is necessary to bring strong initiative from EU, RADAR or neighbouring countries, that harmonisation of Traffic Law in this item is necessary and the School Zones to be legalised and technically defined. It is not only passing street, but safe system of access from nearest bus and tram stops where children's flows shall be identified. The solution to be tailored on the real situation based on analysis of gravity and mobility patterns of pupils visiting school.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Basically, adequate funding is important motivation for processes like "Star Rating for Schools" with the proposal and execution of treatments for the safer access to all schools, small and big, in the village or town, along the traffic corridor.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? On the national level, there is no legal initiative, no standard or manual, compared to the detailed and strictly demanded manual for blind and disabled. Ministry of schools and education should be normally the trigger, or auto moto clubs and NGOs should raise the initiative.</li> </ul>			
	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>No specific funding.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>No rules and specific funds.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Systematic collection of data on road crashes near schools and related casualties</b>	2021 - 2022	MV, MD	Police presidium
Safe infrastructure near schools National level	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Actually, collection of crash data is working, there is relatively very complex evidence of all road accidents, where somebody is injured, where is damage of higher value or damage of public property. Such database should be filtered according different causalities as time, location, participant etc. But that is all reactive, not preventive, and no specific analysis is made in relation to schools or playgrounds.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Very good publicly available database “nehody v ČR” is able to filter by age (0-14), road, time, urban, day etc, from year 2011, (till now 21902 of age 0-14, from that pedestrian 7321), without identification of way to school. Special application to be programmed to identify relation of accidents to the distance to school buildings and areas. Significant peak to be visible on 7 to 8 AM.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Budget of ministry of transport and ministry of interior to be used to improve existing web pages to allow to filter coincidence with the vicinity to schools.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Police presidium and ministry of transport should make public bid on the new functionality of existing web with accidents data, which have GPS coordinates. Manual for required functionality should be approved first.</li> </ul>			
	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Only general accident statistics and map portal, where are all accidents to be filtered.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>See above.</li> </ul>			



	Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools National level	<b>Systematic collection and publishing of key performance indicators on the road network around schools</b> <a href="#">[TA4/ national /indicators]</a>	2021 - 2024	MV, MD	MV, MD, Police presidium
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?            Publishing of key performance indicators on the road network around schools needs to coordinate accidents statistics, school localisation data, traffic volumes data, countermeasures evidence around schools, number of pupils, attraction area of school and public transport services. Nearly all such data are available in the statistical systems of government, but any system giving that data into logical incidence leading to key performance indicators does not exist.</li> <li><b>How</b> will it be implemented (what steps are required in the process)?            First, any decision related to the active policy to the systematic evidence of key performance indicators about road network around schools to be initiated. Central evidence of available data, which should cooperate together to give a picture about preventive road safety measures around schools to be requested by any directive. More concern is given to the strategy to “Save the Planet” and decrease the CO emissions than to children’s safety.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            The systematic preventive care for safety around schools and school zones to be implemented as quickly as possible, in the cooperation with the implementation of new directive EU DIR 2019/1936.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            MV, MD, Police Presidium.</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>General police accident statistic, where are specifically children pedestrian/cyclist by age group.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>See above.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Regional and local level	<b>Ensuring adequate funding for road safety interventions in local roads in the vicinity of schools</b> <a href="#">[TA4/ regional /funding]</a>	2021 - 2024	Regional budget, municipal budget	Regional government, local governments
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why</b> is it necessary (what is the current problem)?            Interventions in local roads in the vicinity of schools are made based on the local knowledge of safety problems, pressure of parents and worst case after heavy accident with the participation of children. Some regions adopted local or regional safety action plan, what was based mostly on the initiative of the chief of transport department or any member of the council. Initiative bottom-up was identified for example on the NGO “Prague mothers”. More concern to the safety at school to be motivated by any promo actions. Local specialists of BESIP are oriented more on education campaigns.</li> <li>• <b>How</b> will it be implemented (what steps are required in the process)?            Any international campaign, any directive, any system of EU subsidies on safety programmes would be helpful. EU subsidies are oriented on energy, environment, housing, enterprises, agriculture, water etc. but not for motivation of specific safety measurements. Subsidies for tourism were used on building outlook towers from timber with very unclear public benefit.</li> <li>• <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Because basically it would be relatively low-cost countermeasures, the regional budget or local budget with some portion of motivating subsidy from the safety fund would be enough for the start of routine improvements.</li> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            Regional and local governments, departments of transport, traffic police, NGOs, parents, management of schools.</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>• No specific programme.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>• Local/municipal projects.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools Regional and local level	<b>Systematic collection of data on road crashes near schools and related casualties</b> <a href="#">[TA4/ regional /data]</a>	2021 - 2024	MV, Police presidium	MV, Police presidium
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Actually, collection of crash data on centralised level is working, there is relatively very complex evidence of all road accidents, where somebody is injured, where is damage of higher value or damage of public property. Such database should be filtered according different causalities as time, location, participant etc. But that is all reactive, not preventive, and no specific analysis is made in relation to schools or playgrounds.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Very good publicly available database “nehody v ČR” is able to filter by age (0-14), road, time, urban, day etc, from year 2011, (till now 21902 of age 0-14, from that pedestrian 7321), without identification of way to school. Special application to be programmed to identify relation of accidents to the distance to school buildings and areas. Significant peak to be visible on 7 to 8 AM.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Budget of ministry of transport and ministry of interior to be used to improve existing web pages to allow to filter coincidence with the vicinity to schools.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Police presidium and ministry of transport should make public bid on the new functionality of existing web with accidents data, which have GPS coordinates. Manual for required functionality should be approved first.</li> </ul>			
<p><b>Uptake Plan</b></p> <p>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Collection of data by traffic police.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>All accidents registered with the costs above 100 000 CZK and all injuries and costs to 3<sup>rd</sup> party.</li> </ul>				

Safe infrastructure near schools Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Educational campaigns to promote safer transport to/from schools</b> <i>[TA4/ regional /campaigns]</i>	2021 - 2024	Ministry of Interior, of Schools, regional budget	Road safety experts
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Existing campaigns are oriented on the safe behaviour on roads/street, targeted to school children (lessons, traffic playgrounds), to cyclists, motorcyclists, elderly etc. No campaigns are targeted on the families and the promotion of safe transport to school. Safe transport depends on the local situation, access to the public transport, parking facilities, use of bicycles, children scooters and it is very individual depending on the distance travelled.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Any such education campaigns to be carefully tailored to the real situation and knowledge of the local conditions, gravity of school, infrastructure, public services etc. In many cases, children depend on one bus morning and one bus afternoon, or pick-up by parents by car.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Actual situation to be studied and any improvements to safety to be made immediately. Specially in rural areas with small villages safe transport depends on the availability of bus service on suitable time serving to all villages, what is theme for negotiations between bus operators, ordering of bus services, coordination of time tables, reliability of services (in winter), special school services etc. Financial resources are based on regional budgets on public transport, local budgets and budgets dedicated to promoting campaigns.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Local authorities, regional authorities, NGOs, public transport operators, traffic police, road safety experts, auto moto clubs, insurance companies.</li> </ul>	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>BESIP, system of school education mandatory.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Traffic playgrounds in every district town, around 160 in Czech Republic.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
Safe infrastructure near schools Road authorities	<b>Forming a special road safety fund dedicated for direct investments in road safety, to implement upgrades in the vicinity of schools</b> <i>[TA4/ authorities /funding]</i>	2021 - 2024	SFDI, regional budget, municipal budget	ŘSD, regional roads operators, local streets operators
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why</b> is it necessary (what is the current problem)?            There is no centrally formed road safety fund. The biggest fund held by SFDI has the specific status defining income sources and main targets: roads, railways, waterways. There is a long list of projects to be financed, approved by board by name and number. There is couple of projects, named “improving safety..”. And then there is a small chapter, launched year to year, named better infrastructure for disabled, cyclist or safety, where individual investors should apply for co-financing. The value is very small and number of accepted projects needs careful application form.</li> <li>• <b>How</b> will it be implemented (what steps are required in the process)?            It is necessary to change the statute of SFDI and to identify minimal value of “Road Safety Fund” and define strictly the rules for safety interventions and prioritisation, because normally it is told, that “every by-pass, every new motorway, every modernisation” is the road safety project.</li> <li>• <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            It needs the legal act from government, proposal should be approved by parliament and signed by president. No political party have the road safety now as the important priority. Every party have somewhere in the programme building motorways and modernisation of roads, parallel with building high speed railways.</li> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            The Fund to be legally adopted by government, included in the SFDI status, rules and restrictions for application and prioritisation shall be described and individual road authorities (ŘSD for motorways and 1<sup>st</sup> class roads, regional government for 2<sup>nd</sup> and 3<sup>rd</sup> class roads, municipalities for urban streets) shall apply with strict prioritisation based on star rating, safety ranking, hot spot prioritisation, accident statistics. Decision about financing should be published to be objectively controlled. Different types of safety remedies should be covered (schools, junctions, trees and rigid obstacles, railway crossings, pedestrian etc.)</li> </ul>			
	<b>Uptake Plan</b> <i>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</i> National uptake activities: <ul style="list-style-type: none"> <li>• No such specific fund.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>• Paid by regional governments and municipalities.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	<b>Observation of road safety trends and good practices to plan maintenance and upgrades of existing road network in the vicinity of schools</b> <a href="#">[TA4/ authorities /good_practice]</a>	2021 - 2024	MV, MD, road authorities' budget	Road authorities + municipalities
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why</b> is it necessary (what is the current problem)?                Good practice cases to be mandatory documented and given to other road authorities like samples to be followed. Experience to be edited like the manual for repeated application. No such observation of upgrades at school is systematically followed with evaluation “before and after”.</li> <li>• <b>How</b> will it be implemented (what steps are required in the process)?                Catalogue of typical solutions with relevant information from before and after study” to be publicly available at the system of technical standards. No such standard is now possible to follow.</li> <li>• <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?                Such action should start immediately, under supervision of transport departments, traffic police and management of schools. But any stimulus should come from EU directive, RADAR or other international body, addressing the Czech authorities to give instruction to Czech ministry of education to communicate with transport departments about such activities.</li> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?                Ministry of schools + transport departments and road operators, BESIP and auto moto clubs should launch relevant campaigns.</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>• Evidence in police accidents statistic, group children by age group, location of accidents is according to road class and road characteristics (straight, curve, junction, railway crossing, but not at school).</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>• Not found.</li> </ul>			

Safe infrastructure near schools Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Use of appropriate methodologies to identify hazardous locations near schools and the causes of road safety problems, identify intervention priorities and implement countermeasures</b> [TA4/ authorities /methodology]</p>	2021 - 2025	SFDI budget, MD budget, regional governments budgets	SFDI, MD, Traffic police
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Identification of hazardous locations should be based on reactive approach (after accident happen) or on pro-active base. Pro-active access should collect inputs from schools (pupils, parents, teachers) or based on systematic investigation. Any relevant methodology like SR4S is not implemented in Czech and it is very important to make advisory in such topics.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? First of all, initiative, then the instruction, better the directive! No such action is included in the official National Safety Action Plan.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? To prepare methodology based on international and local practice is not big issue, but relevant authorities should be motivated to order and then approve such methodology. Budget of SFDI or MD shall be the primary financial recourse.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Traffic police, MD, BESIP.</li> </ul>				
<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Not found.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Not found.</li> </ul>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	<b>Carrying out of “before and after” studies to evaluate the road safety effect of implemented interventions</b> <i>[TA4/ authorities /impact]</i>	2021 - 2025	SFDI, regional governments, municipalities	Founder of school, parents, road safety auditors;
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li>• <b>Why</b> is it necessary (what is the current problem)?            Safe access to schools and other children’s collective activities is the most important parameter of traffic safety. Situation in this respect is different from school to school, location to location. General evaluation of the “Safe way to school” should prioritise the schools and localities, where there is permanent problem and risk. Such classification should prioritise schools deserving detailed safety evaluation and execution of Study and relevant Treatment;</li> <li>• <b>How</b> will it be implemented (what steps are required in the process)?            Analysis of the gravity of school, access to school, modal split of student’s trips, evaluation of risks at visiting school, potential improvements evaluation, cost-benefit evaluation of different scenarios, presentation, selection of optimal variant, approval, execution of countermeasures, education of students, after study, evaluation of positive effects, reporting, recommendation for another improvement, final report.</li> <li>• <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Immediately after approval to make “Safety Rating around school”, authors of the Interventions proposals, founder of the school, funded according to class of the road passing around school environment;</li> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            Department of Transport, Municipality, Founder of the school;</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>• Project INFOBESI, old data 2013-2014.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>• Project IDEKO, research, not updated.</li> </ul>			



## Transport Safety and COVID-19

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Revision of the default speed limit for rural roads and consider adaptations where necessary (possibly only on sub-sets of the network, e.g. roads with narrow cross-sections, or roads with vulnerable road user traffic), with a view to preventing collision forces that humans cannot survive or would cause serious injury.</b> [TA5/national/speed limit]</p>	<p>Identification 2021 – 2022, speed limit signs installation 2023 - 2030</p>	<p>Road owners (regions, state)</p>	<p>Traffic Police, road operators, recommendation from RSI</p>
<p>Investing in safe infrastructure National level</p>	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? On the rural roads, there is standard speed limit given by traffic law 90 km per hour, often lowered locally by traffic signs to 70 or 50 km based on identified road characteristics. In the countries around Czech Republic, there is the same or higher speed limit (100 km per hour). There are 3 categories of roads in the Czech Republic (primary, secondary and tertiary class), which differs by traffic importance, traffic volume, connectivity in the network to service the settlements and also ownership (state roads or regional roads). Rural roads in fact are not a special category. I am not sure if any special countrywide speed limit is needed. According to traffic law, speed to be adjusted to the road and traffic characteristics automatically. The existing problems are more or less in following: <ul style="list-style-type: none"> <li>➤ Over speeding above the general speed limit;</li> <li>➤ Low accommodation to the poor road characteristics;</li> <li>➤ Limited number of village by-passes;</li> <li>➤ Missing infrastructure for VRU;</li> </ul> Solution is not in further lowering of permitted speed, but in the modernisation of the road network to be appropriate to the traffic importance and volume and better equipped for the movement of VRU. Limited speed to be applied at the junctions with higher traffic volumes or lower sight distances. </li> <li><b>How</b> will it be implemented (what steps are required in the process)? Modernisation of the road network to be safer for all road users is planned permanently in the plans of road owners: For the road's construction and reconstruction, it was invested in years 2001 to 2020 724,3 billion Czech crowns. For the II. and III. Class roads, in 2021 the budget was 8,63 billion Czech crowns. Speed 30 is planned on the selected busy sections of local roads class C according to standard for local roads (not rural).</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Selection of sub-sets of the road network with the lower speed limit to be subject of careful analysis of technical parameters and accident risk analysis to prepare specific action by installation of traffic signs. It shall be the product of traffic management – road safety analysis. Road signing to be paid from maintenance budget of road owners. It shall be applied during the planning period 2021 –</li> </ul>			

	<p>2030.</p> <ul style="list-style-type: none"> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?</li> </ul> <p>Main actors to be road owners (state, regions) based on the Road Safety Strategy for 2021 – 2030. Identification of relevant sections/sub-sections is planned on 2021 – 2022. Supervision on respect to permitted speed is given to Czech Traffic Police and road owners.</p>
	<p><b>Uptake Plan</b></p> <p>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>• No specific policy, manuals for Tempo 30 and traffic calming.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>• See above.</li> </ul>

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Implementation of a Safe System, with emphasis on rural roads, so that they eventually become self-explaining and forgiving to human error</b> <a href="#">[TA5/national/SafeSystem]</a>	2021 - 2030	Regional governments budget, subsidy from SFDI	Traffic police, road owners, road safety auditors
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Specifically rural roads are very often not self-explaining and forgiving. Change in geometry, sight distance, poor junctions, traffic signs hidden in green, no horizontal signing, no shoulders, often poor pavement close to edge, lot of rigid obstacles (trees, poles, walls, columns etc.) require full concentration of drivers which are not local. “Modernisation” of such roads is needed with the focus on the space for VRU (preferably separated path), elimination or protection of rigid obstacles, clearing the sight distance, visibility of road signs, better road marking, elimination of suddenly narrowed sections, protection of road environment is needed.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Unfortunately, the primary roads have the similar safety deficits at the higher traffic volumes and importance. The length of secondary and tertiary roads is several times higher at the lower traffic. So, the modernisation programmes are concentrated on roads with the higher traffic priority. There are following programmes for the safer roads:           <ul style="list-style-type: none"> <li>➤ Activity 22 – elimination of accident locations...;</li> <li>➤ Activity 23 – elimination of accident locations co-financed by SFDI;</li> <li>➤ Activity 24 – elimination of accident locations with trees;</li> <li>➤ Activity 25 – installation of guard rails at the new alleys with speed higher than 60 km per hour;</li> <li>➤ Activity 26 – 50 new railway gates per year;</li> <li>➤ Activity 27 – 90% of railways crossings on primary roads equipped by gates;</li> <li>➤ Activity 28 – improvement of signing and marking at the railway crossings on the regional roads;</li> </ul> </li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Officially planned for years 2021 – 2022, realistically to be implemented during 2021 – 2030 period. Officially, financing is guaranteed by the existing road budget.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? For the activities above, responsible actors are Ministry of Transport, road owners, railway owners, SFDI, Traffic Police.</li> </ul> <p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>• Activities in national action plan.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>• Road design standards and technical conditions approved by MD.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<p><b>Provide police forces and other enforcement entities with adequate resources and legal precautions for re-instated &amp; intensified and effective speed enforcement; this may include section (average speed) controls – also on rural roads</b></p> <p><a href="#">[TA5/national/enforcement]</a></p>	2021 - 2022	Traffic Police, Road owners' budgets	Traffic Police, Road owners
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Over speeding is the important trigger for road accidents with FSI. Accident statistics show the number of accidents where the high or inappropriate speed was the main factor. Driving by speed higher than 20 km above speed limit by some aggressive road users is regularly visible and mostly stay without penalty. Number of sections with the permanent speed enforcement is limited (some urban sections, road tunnels) but have very positive effects. Very often it is installed after very tragic accident. Movable and hand-held radars are rare, mostly as the planned week of speed control. It is necessary to increase the penalisation of aggressive drivers with dangerous overtaking (often strong motorcycles), but not the accidental over speeding of 5 km.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? The following activities are planned:           <ul style="list-style-type: none"> <li>➤ To increase the visual presence of traffic police, including speed cameras;</li> <li>➤ To increase the real number of hours of mobile speed measurements on 5% more in 2021 and 10% more in 2022 than the reality in 2020;</li> <li>➤ To identify minimally 40 locations for installation of spot speed control or section speed control;</li> <li>➤ To provide permanent measurement in 15 locations in 2021 and 25 in year 2022 by spot control or section control;</li> </ul> </li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Officially planned for 2021 – 2022, financing guaranteed;</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Czech Traffic Police shall execute the operative and movable speed measurements, Czech Directorate of Roads and Motorways shall guarantee the permanent installations, urban speed measurement devices are installed by municipalities. For example, Prague has 60 measuring locations for section control including tunnels, 38 locations of spot speed control and 19 equipment for red light violation.</li> </ul>			
	<p><b>Uptake Plan</b></p> <p>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Police intervention and permanent speed measurement as activity of national action plan.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>See above.</li> </ul>			

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Consider tougher legal sanctions for excessive speed violations, such as higher/ income-dependent fines, licence withdrawal, and confiscation of vehicles</b> [TA5/national/sanctions]</p>	<p>Given in traffic law, which is subject of amendments</p>	<p>Not needed</p>	<p>Ministry of Transport, Czech Government, Parliament</p>
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? The problem is not in the legal level of penalisation, but the in very ineffective system of identification of traffic offences and penalisation of dangerous and aggressive road users. Very often the penalisation is targeted on not intentional over speeding 5 to 10 km, not spotted beginning of village, not spotted lower speed limit or variable message sign for specific time slot. Intentional aggressive drivers stay not penalised or using lawyers refuse identification. So, more effort to be given to application of existing penalisation law and effective process of penalisation. Existing law is using following steps of sanctions: <ul style="list-style-type: none"> <li>➤ Less than +20 km in urban and less than +30 km rural;</li> <li>➤ More than +20km in urban and more than +30 km rural;</li> <li>➤ More than +40 km in urban and more than +50 km rural;</li> </ul> To these steps are relevant financial penalties and point system for loss of driving license. <ul style="list-style-type: none"> <li><b>How</b> will it be implemented (what steps are required in the process)? No changes are planned in the short time period;</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? No changes are planned in the short time period;</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Proposal should be prepared by Ministry of Transport + Ministry of Interior + Ministry of Justice, approved by Government, approved by Parliament (lower and upper chamber) and signed by President.</li> </ul> </li> </ul>				
<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Traffic law and relevant penalisation.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>See above.</li> </ul>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<p><b>Encourage the use of seatbelts in passenger cars through awareness and enforcement measures</b></p> <p><a href="#">[TA5/national/seatbelt]</a></p>	Use of seatbelts is mandatory	Zero	Traffic Police
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Violation of duty to use seat belt to be controlled by Police;</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Police is controlling the duties of drivers and passengers. The penalty paid on place is 2000 CZK, if paid later during the official process it is 2500 CZK;</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? No action is needed, it is question of permanent supervision by Traffic Police and the effectivity to catch the guilty person;</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Traffic control made by traffic police, problem is dependent on the live traffic control with binoculars to catch and to stop the violator (passengers) by routine traffic control. Cameras should also identify violator, but it is relatively problematic more than speed control with picture and car plate number.</li> </ul>			
	<p><b>Uptake Plan</b></p> <p>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>The emphasize on the seat belts use police control is the topic of activity 36 of the national action plan approved by government on 4<sup>th</sup> January 2021;</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Traffic law and relevant penalisation.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Education as the activity of national action plan.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Put high priority on enforcement and educational &amp; awareness-raising activity to curb inappropriate speeds</b> <i>[TA5/regional/speed]</i></p>	2021 - 2030	Ministry of Interior (Traffic Police) budget, Ministry of Transport (BESIP) and the transport departments on relevant levels	Ministry of Interior (Traffic Police)
Investing in safe infrastructure Regional and local level	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Inappropriate speed is identified as the main trigger of the accident in 12568 accidents with 185 killed, 501 seriously injured in the year 2020.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? In the national road safety strategy, increased activity in speed control is activity 1 and 2, prevention and education, including campaigns is activity 3. Importance of safe speed is subject of “Strategy BESIP 2021 – 2030” on the National level. For the regional and local level, there are methodologies and implementing manuals for regional and local BESIP strategies.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Road safety strategies are financed on the relevant levels, it means on national, regional and local level budgets.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Main actor is department of road safety on the ministry of transport (BESIP) and the CDV, organisation financed by Ministry of Transport. On the regional and local level, responsibility is on the transport departments.</li> </ul>			
	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Importance of speed control, enforcement and education as the identified activities of national action plan.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Workshop for the creation of regional and local BESIP strategies is organised for example on 2<sup>nd</sup> November 2021.</li> </ul>			

Investing in safe infrastructure Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Consider the implementation of local safe zones (30 km/h) around educational and medical institutions, area-wide 30 km/h limits in urban areas (potentially excluding major urban thoroughfares) and other traffic calming measures</b> [TA5/regional/traffic_calming]</p>	2021 - 2030	Budget of infrastructure owners	Municipalities, transport departments and their infrastructure operators
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li>• <b>Why</b> is it necessary (what is the current problem)? Number of killed pedestrians on urban streets was 23 (on rural roads 58).</li> <li>• <b>How</b> will it be implemented (what steps are required in the process)? Activity 30 of the national action plan: “Increase the number of Tempo 30 zones on the local streets category C from the technical standard 73 6110 with the high frequency of VRU – shopping and residential areas”.</li> <li>• <b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? The plan for expansion of 30 km zones is officially to 2022. But the process of traffic calming around schools will continue the whole planning period to 2030 based on the local situation.</li> <li>• <b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Local municipalities, departments of transport, NGO’s, public space planners.</li> </ul>				
<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>• Activity no. 30 of the national action plan.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>• Relevant methodologies are available and approved by Ministry of Transport.</li> </ul>				



	Intervention	Time frame	Financial resources	Main actor(s)
Investing in safe infrastructure Regional and local level	<p><b>Help making the increased usage levels of active mobility (walking, cycling) sustainable by providing them with safe facilities and an adequate share of road space</b> [TA5/regional/active_mobility]</p>	2021 - 2030	Municipalities budgets, subsidies from SFDI	Municipalities
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Walking is natural for most of inhabitants, cycling is very popular for leisure, but also for the daily use. Because the street space is limited, great problems arise due to conflicts between vehicles and cyclists on the shared street space, increase of micro mobility, electro mobility, scooters, parking, shared bikes, shared scooters, speed limits, use of pedestrian sidewalks by cyclists, safety of children and elderly, blind etc. There are legal problems and problems with the practical behaviour and street capacity with bikers and scooters.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? SUMP Plans are prepared and adopted in cities with more than 30 000 inhabitants based on European and Czech methodologies, where highest priority is given to the sustainability, pedestrians and cyclists.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? More and more zones are planned and executed, but attitude to shared space is very negative from VRU and Police, when the traffic is not possible to divert to any safe arterials and by-passes.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Municipalities, departments of transport.</li> </ul>			
	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Methodology for execution of SUMP plans in towns.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Relevant manuals for all facilities for pedestrian, cyclists, disabled etc. are available, the main problem is the space deficits in the urban structure. Where possible, dedicated cycle/pedestrian paths separated from motorised traffic are build and are very popular.</li> </ul>			

Investing in safe infrastructure Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Set the necessary promotive steps to re-establish the modal share of public transport – by far the safest and most sustainable transport mode – at least to pre-pandemic levels</b>  <a href="#">[TA5/regional/public transport]</a></p>	2021 - 2022	Public transport operators, regions and municipalities budgets	Public transport operators, regions and municipalities
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?            In the pandemic critical period, use of public transport was decreased and walking, cycling and car driving was popular and safest. After pandemic crisis, all services of public transport are on pre-pandemic level and mobility is increased. But, popularity of home office and availability of electronic tools like Teams decreased mobility figures at some types of employments.</li> <li><b>How</b> will it be implemented (what steps are required in the process)?            Promotive steps for public transport use are permanent, low cost of seasonal (yearly and quarterly) tickets and discounts for children, students and elderly, compared to individual one trip fares are the standard public transport policy.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            This is permanent policy, but public transport needs high subsidies from municipalities and regional governments.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            Level of subsidies and discounts to the full economic price of public transport is dependent on Ministry of Transport, Regional governments decisions and Municipal decisions on the standard fare, children, students, disabled, elderly discounts.</li> </ul>				
<p><b>Uptake Plan</b>            Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Subsidies for public transport operation.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>In the Czech Republic, there is very good policy supporting public transport. The only very expensive are single tickets in city public transport.</li> </ul>				

	Intervention	Time frame	Financial resources	Main actor(s)
Investing in safe infrastructure Road authorities	<p><b>Establish an evidence base to prioritise infrastructure investments based on safety indicators: crash locations, traffic flows, speed levels, road infrastructure design &amp; safety data.</b></p> <p><a href="#">[TA5/authorities/prioritisation]</a></p>	2021 - 2030	Budget SFDI, European Funds	Ministry of Transport, RSD, Regional Governments, Municipalities
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? There is good evidence of accidents and their location and cumulation. There is the program of elimination of safety deficits on TEN-T network. But unfortunately, there is great deficit in the complexation of motorway network, in the construction of bypasses, in the modernisation of infrastructure in general specifically in road environment (rigid obstacles), modernisation of junctions and provision for VRU. Position of CZ in the EU in number of killed per 1 mil. Inhabitants is the result is the 7<sup>th</sup> worse from 27 countries.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Main tool is the implementation of the “real” road safety management under effective public and EU control, based on the implementation of Directive 2019/1936/EC, application of common methodology for performing network-wide road assessment, clear prioritisation of effective countermeasures for safer roads and strict implementation of Safer roads policy into practice.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Implementation of EU Dir 2019/1936/EC into national law is delayed and the text of Czech law proposal is not fully complementary with EU DIR. But the implementation is formally content of National Action Plan. It will be covered by SFDI budget, budget of Traffic Police, budget of regional governments and municipalities.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Main actors to be all partners mentioned in the National Action Plan, basically MD, SFDI, RSD and regional governments.</li> </ul>			
<p><b>Uptake Plan</b></p> <p>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Evidence of crash locations on the web.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Uptake activity is to include the EU Dir into Czech law, what is expected by next government after autumn elections, and then step by step preparation of risk-based action plan, regularly updated, and realisation of safety actions in practice.</li> </ul>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Road authorities	<b>Make sure that for each road construction, reconstruction or maintenance project, the implementation of Safe System principles is considered</b> <i>[TA5/authorities/SafeSystem]</i>	2021 - 2030	Budget for road investments, reconstruction and maintenance works on all levels	Methodically Ministry of Transport, which is responsible for technical standards and technical conditions.
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Till now, motivation of road construction and reconstruction is mainly long-term investment plan and for reconstruction the status of pavement and bridges. Minority is investment and reconstruction completely initiated by safety. This initiation is usual at the reconstruction of junctions to roundabouts. Other input is often based on construction of anti-noise walls. At the modernisation, realignment and cross-section is improved, but very often safety improvements are limited by problems with acquisition of land (village entrance islands, side distance triangles etc.). Importance of basic Safe System Principles are key to be emphasized.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Complete change in prioritisation of reasons for construction and reconstruction, wide care for roads in operation rehabilitation, implementing all processes included in in EU Directive on all primary roads, roads co-financed by EU and on roads with higher accident frequency (application of risk maps as the trigger for action).</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? It will be long term process starting with legal implementation, manuals, methodologies. In the new strategy, implementation of whole directive is under activity 21.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Responsibility in Action plan approved by the government is dedicated to the Ministry of Transport.</li> </ul>			
<p><b>Uptake Plan</b></p> <p>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>There are no “Safe system principles” identified.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Safe System Principles to be included into any basic Law or Technical standard mandatory for road owners and operators. Now there is hundreds of different technical standards, but they are valid exclusively for construction and reconstruction, but not for any routine upgrades. So, the activities of operators are concentrated on pavement maintenance and winter maintenance, periodically on traffic signs, but most safety deficits stay unattended for tents of years.</li> </ul>				

## Road Infrastructure Safety Management

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>In the process of definition of Primary road network, national authorities should encourage including roads where at least 50% of fatal and serious accidents occur</b>  <a href="#">[TA6/national/primary]</a></p>	2021 - 2030	Ministry of Transport, SFDI, owners of infrastructure and their budgets	Ministry of Transport, SFDI, owners of infrastructure
Provisions for vulnerable road users National level	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?            5807 km of primary roads are most important part of road network after the motorways. From this length only 147,6 km are dual roads. On the 1<sup>st</sup> class roads, 13 117 accidents was investigated and 148 people was killed, what is the highest figure from all road categories (secondary roads 15 237 accidents, 110 people killed).</li> <li><b>How</b> will it be implemented (what steps are required in the process)?            Fortunately, in the proposal of implantation of EU DIR 2019/1936, there are all first-class roads mentioned, what is given by “Road Law” and statistically it is 5807,576 km (dated 1<sup>st</sup> July 2021). The new text of Law 13/1997 is already submitted to the parliament session no 111 under the parliament text 1245/0.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Executive instructions with details are planned to be issued till year 2023.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            The law shall be approved by parliament, signed by president and then all actors should follow the duties in defined extent. Mainly it is RSD CR, because all primary roads are owned by state and operated by RSD, than all road projects co-financed by EU funds (secondary roads rehabilitations and modernisations) have to follow same rules (RSA in all stages).</li> </ul>			
	<p><b>Uptake Plan</b>            Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>In the law adopting DIR 2019/1936, full extent of primary roads is expected.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>The new text of Law 13/1997 is already submitted to the parliament session no 111 under the parliament text 1245/0.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users National level	<p><b>Country specific national classification criteria should be encouraged in order to enable proper classification of high, medium and low risk roads, based on accident reduction potential as a direct consequence of road infrastructure improvements</b></p> <p><i>[TA6/ national /classification]</i></p>	1 <sup>st</sup> October 2023	Budget RSD	Ministry of Transport, RSD, other road owners (secondary class roads)
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? EU DIR 2019/1936 is implementing the network wide safety evaluation in minimally 3 categories (high, medium, low). Implementation into Czech law 13/1997 is already submitted to the parliament session no 111 under the parliament text 1245/0. There are general duties only. The detailed method of evaluation shall be subject of executive law 104/1997 modification, which shall be in force from 1<sup>st</sup> October 2023.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? The executive law 104/1997 modification shall rely on appendix III of amendment (EU) 2019/1936 from 23. October 2019. The proposal is mentioning the methodology of EC, which is promised to be available to June 2023. The use of experience from EuroRAP/iRAP methodology which is available shall stay probably unattended and any basic methodology shall be probably introduced.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Implementation should be expected after October 2023. It will be financed by RSD budget mostly, when it is related to primary roads.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Methodology shall be based on EC promised methodology in compliance with 2019/1936 Directive appendix III list of attributes. Such methodology shall be content of technical specification approved by Ministry of Transport. Execution shall be in hands of certified auditors. Main actor shall be RSD.</li> </ul>			
	<p><b>Uptake Plan</b></p> <p>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>It is expected, that EC shall submit acceptable methodology.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Proposal to adopt iRAP methodology was not accepted till now, even when some people from road authority were educated in iRAP.</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Safe System concept should be built in all road infrastructure related legal acts</b> <a href="#">[TA6/ national /SafeSystem]</a>	2021 - 2030	MD, SFDI budget	MD, SFDI
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)?            Vision ZERO and Safe System is included into the National road safety strategy 2021 – 2030 on page 3 to 4. But this is the verbal explanation of targets, without any detailed description of practical steps. The action plan is containing individual activities, where no specific document how to build “Safe System” is not included. There is no detailed technical manual how to build “Safe System”. Safety level of Czech road network is in general poor. Best safety level is on motorways, where the infrastructure is step by step reconstructed based on the last RSI, and in road tunnels, where EU DIR 2004 is applied in term of marking, signing, fire protection and evacuation routes.</li> <li><b>How</b> will it be implemented (what steps are required in the process)?            Any comprehensive manual how to reach “Safe System” is needed, because all parameters of road construction, maintenance and operations are included in separate technical standards, not securing the best complex safety solution.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from?            Modernisation of infrastructure in terms of safety and safe environment is problem for years, because there is slow progress in complexion of planned motorway network, construction of bypasses and improvement of road environment.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)?            Owners of infrastructure on all levels, basically state, regions and municipalities.</li> </ul>			
<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>Safe Road Strategy 2021 – 2030 was approved by government with the duty of yearly reporting of activities.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>Individual activities are defined in Action plan, but no “Safe system concept”.</li> </ul>				

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users National level	<p><b>Special attention needs to be given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure</b> [TA6/ national /VRU]</p>	2021-2030	Regions, municipalities budgets	Regions, municipalities
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Relatively good situation for pedestrian is in cities, where are sidewalks dedicated to pedestrian. Expanding number of cyclists share mostly the space with cars (or they are in conflicts with pedestrian when using sidewalks breaking traffic law. Separate path between villages for VRU are relatively very rare. Cycling is promoted often like sport activities, in the cities there is lack of space, or lack of capacity, or lack of safe solution. Some cyclist arrangements on road arterials seems to be contra-productive in the focus of safety and capacity. Movement of pedestrian outside built areas (especially in darkness) from village to village or to bus-stops is extremely dangerous and unprotected. Important improvement is needed.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Duty to build separate path for VRU in rural areas along roads to be emphasized like the standard part of road cross section, what is now very rare comparing to Germany or Austria.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Massive action is needed to build separate infrastructure for VRU along roads is needed, because most of roads are two-lane only without hard shoulder usable by pedestrian or cyclist. Both are extremely endangered when moving in traffic lane at higher traffic volume.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Ministry of transport as the policy maker and municipalities as the protectors of local people, construction of this path to be mandatory for road owners under specified conditions.</li> </ul>			
<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Biggest concern is given to cycling, where manuals how to build cycling infrastructure is available, approved by M of Transport.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Very detailed methodology for infrastructure for disabled is controlled at all new project approval process.</li> </ul>				



	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users National level	<p><b>All investment plans in road infrastructure safety improvements should be made based on cost/benefit analysis with modelling of savings in terms of fatal and serious injuries prevented</b> [TA6/ national /investment]</p>	2021 - 2030	SFDI budget	SFDI
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Existing Directive of the Ministry of Transport no. V-2/2016 effective from 1.1.2017 describes the process of economic evaluation and approval of financing road infrastructure projects. There are procedures of calculation IRR, NPV, BCR, CBA, MCA. There are economical parameters and also calculation of safety benefits and accidents reduction gained by new road investment. Unfortunately, weight of safety benefits is weak compared to other criteria like environmental impacts.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Completely different attitude to the importance of saving of fatal and serious injuries has to be adopted, where the modelling of safety benefits shall be priority.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? It needs the adoption of new methodology for prioritisation of investment based on highest priority of safety benefits.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Actors are members of governmental council for road safety, specifically ministry of transport, who needs to emphasize the priority of actions for road safety.</li> </ul>			
	<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Methodology for economic evaluation (including safety benefits) is mandatory for all key investments into roads. But EIA has stronger position.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>See above!</li> </ul>			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Raise the minimal road safety design standards for new and existing road infrastructure.</b> <i>[TA6/ national /standards]</i></p>	2021 - 2030	SFDI budget	SFDI, Ministry of transport
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Responsibility for standardisation and technical conditions is fully on the ministry of transport. Other problem is, that all technical standards and most technical conditions are effective for the investment and reconstruction, but the status-quo of infrastructure is prevailing.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? First step is objective evaluation of safety level based on road safety inspection and assessment, second step is fixing the request on minimal safety level, third step is mandatory action to increase the safety level on the acceptable (for example 3-star minimum on iRAP assessment) within time period.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? It needs the political and international pressure to raise the safety level, based on European road safety atlas, publicly available. Methodology to be financed by ministry of transport budget, actions to be financed from budget of road owners (RSD, regions, municipalities).</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Methodically ministry of transport, evaluation/assessment infrastructure owners, rehabilitation infrastructure owners.</li> </ul>				
<p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>No minimal safety standard is defined. For new construction, design standards are valid.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Set of design standards and technical conditions.</li> </ul>				

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users Regional and local level	<p><b>Road safety audit and inspection procedures should be performed on regional road network based on crash occurrence analysis</b> [TA6/ regional /audit]</p>	2021 - 2030	Regional budget	Regional governments
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? The safety level of secondary and tertiary road network is poorer than primary roads, traffic volumes are lower, length of network is (data to 1.7.2021), killed in 2020 within 24 hours: <ul style="list-style-type: none"> <li>Motorways 1305 km, killed 33;</li> <li>Ist class roads 5 808 km, killed 148;</li> <li>IInd class roads 14 624 km, killed 110;</li> <li>IIIRD class roads 34 062 km, killed 76;</li> </ul> Comparing to the length of network, accident density at secondary and tertiary class roads is several times lower, so effectivity of safety treatments is much lower. </li> <li><b>How</b> will it be implemented (what steps are required in the process)? The only effective way is prioritisation of actions based on accident spots identification, traffic volumes and road importance. Then the application of RSA and RSI will be effective. System of prioritisation for regional transport departments to be prepared. </li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? First of all, EU DIR to be routinely applied to first class roads and projects with participation of EU funds, than the practice to be implemented to other road sections. </li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Road safety strategy implementation, regional governments, departments of transport.</li> </ul> <p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>For regional roads, no RSA is used. But when applying for subsidy for safety improvements, RSA is recommended.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>No specific documents, proposal to prepare regional road safety strategy.</li> </ul>			

Provisions for vulnerable road users Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Special attention needs to be given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure in urban and suburban areas</b> <i>[TA6/ regional /VRU]</i></p>	2021 - 2030	Regional and local budget	Regional governments, municipalities
<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Vulnerable road users are not protected in rural sections of roads. In urban areas, sidewalks are standard solution in cities, but there are often missing on through roads sections in smaller settlements and villages. Then there is no safe space for walking to school, bus stop or shopping.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Basic solution is building by-passes, rehabilitation of through road sections and construction of separate paths along roads. Special attention to be given to safe access to bus stops on the passing road sections.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Progress in building multipurpose path between villages separated from road traffic lanes is extremely slow, but not zero. Same situation is in construction of planned by-passes or through road sections in smaller settlements.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Owner of the infrastructure under pressure of local municipalities, application for subsidy from SFDI on safety projects.</li> </ul>				
<p><b>Uptake Plan</b> <i>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</i></p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>Technical conditions approved by Ministry of Transport.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>TP 103 – Design of housing and pedestrian zones;</li> <li>TP 179 – Infrastructure for cyclists;</li> <li>TP 218 – Design of zones 30;</li> </ul>				

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users Regional and local level	<p><b>Promote and expand 30 km/h speed limit zones in residential areas</b> <i>[TA6/ regional /residential]</i></p>	2021 – 2030	Municipalities budget	Municipalities
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? In typical residential areas without through traffic, 30 km zones are applied based on existing methodology. There are basically two scenarios – traffic signs only, or complete rehabilitation of public space. At the new housing projects, residential areas are usually build based on traffic calming methodologies available and approved by ministry of transport (for example design of 30 km zones – no 218).</li> <li><b>How</b> will it be implemented (what steps are required in the process)? These residential zones patterns are implemented step by step at new housing projects and by street rehabilitation.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Financial resources depend on the investor of new housing project (future inhabitants are paying infrastructure), or at the old street and housing schemes by municipality budget.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Investor of housing estate, municipality departments.</li> </ul>			
	<p><b>Uptake Plan</b> <i>Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention</i></p> <p>National uptake activities:</p> <ul style="list-style-type: none"> <li>National action plan activity</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>TP 218 – Design of zones 30.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users Road authorities	<b>Significantly increase weight of road safety priorities in investment and maintenance plans development</b> <a href="#">[TA6/ authorities /priorities]</a>	2021 - 2030	Infrastructure owner budget	Infrastructure owner
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Weight of road safety priorities is generally low. Standard attitude is the road pavement maintenance, winter maintenance, traffic signs replacement, grass cutting, winter maintenance, road marking, regular bridge control, sometimes drainage cleaning. Road safety is considered based on any tragical accidents with more people killed. Importance of increased safety especially environments (trees, walls, slopes, rocks) is of low weight. Better situation is on TEN-T network, where regular RSI identified safety deficits including categorisation of the risk level.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Implementation of new EU DIR 2019/1936 on 1st class road shall be the great progress in the safety assessment, public awareness and comparison of safe level.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? The new directive shall start to be implemented from 2023, so any effects should be identified 2025 – 2027.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? First of all, Czech directorate of roads and expressways, later investors of roads with participation on EU funds.</li> </ul> <p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities:</p> <ul style="list-style-type: none"> <li>No other activity than Road Safety Strategy 2021 – 2030.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>Individual actions in National action plan.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users Road authorities	<p><b>Define clear strategy and action plan to reduce 50% of fatal and serious accident on managed road network by 2030</b> [TA6/ authorities /strategy]</p>	2021 - 2030	Ministry of transport, Transport police, road owners' budgets	Ministry of transport, Transport police, road owners
	<p><b>Explanatory notes:</b></p> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Such strategy and action plan named BESIP strategy for 2021 – 2030 was approved by government approval no. 8 dated 4<sup>th</sup> January 2021. There is strategy, targets, pillars and individual activities. Main target is defined same as in EU, decrease number of FSI to 2030 about 50 % compared to 2019 or average from 2017-2019 (base year 2020 is not used, because it was influenced by COVID-19).</li> <li><b>How</b> will it be implemented (what steps are required in the process)? In the strategy, main actors responsible are ministers of transport, interior, health care, defence, education, chiefs of regional offices and selected cities, recommended to political bodies of all levels.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Periodical control on the top level is given to 30<sup>th</sup> June each year, update to 30<sup>th</sup> June 2022, government control on 31<sup>st</sup> January 2023 including proposal for 2023-2024. Financial resources – relevant budgets of mentioned ministries.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Main actors responsible are ministers of transport, interior, health care, defence, education, chiefs of regional offices and selected cities, recommended to political bodies of all levels.</li> </ul> <p><b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities:</p> <ul style="list-style-type: none"> <li>Road Safety Strategy 2021 – 2030.</li> </ul> <p>Targeted national documents acknowledging the intervention:</p> <ul style="list-style-type: none"> <li>See above.</li> </ul>			

	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users Road authorities	<b>Set internal guidelines above the minimal road safety standards</b> <a href="#">[TA6/ authorities /guidelines]</a>	2021 - 2030	Ministry of transport, SFDI, Technology agency budgets	Ministry of transport, SFDI, Technology agency
	<b>Explanatory notes:</b> <ul style="list-style-type: none"> <li><b>Why</b> is it necessary (what is the current problem)? Such guidelines are missing, because there is plenty of detailed standards and manuals, but no comprehensive guideline fixing minimal safety standard on existing operated roads and streets. Such manuals are often translated result of international projects, like Pilot4Safety “Manual for safe 2-lane rural roads”, or not translated PIARC Road safety manual 1<sup>st</sup> and 2<sup>nd</sup> edition.</li> <li><b>How</b> will it be implemented (what steps are required in the process)? Pressure of EU directive about road safety management gives great chance to increase importance of guidelines or directives, what is the minimal acceptable safety level on different categories of roads. Idea of minimal 3-stars roads for all roads users based on 5star assessment methodology like iRAP was not adopted in Czech Republic, even there are teams certified, accredited and equipped to make such internationally compatible assessment. Czech law expects to wait till 2023 for EU assessment methodology.</li> <li><b>When</b> will it be implemented, what are required <b>financial resources</b>, and from which <b>fund or budget</b> they will they be obtained from? Such implementation is not planned, status quo is update of design standards, requirements for retention level of guardrails and slow progress of elimination of black spots base on National Road Safety Strategy and Action plans.</li> <li><b>Who</b> will be the actors (please mention main actors and other contributing players, and how they should interact)? Methodically it is ministry of transport, issuing the technical standards and responsible for the filling the National Road Safety Strategy.</li> </ul>			
	<b>Uptake Plan</b> Please provide a list and short description of national uptake activities and targeted national documents acknowledging the intervention National uptake activities: <ul style="list-style-type: none"> <li>No specific guidelines available.</li> </ul> Targeted national documents acknowledging the intervention: <ul style="list-style-type: none"> <li>Pilot 4 Safety project.</li> </ul>			



## 8. Danube Infrastructure Road Safety Improvement Action Plan (DIRSIAP) for Bosnia and Herzegovina

This Action Plan has been created in the framework of the [RADAR project](#) which aims at raising road safety levels of countries in the Danube Region. It is structured along RADAR's four Thematic Areas:

- TA1: Investing in safe infrastructure,
- TA2: Provisions for vulnerable road users,
- TA3: ITS and other techniques for speed management,
- TA4: Safe infrastructure near schools,

and is adapted to the specific road safety requirements of Bosnia and Herzegovina. The interventions set out in this Action Plan are directed at all levels of road safety management, i.e., from national to regional and local level, with a special section on road authorities.

## 1) Investing in safe infrastructure

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Definition of a national minimal standard for road infrastructure safety rating for existing and new roads based on an evidence-based methodology</b>  <a href="#">[TA1/national/standard]</a></p> <p><b>Explanatory notes:</b>  <b>Why?</b>            Amend the basic state law on security and in transport by adding sub-laws and regulations as necessary to enable more efficient management, coordination and implementation of road safety interventions in the BiH. In Bosnia and Herzegovina there is current legal and technical regulation as Law on Roads, 'Regulations on the basic conditions of public roads, their elements and objects on them have to meet in terms of traffic safety'. Amend/improve other regulations at the national, federal and cantonal levels that affect traffic safety.</p> <p><b>How?</b>            The related regulations have to be reviewed. Also, it needs to be consider the implementation of the IRAP methodology and others good practices in current regulations. This intervention is needed to better plan and manage security issues. Amend the basic national law on safety and traffic by adding sub-laws and regulations as necessary to enable more efficient management, coordination and implementation of road safety interventions.</p> <p><b>When?</b>            Between the years 2021-2030</p> <p><b>Who?</b>            The main actors implementing this intervention are Parliament, Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, cantons, municipalities.</p> <p><b>Uptake Plan</b>            Revision of current regulation            Prepare material with the adopted IRAP methodology            Organize workshops, educations, meetings</p>	2021-2030	100.000 €	Parliament MKTBIH FMPIK Cantons Municipalities

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Allocation of a certain portion of road infrastructure investments to road safety interventions</b> <a href="#">[TA1/national/investment]</a>	2021-2030	20.000 €	Entities MKTBIH Cantons Municipalities Partners
	<b>Explanatory notes:</b> <b>Why?</b> Currently, Bosnia and Herzegovina do not allocate funds for road safety when investing in road infrastructure. Certain funds have been provided by road managers, but investments in road safety are very small. Funds need to be secured for larger investments and more expensive countermeasures.  <b>How?</b> When allocating the budget for investing in road infrastructure, immediately provide a budget for investing in road safety. This should be defined and applied to every road investment and thus ensure a road safety budget. In this way, the budget would be ensured and larger investments for road safety could be made.  <b>When?</b> Between the years 2021-2030.  <b>Who?</b> The main actors for implementing this intervention are entities, Ministry of Communications and Transport of Bosnia and Herzegovina, cantons, municipalities, and other partners.			
	<b>Uptake Plan</b> Preparation of legislation Consideration of the adoption of the proposal, meetings and roundtable with relevant actors Implementation of proposal			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice</b> <i>[TA1/national/SafeSystem]</i>	2021-2030	20.000 €	Parliament MKTBIH FMPIK Cantons Municipalities Partners
	<b>Explanatory notes:</b> <b>Why?</b> Currently in Bosnia and Herzegovina, a draft law has been made with the adoption of Directive 2008/96 and Directive 2019/1936. Once they are adopted, they will be applicable to roads in Bosnia and Herzegovina. Implement legal responsibilities towards road authorities (entities, cantons and municipalities), which will be responsible for traffic safety on their road networks and report annually on traffic safety issues.  <b>How?</b> By adopting laws and directives by the responsible Ministries and other actors. Amend/improve regulations at the state, federal and cantonal levels that affect traffic safety.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors for implementing this intervention are Parliament, Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, cantons, municipalities, and other partners.			
	<b>Uptake Plan</b> Consultation all main actors Preparation of legislative, and other relevant material Adopting legislative Implementation on roads			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Institutionalisation of trainings for road safety auditors and road safety inspectors</b> <i>[TA1/national/auditors]</i>	2021-2030	30.000 €	MKTBIH FMPIK PC Roads Engineers Consultants Cantons Municipalities
Investing in safe infrastructure National level	<b>Explanatory notes:</b> <b>Why?</b> Establish annual training on audit and inspection traffic safety.  <b>How?</b> Organize a special sector at the national level that will deal only with training and preparation of all road safety actors.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors for implementing this intervention are Ministry of Communication and Traffic of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, PC Roads, engineers, consultants, cantons, municipalities.			
	<b>Uptake Plan</b> Organize meetings with relevant stakeholders, main actors and other partners Workshops and seminars for consultations, development and introduction of trainings Publication of material and legislative Holding regular conferences			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Transfer of the Safe System approach to local governments and local road authorities</b>  <a href="#">[TA1/national/vertical]</a>	2021-2030	50.000 €	Entities MKTBIH Cantons Municipality
	<b>Explanatory notes:</b> <b>Why?</b> Because local communities have jurisdiction over part of the road infrastructure, and that is local roads. They need to be linked to national strategic goals.  <b>How?</b> Based on the completed projects, research and the needs of individual local communities, it is necessary for road safety activities at the local level to be consistent taking into account national road safety targets and visions.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors for implementing this intervention are entities, Ministry of Communication and Traffic of Bosnia and Herzegovina, cantons, municipalities.			
	<b>Uptake Plan</b> Elaboration of the concept Inter-ministerial consultations Establishment of the legal framework Pilot project Introduction of the intervention			

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Enlarging the scope of roads to be treated in accordance with Directive 2019/1936 to 2nd level roads (e.g., “regional roads”)</b> <a href="#">[TA1/national/secondary]</a>	2021-2030	10.000 €	Parliament MKTBIH FMPIK
	<b>Explanatory notes:</b> <b>Why?</b> In 2008, the Republic of Srpska adopted Directive 2008/96. The Federation of Bosnia and Herzegovina has not yet done anything on the issue. A draft law and amendments to Directive 2008/96 under Directive 2019/1936 are currently being drafted.  <b>How?</b> The draft of the law and Directive 2019/1936 have been made. It is necessary to government session and adopting of Directive. After that, the directive will be applicable on the roads of the Federation of Bosnia and Herzegovina.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors in implementing this intervention are Parliament, Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications.			
	<b>Uptake Plan</b> Adopting the proposed Law and Directive 2019/1936 Implementation of the Directive			

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Institutionalisation of knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments</b> <a href="#">[TA1/national/good_practice]</a>	2021-2030	10.000 €	MKTBIH FMPIK Cantons Municipalities
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Lack of professional training of regional/local road managers. It is necessary to make a plan and establish a constant training program on an annual basis.</p> <p><b>How?</b> As for other activities, this one needs to define the legal basis, regulations and guidelines. Introduce trainings, workshops for local/regional road managers into regular practice. The proposal may be to introduce that they must have one month of professional training on an annual basis.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors in implementing this intervention are Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, cantons, municipalities.</p>				
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>Forming a research group</li> <li>Proposed action plan</li> <li>Proposed guidelines and ordinances</li> <li>Adoption of plan and documentation</li> <li>Realization</li> </ul>				



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Regional and local level	<b>Systematic road safety data collection and analysis to plan interventions/investments on most critical locations</b> <a href="#">[TA1/regional/data]</a>	2021 - 2030	15.000 €	Entities MKTBIH FMPIK FMUP PC Roads PC Motorways Cantonal ministries Municipalities
	<b>Explanatory notes:</b> <b>Why?</b> Lack of databases of many traffic safety data is the main problem that prevent analysis, research and concrete facts in solving certain problems. In order to better plan and invest in road safety, data and databases are needed to monitor the situation and set priorities.  <b>How?</b> Depending on the responsibilities of road managers, whether regional or local, create databases that will be available to all relevant stakeholders.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors to implement this intervention are entities, Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, Ministry of Internal Affairs, Federal Ministry of Internal Affairs, PC Roads, PC Motorways, cantonal ministries, municipalities.			
	<b>Uptake Plan</b> Preparation of the implementation plan Meetings with main actors Creating a database with unique data Organize educations and workshops Publication of material and legislative			

	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Setting up of road safety funds for investments in road safety upgrades in terms of road safety equipment and measures at locations with most effectiveness</b> <i>[TA1 /authorities/funds]</i>	2021-2030	15.000 €	Entities MKTBIH FMPIK PC Roads PC Motorways Cantonal road directorates Cantonal ministries Municipalities
Investing in safe infrastructure Road authorities	<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            When solving certain problems in road traffic, priority should be given to the locations that will give the most impact. Therefore, it is necessary to create funds that will be directed exclusively for these purposes.</p> <p><b>How?</b>            The solution can be the allocation of funds during vehicle registration, and businesses to allocate a certain amount according to profit. When creating a budget for certain activities, it is necessary to create a special fund proposal that will focus only on the countermeasures that give the greatest effect.</p> <p><b>When?</b>            Between the years 2021-2030</p> <p><b>Who?</b>            The main actors for implementing this intervention are entities, Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, PC Roads, PC Motorways, cantonal ministries, cantonal road directorates, municipalities.</p>			
	<p><b>Uptake Plan</b></p> <p>Make a budget proposal            Adopting the proposal            Organize meetings, roundtables, workshops with main actors            Development the legislative and fund</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Road authorities	<p><b>Observation of road safety trends and good practices to plan maintenance and upgrades of the existing road network in operation</b></p> <p><a href="#">[TA1/authorities/good_practice]</a></p>	2021-2030	50.000 €	PC Roads BIHAMK Partners
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> The job of road safety requires daily research and education. Therefore, it is necessary to look at good practice in other countries, which has proven to be a good solution and which has led to improvement. Therefore, it is necessary to publish a collection of good practice in traffic. Take over and implement those solutions that can be applied on the roads in Bosnia and Herzegovina in accordance with the law.</p> <p><b>How?</b> Determine the period for which the publication will be made and do research and analysis of all good practice. Following the good practice, it is necessary to make new proposals for the adoption of these solutions in regulations and ordinances.  Do research and analysis of good practices of other countries. Make suggestions for what can be implemented in Bosnia and Herzegovina and try. Make a proposal for the adoption of these solutions in regulations and ordinances.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors for implementing this intervention are PC Roads, BIHAMK and other partners.</p>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>Analysis of good practices</li> <li>Organize multiple roundtables, workshops</li> <li>Proposal of material and legislative</li> <li>Development of publication of good practices</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Road authorities	<p><b>Use of methodologies for selecting most critical locations with highest potential savings.</b> <i>[TA1/authorities/methodologies]</i></p>	2021-2030	15.000 €	MKTBIH PC Roads PC Motorways Cantonal directorates for roads Municipality Partners
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Due to the lack of methodologies that can identify critical locations with the greatest savings, it is necessary to revise the existing methodology and try to implement a new one, such as Star Rating. This methodology consists of road surveys, their analysis, the current situation and a proposed solution. This methodology in the solution shows the roads with the least stars, ie those that are most critical with the solution that is more efficient.</p> <p><b>How?</b> Make a proposed methodology which will define critical locations on road but with highest savings. The Ministry of Communications and Transport, together with road managers, should be responsible for implementation this intervention. It is necessary to do a pilot project to present the good effects by adopting a new methodology. The methodology should be available to all relevant users, especially road managers for the preparation and quality implementation of the work.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actor for implementing this intervention are Ministry of Communication and Transport of Bosnia and Herzegovina, PC Roads, PC Motorways, cantonal road directorates, municipalities, other partners, who will use the methodology in the future to improve roads at the lowest cost.</p>			
<p><b>Uptake Plan</b>            Make a proposal of the methodology            Organize workshops, round tables with stakeholders            Do a Pilot project            Education and trainings for all main actors            Adopting the methodology</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Road authorities	<b>Publication of the list of high accident concentration road sections / hot spots.</b> <a href="#">[TA1/authorities/hotspots]</a>	2021-2025	15.000 €	MKTBIH MUP PC Roads FSK
	<b>Explanatory notes:</b> <b>Why?</b> Most roads in Bosnia and Herzegovina needs the rehabilitation, reconstruction and construction in the vicinity of the identified micro-location of the "black spot" and determine the priorities for taking technical measures. It should be the duty of the authorities to publish the list of high accident concertation road section in order to inform the public so that they can increase their attention by moving through them. In Bosnia and Herzegovina, in 2017. is published a black spot study for the magistral road network in Federation of Bosnia and Herzegovina for the period 2013.-2015.  <b>How?</b> It is necessary to define the institution that will be responsible for the realization of the publication. Also, it is necessary to collect all data on traffic accidents, number of vehicles, speeds. Then do analysis, research and case studies. Very important is to define the manuals for the black dot management program. Publish the publication every year to monitor the situation on the roads.  <b>When?</b> Between the years 2021-2025  <b>Who?</b> The main actor in implementing this intervention are Ministry of Communications and Transport of Bosnia and Herzegovina, Ministry of Internal Affairs, PC Roads and Faculty of Transport and Communications.			
<b>Uptake Plan</b> Development of the methodology Define responsible institution Collecting all data Review of road network Development of publication				

## 2) Provisions for vulnerable road users

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Incorporation of the principles and concepts of the Safe System approach in relevant legislation and VRUs' countermeasures selection criteria</b> <a href="#">[TA2/national/SafeSystem]</a>	2021-2030	15.000 €	MKTBIH FMPIK Cantons Municipalities BIHAMK
	<b>Explanatory notes:</b> <b>Why?</b> In order to increase the safety of vulnerable road users, it is necessary to introduce new guidelines and solutions regarding road infrastructure.  <b>How?</b> It is necessary to review the existing legislation and make proposals and changes that will focus on the safety of vulnerable road users.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors for implementing this intervention are Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, cantons, municipalities, Bosnia and Herzegovina Automobile Club.			
	<b>Uptake Plan</b> Form a research group Revision of existing legislative Make proposal of new legislative			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Development/Incorporation of a unified protocol for assessment of the risks of VRUs, which will ensure that results are understood and comparable between countries</b> <a href="#">[TA2/ national /risk_assessment]</a>	2021-2030	15.000 €	MKTBIH PC Roads BIHAMK NGO's Others responsible stakeholders
Provisions for vulnerable road users National level	<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            To implement this intervention, it is necessary to look at positive examples of countries that have already defined risk assessment protocols for vulnerable road users. Guided by these examples and in accordance with the possibilities that can be done on the roads of Bosnia and Herzegovina, make a proposal for a protocol as well as a legislative.</p> <p><b>How?</b>            It is necessary to research examples in other countries that have this protocol, case studies, analysis in cooperation with national stakeholders. This all will lead to the version of the legislative proposal that will define this area.</p> <p><b>When?</b>            Between the years 2021-2030</p> <p><b>Who?</b>            The main actors for implementing this intervention are Ministry of Communications and Transport of Bosnia and Herzegovina, PC Roads, Bosnia and Herzegovina Automobile Club, NGO's, other stakeholders and partners.</p>			
	<p><b>Uptake Plan</b></p> <p>Do research of good examples in countrys that have been implemented this kind of protocol</p> <p>Case studies, meetings, analysis to define protocol and legislative</p> <p>Preparation of an evaluation material for decision-makers analyzing the possibilities of adapting the protocol and legislative</p> <p>Organize trainings and education</p> <p>Development of legislative</p>			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Definition of a national minimal standard threshold values of relevant road safety indicators based on which high-risk road sections for VRUs will be identified</b></p> <p><i>[TA2/ national /standard]</i></p>	2021-2030	15.000 €	MKTBIH FMPIK Cantons Municipalities Partners
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Given that vulnerable road users are a very vulnerable category, more attention needs to be paid to addressing issues related to their safety. It is necessary to define the minimum conditions that will determine the critical locations for the VRU.</p> <p><b>How?</b> It is therefore necessary to review the existing relevant legal basis. Define what are the conditions for defining critical locations for VRU. Take into account the current condition of the road, the number of traffic accidents, the number of dead and injured, ADAT, etc.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors implementing this intervention are Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, cantons, municipalities, partners.</p>			
	<p><b>Uptake Plan</b></p> <p>Data collection Make a proposal of minimum conditions according to which critical locations for VRU will be defined Organize meetings, workshops with relevant stakeholders Proposal of the Ordinance on minimum conditions for defining critical locations for vulnerable road users Adopting the proposal</p>			



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Ensuring that available funds are primarily invested in low-cost, high-impact countermeasures, by considering the concepts of tactical urbanism and space-wise planning</b> <a href="#">[TA2/ national /funds]</a>	2021-2030	10.000 €	MKTBIH FMPIK PC Roads Cantons Municipalities
	<b>Explanatory notes:</b> <b>Why?</b> Such an approach, where priority would first be given to low-cost repairs and a large effect of the implemented measures, would lead to an increase in road safety to a higher level.  <b>How?</b> During the research and analysis of countermeasures to be carried out, it is necessary to define in the ordinance that preference is given to those with low costs and high performance, all with the aim of increasing traffic safety. This is preceded by research and analysis that will ensure that a particular measure will bring great effects.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors of this intervention are the main financiers of road maintenance and repair at the national level, such as Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, PC Roads, cantons, municipalities.			
	<b>Uptake Plan</b> Pilot projects and case studies that will provide required material for analysis the countermeasures. Precise selection of countermeasures that have priority, according to defined priorities, which are low cost and high-impact countermeasures. Publication of material and legislation Organize education and trainings			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Development/restructuring and linking datasets on road traffic accidents and road network in order to increase their precision and provide free and easy access to all stakeholders</b> [TA2/ national /dataset]</p>	2021-2030	250.000 €	MUP FMUP Cantons Municipalities
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Provisions for vulnerable road users National level</p>	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> There is no single database on traffic accidents in Bosnia and Herzegovina. The progress made in 2021 is a unique form for collecting data on traffic accidents. The form is defined by the Rulebook on the manner of collecting and processing statistical data on traffic accidents. The next step would be to connect all ministries into a single database where the collected data would be processed.</p> <p><b>How?</b> It is necessary to create a database that will collect all the forms of all ministries and police stations. In order to do that, we need IT support, a single database, as well as successful cooperation of all those responsible. Also, do research that will provide a stable groundwork for the elaboration of guidelines. Database allows that data can be collected, stored, upload, analyse and distribute more efficiently and to make them more accessible to all concerned actors.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors of this intervention are Ministry of Internal Affairs, Federal Ministry of Internal Affairs, cantons, municipalities.</p>			
	<p><b>Uptake Plan</b> Do a database and connect all ministries and police stations Organize meetings with the competent ministries for the implementation of the intervention Multiple workshops, roundtables and discussions with main actors Traffic police training on collection data, as well as data analysis training for the police, staff of the state and federal security departments at roads, road safety councils and key actors Publication of material and legislative</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Linking the police database on road traffic accidents with hospital data in order to minimize the VRUs accidents under-reporting issue</b> <a href="#">[TA2/ national /database_link]</a>	2021-2030	50.000 €	MUP FMUP FMZ Cantons Municipalities
Provisions for vulnerable road users National level	<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            In order to reduce the possibility of errors when recording data on victims of traffic accidents, it is necessary to take into account the implementation of this intervention and connect the database of the Ministry of Interior with the Ministry of Health.</p> <p><b>How?</b>            Databases need to be created for the Ministry of Internal Affairs and the Ministry of Health. Their successful cooperation and communication is needed for this intervention to be realized. This would reduce the possibility of error, record everything through databases and be visible to both parties. It is necessary to connect all hospitals and police stations, provide IT support, education, etc.</p> <p><b>When?</b>            Between the years 2021-2030</p> <p><b>Who?</b>            The main actors and financiers of these databases are Ministry of Internal Affairs, Federal Ministry of Internal Affairs, Federal Ministry of Health, cantons, municipalities.</p>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>Do database and connect all ministries, hospitals and police stations</li> <li>Provide IT support</li> <li>Multiple workshops, roundtables and discussions with main actors</li> <li>Organize meetings with main actors and others national stakeholders</li> <li>Publication of material and legislation</li> <li>Organize education and trainings</li> </ul>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Changing traffic culture and public awareness by disseminating relevant information to the public by various media sources</b> <a href="#">[TA2/ national /awareness]</a>	2021-2030	50.000 €	MKTBIH MUP BIHAMK PC Roads
	<b>Explanatory notes:</b> <b>Why?</b> Changing culture and informing the public in Bosnia and Herzegovina is one of the most common intervention. A large number of projects have been done and realized with this goal. BIHAMK has the largest share in this field. BIHAMK implements several projects each year in an effort to influence public awareness. However, other important institutions are also trying to educate and influence the public. Projects are targeted at all populations, from the youngest to the oldest participants.  <b>How?</b> Make a proposal to mark the Day of Traffic Culture. The aim would be to involve all relevant institutions in the celebration of this Day, as well as the implementation of campaigns and projects aimed at influencing traffic culture. In this way, they would influence a large number of residents of Bosnia and Herzegovina in order to improve traffic culture. Periodic surveys to assess the effectiveness of publicity in changing attitudes or knowledge.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors implementing this intervention are Ministry of Communication and Transport of Bosnia and Herzegovina, Ministry of Internal Affairs, Bosnia and Herzegovina Automobile Club, PC Roads, cantons, municipalities, other partners.			
<b>Uptake Plan</b> Make a proposal "Day of Traffic Culture" Adoption of proposal at the level of Bosnia and Herzegovina Define a traffic problem for the project Realization of project Publication of material Project performance analysis				

Provisions for vulnerable road users Regional and local level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Ensuring that results obtained by road safety assessments performed in individual municipalities at local level are standardized and comparable between different municipalities and on the National level</b> [TA2/ regional /standard]</p>	2021-2030	20.000 €	MKTBIH PC Roads Cantonal road directorates Municipalities
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Given that less importance is given at the local level to research before road works, it is necessary to provide road managers or municipalities with knowledge and good practices.</p> <p><b>How?</b> In order for the results obtained from road safety assessments at the municipal level to be standardized, it is necessary to define certain technical regulations and guidelines for the implementation of measures. Also, it is necessary to form a working group at the cantonal level that will monitor the implemented measures and create a database that will be unique for all cantons. This will ensure the possibility of comparison between municipalities.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors in implementing this intervention are Ministry of Communication and Transport of Bosnia and Herzegovina, PC Roads, cantonal road directorates, municipalities.</p>				
<p><b>Uptake Plan</b> Revision and development of technical regulations and guidelines Forming a working group on cantonal level Database of implemented measures on local level</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Systematic, high-quality road safety data collection and analysis to plan interventions/investments on most critical locations for VRU</b> <i>[TA2/ regional /data]</i>	2021-2030	50.000 €	MKTBIH FMUP PC Roads Cantonal road directorates Municipalities Partners
Provisions for vulnerable road users Regional and local level	<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            In order to take adequate measures to improve the safety of vulnerable road users, various factors and information must be monitored. Currently in Bosnia and Herzegovina there is no such base, which would help all relevant institutions to better implement measures related to VRU.</p> <p><b>How?</b>            Create software for all relevant institutions and road managers that will enable the identification of critical locations for vulnerable road users. To achieve this, it is necessary to monitor certain data such as the state of road infrastructure, traffic accidents, etc. It is also possible to do research on user behaviour in a particular dangerous place, such as a pedestrian crossing, in order to select an adequate countermeasure. The software created should be unique for all road managers, from local to magistral roads.</p> <p><b>When?</b>            Between the years 2021-2030</p> <p><b>Who?</b>            The main actors implementing this intervention are Ministry of Communication and Transport of Bosnia and Herzegovina, Ministry of Internal Affairs, PC Roads, cantonal road directorates, municipalities, other partners.</p>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>Meetings, roundtables with relevant institutions</li> <li>Development of software</li> <li>Development of material</li> <li>Education and trainings</li> </ul>			

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Use of official, standardized, objective methodology for selecting most critical locations for VRUs with highest potential savings</b> <a href="#">[TA2/ authorities /methodology]</a></p>	2021-2030	15.000 €	MKTBIH FMPIK PC Roads Cantonal road directorates Municipalities
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Currently, the main data for determining and defining critical locations for VRU in Bosnia and Herzegovina is number of killed people. It is necessary to develop a methodology that will take into account all factors when determining the critical location for vulnerable road users.</p> <p><b>How?</b> Create and adopt a unique methodology for all relevant institutions and road managers, from local to magistral roads, where they will work on the same principle.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors implementing this intervention are Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, PC Roads, cantonal road directorates, municipalities.</p>				
<p><b>Uptake Plan</b> Form a research group Make a proposal methodology Adopting the methodology</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<p><b>Ensuring that types of pedestrian/cyclist facilities and crossing arrangements are selected based on the operating speed of traffic flow and pedestrian, cyclists and vehicle peak-hour flow volumes</b></p> <p><a href="#">[TA2/ authorities /evidence_base]</a></p>	2021-2030	20.000 €	MKTBIH FMPIK PC Roads Cantonal road directorates Municipalities Others
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> When designing pedestrian and bicycle facilities and crossings, take into account the working speed of traffic flow and the volume of flow of pedestrians, cyclists and vehicles, as very important factors.</p> <p><b>How?</b> Review existing guidelines and policies. Propose new legislation that will take into account factors such as the working speed of traffic flow and the volume of flow of pedestrians, cyclists and vehicles.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors implementing this intervention are Ministry of Communication and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communication, PC Roads, cantonal road directorates, municipalities, and other companies and partners that are involved in design of roads</p>			
	<p><b>Uptake Plan</b></p> <p>Revision of existing guidelines and regulations            Form research group            Make proposal of guidelines and regulations with amendments            Adopting the proposed changes</p>			



	Intervention	Time frame	Financial resources	Main actor(s)
Provisions for vulnerable road users Road authorities	<p><b>Periodical collection of relevant supporting data on characteristic VRU crash locations on the road network on a mandatory basis and update relevant databases</b> [TA2/ authorities /supporting_data]</p>	2021-2030	25.000 €	MKTBIH FMPIK MUP FMUP PC Roads Cantonal road directorates Municipalities
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> In all stakeholders which manage the roads it is necessary to ensure periodic data collection at specific locations for VRU. Since it is a periodic collection, it is necessary to create a database. From such a database, it is possible to monitor the condition of locations, whether we have reducing number of dead/injured VRU at a location or even more, as well as all other data important for traffic safety.</p> <p><b>How?</b> It is necessary that all road managers at all levels have such databases, in order to be able to monitor and compare the status of specific locations for VRU on all roads. It is necessary to make guidelines for everyone, so that the databases are unique in all parameters. According to this, it is necessary to make legal legislation.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors for implementing this intervention are Ministry of Traffic and Communication, Federal Ministry of Transport and Communications, Ministry of Internal Affairs, Federal Ministry of Internal Affairs, PC Roads, cantonal road directorates, municipalities.</p>			
	<p><b>Uptake Plan</b></p> <p>Preparation of an evaluation material for all stakeholders analysing the possibilities of adapting the intervention and database            IT support            Creating a database            Successful communication and cooperation all stakeholders and main actors            Organize trainings and education            Propose and adopt a new legislative</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<b>Periodical analysis of effectiveness and efficiency of implemented countermeasures for VRUs</b> <a href="#">[TA2/ authorities /analysis]</a>	2021-2030	15.000 €	BIHAMK Other relevant institutions
	<b>Explanatory notes:</b> <b>Why?</b> In order to obtain data on how well a countermeasure is implemented, it is necessary to perform periodic analyses of effectiveness and efficiency. It is necessary to determine whether this countermeasure yielded the results we expected, whether something more needed to be done, and so on.  <b>How?</b> Do the analysis one year after the implemented measure. for example, if the measure was a road safety fence, as the cheapest but most effective solution, compare the data with the dead before and after the implemented measure.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors to implementing this intervention depend on the road on which the countermeasure was carried out. The actors can be Bosnia and Herzegovina Automobile Club, or other relevant institutions.			
	<b>Uptake Plan</b> Analyse the material on the implemented measure Compare data before and after the countermeasures were taken Make a case study Publication of case study			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<b>Engaging all stakeholders in the process of VRU-friendly road design (engineers need to collaborate with different stakeholders and NGOs)</b> <i>[TA2/ authorities /stakeholders]</i>	2021-2030	12.000 €	MKTBIH FMPIK Engineers Cantons Municipalities BIHAMK NGO's Other relevant stakeholders
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            Perform analysis and revision of existing road design legislation. It is difficult to reconcile the need to optimize the design, operation and maintenance of roads, environment and the road users for safety. However, with the successful and good cooperation of a large number of engineers, stakeholders and ngos, it is possible to create material that will be used by everyone when designing a road for VRU.</p> <p><b>How?</b>            Adopt a partnership approach in the development and implementation of road safety interventions and involve the Ministries, Cantons, Municipalities, the private sector and NGOs/communities/academics wherever possible. Organizing workshops, round tables for all participants.</p> <p><b>When?</b>            Between the years 2021-2030</p> <p><b>Who?</b>            The main actors in implementing this intervention are Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, engineers, cantons, municipalities, Bosnia and Herzegovina Automobile Club, NGO's, other relevant stakeholders.</p>			
	<p><b>Uptake Plan</b>            Workshops and seminars for consultations, development and introduction of revised/amended manuals</p>			

### 3) ITS and other techniques for speed management

	Intervention	Time frame	Financial resources	Main actor(s)
ITS and speed management National level	<b>Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches</b> <i>[TA3/ national /guidelines]</i>	2021-2030	32.000 €	Parliament MKTBIH FMPIK MUP BIHAMK Research institutions Partners
	<b>Explanatory notes:</b> <b>Why?</b> It is vital to elaborate national guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches in order to provide standardised framework for ITS implementation.  <b>How?</b> New guidelines related to speed management and traffic calming ITS solutions have to be developed. Also, existing documentation must be reviewed and good practice from other countries. Education and training in the implementation of guidelines, especially for road managers, are needed.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors implementing this intervention are Parliament, Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, Ministry of Internal Affairs, Bosnia and Herzegovina Automobile Club, research institutions, partners.			
	<b>Uptake Plan</b> Multiple workshops and roundtables Forming a research group Proposal and adopting the guidelines			

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Setting of speed limits: elaboration and continuous revision of guidelines &amp; systematic implementation</b> <a href="#">[TA3/ authorities /guidelines]</a>	2021-2030	25.000 €	MKTBIH FMPIK MUP FMUP
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> In Bosnia and Herzegovina, the speed of vehicles is defined by the Law on Fundamentals of Road Traffic Safety. When limiting speed, several factors must be taken into account, such as the environment, person, vehicle, and road infrastructure. Also, a very important piece of information are traffic accidents that indicate a dangerous place. All this should be taken into account when determining the speed, and in order to ensure traffic safety.</p> <p><b>How?</b> Form a research group that will determine the condition of road infrastructure, environment and other important factors. It is necessary to do audit of roads, of existing documentation as well and to collect other relevant data. Based on all this data, make a proposal for a speed limit plan and guidelines that will be available to all relevant institutions and users.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors implementing this intervention are Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, Ministry of Internal Affairs, Federal Ministry of Internal Affairs.</p>				
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>Forming a research group</li> <li>Collecting data on road infrastructure, speeds, etc.</li> <li>Revision of existing documentation</li> <li>Proposal for a speed limit plan and guidelines</li> <li>Adopting the plan and guidelines</li> </ul>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
ITS and speed management Road authorities	<p><b>Consistency of speed limits: differentiated speed limits depending on the function, alignment, volume and structure of traffic must be defined, in accordance with the reasonable local speed limits</b> [TA3/ authorities /consistency]</p>	2021-2030	100.000 €	MKTBIH MUP FMUP PC Roads PC Motorways Road directorates Cantons Municipalities
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Some speed limits cause frustration for drivers, for example places where there is a smaller speed limit, and there is no reason for that (not inhabited). It is necessary to revise and investigate the justification of certain limits.</p> <p><b>How?</b> Revise existing constraints and feasibility analysis. Based on the obtained data, make a pilot project with new constraint proposals of speed limits. In the end it is necessary to inform about the obtained recommendations to the road operator.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors implementing this intervention are Ministry of Communications and Transport of Bosnia and Herzegovina, Ministry of Internal Affairs, Federal Ministry of Internal Affairs, PC Roads, PC Motorways, road directorates, cantons, municipalities.</p>			
	<p><b>Uptake Plan</b>            Research and road surveying            Analysis            Pilot project</p>			

ITS and speed management Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Speed enforcement: implementation of section control, minimization of the obstacles in violation processing procedures</b> <a href="#">[TA3/ authorities /enforcement]</a>	2021-2030	150.000 €	MUP FMUP Cantons Municipalities
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Currently, speed control in Bosnia and Herzegovina is carried out on certain measures and sections, and is one of the most effective methods of influencing the reduction of vehicle speeds. Therefore, this aspect should be given more importance and work should be done to control as many shares as possible, but also to sanction drivers.</p> <p><b>How?</b> The biggest work regarding this intervention should be done by the Ministry of Internal Affairs. It is necessary to organize meetings and workshops at the national level for the adoption of proposals for monitoring sections and speed of vehicles, as well as for sanctioning drivers. This must be defined at the national level and implemented at the regional and local level as well.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors in implementing this intervention are Ministry of Internal Affairs, Federal Ministry of Internal Affairs, cantons, municipalities.</p>				
<p><b>Uptake Plan</b></p> <p>Forming a work group Research and proposal on national level Infrastructure investments, IT support, education Development of material</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
ITS and speed management Road authorities	<b>Speed data collection and analysis: systematic collection of speed data development in anonymized speed database. Further development of the methodology of analysis (for example speed development by road types, etc.)</b> <a href="#">[TA3/ authorities /data]</a>	2021-2030	25.000 €	MKTBIH FMPIK MUP FMUP PC Roads PC Motorways Cantons Municipalities Cantonal road directorates
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            There is no speed database in Bosnia and Herzegovina. Data can only be extracted from traffic meters under the jurisdiction of the JP Ceste FBiH. Also, a small part of the database for internal use has the Ministry of Interior, from stationary and mobile radars. JP Autoceste FBiH for their needs do monitoring and measuring speed on the highways of FBiH.            For any analysis and projects related to traffic safety, one of the starting points is the speed of the vehicle. Therefore, this intervention is very important for implementation.</p> <p><b>How?</b>            To solve this intervention, large investments are needed in infrastructure, software, vehicle speed meters, etc. It is necessary that all relevant institutions, ministries, cantons, as well as road managers cooperate in order to successfully create a database. It is necessary, that at all levels of the road, there is a central place for data collection that would be available to relevant institutions and users, in order to conduct projects, research and other.</p> <p><b>When?</b>            Between the years 2021-2030</p> <p><b>Who?</b>            The main actors implementing this intervention are Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Transport and Communications, Ministry of Internal Affairs, Federal Ministry of Internal Affairs, cantons, municipalities, PC Roads, PC Motorways, cantonal road directorates, other stakeholders</p>			
<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>Revision of the existing situation</li> <li>Development of software</li> <li>Education and training</li> <li>Do a pilot project of speed measurement</li> <li>Commissioning of software and database</li> </ul>				



## 4) Safe infrastructure near schools

	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Development and support of specific design guidelines for road sections in the vicinity of schools</b> <i>[TA4/ national /guidelines]</i>	2021-2030	15.000 €	Parliament MKTBIH FMPIK FMON Cantons Municipalities Schools
Safe infrastructure near schools National level	<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            In the design guidelines adopted in 2008, there is a small part concerning the design of roads near schools. However, from then until today, that is all that exists at the level of Bosnia and Herzegovina. In order to ensure maximum safety of children in road traffic, it is necessary to constantly work and adopt new measures, analysis as well as regulations that will define what kind of roads near schools must be.</p> <p><b>How?</b>            Amend/improve other regulations at the state, federal and cantonal level concerning design guidelines for road sections in the vicinity of schools. Revision of the plan and amendments to the design manual to include additional road safety features. Existing guidelines need to be revised and verified. Do research of examples from other countries, manuals for road design in vicinity of schools.</p> <p><b>When?</b>            Between the years 2021-2030</p> <p><b>Who?</b>            The main actors for implementing this intervention are Parliament, Ministry of Communications and Transport of Bosnia and Herzegovina, Federal Ministry of Traffic and Communication, Federal Ministry of Education and Science, cantons, municipalities, schools.</p>			
	<p><b>Uptake Plan</b>            Revision of existing documentation and guidelines            Workshops and seminars for consultation,            Development and introduction of revised/amended manuals            Adopting the guidelines</p>			

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Definition of special speed limits in the Road Traffic Code to be applied on road sections in the vicinity of schools</b> <i>[TA4/ national /limits]</i>	2021-2030	100.000 €	Parliament MKTBIH FMPIK MUP FMUP Cantons Municipalities
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> In many road sections where is possible depending on the road and where the frequency of traffic allows it, the speed near the schools is limited to 40 km/h, and in some places the speed is 30 km/h. However, a complete network audit needs to be done.</p> <p><b>How?</b> Observe and review the current speed limits throughout the road network and prepare a speed management plan through the road network, with the speed limits reviewed so that the set speed limits reflect the function and characteristics of the section. A complete network audit needs to be done. After the audit, make a proposal to limit the speed to 40 km/h on main and regional roads in all places near schools.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors in implementation this intervention are Parliament, Ministry of Communications and Transport of Bosnia and Herzegovina, Ministry of Internal Affairs, Federal Ministry of Internal Affairs, Federal Ministry of Transport and Communications, cantons, municipalities.</p>				
<p><b>Uptake Plan</b> Preparation of an evaluation material for decision-makers analysing the possibilities of adapting proposal of speed limits Organize workshops and roundtables</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools National level	<b>Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools</b> <i>[TA4/ national /funding]</i>	2021-2030	500.000 €	MKTBIH MUP FMUP FMPIK FMO PC Roads PC Motorways BIHAMK Cantons Municipalities NGO's
	<b>Explanatory notes:</b> <b>Why?</b> In certain institutions which are dealing with traffic there is a certain fund that can be used for certain interventions near schools. However, it is not primary and is not used solely for these purposes. It is necessary to make a proposal, studies and solutions in order to finance a certain measure.  <b>How?</b> Ensure annual budgets of all state actors for road safety interventions on primary roads in the vicinity of schools.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors implementing this intervention are responsible Ministries, cantons, municipalities, Bosnia and Herzegovina Automobile Club, NGO's, PC Roads, PC Motorways.			
	<b>Uptake Plan</b> Make a budget proposal in all relevant institutions. Propose a special fund for road safety in vicinity of schools. Workshops and roundtables Adopting of a proposal			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools National level	<b>Systematic collection of data on road crashes near schools and related casualties</b>	2021-2030	15.000 €	MKTBIH MUP FMPIK FMUP FMON Cantons Municipalities BIHAMK Schools
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Data on traffic accidents near schools at the national level do not exist. In order to have comprehensive data on sections near schools, it is necessary to keep records of traffic accidents. In this case they could define more/less critical stocks and know in which direction to act.</p> <p><b>How?</b> The cooperation of the Ministry of the Internal Affairs at all levels is needed in order to record and keep detailed data on accidents near schools.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors for implementing this intervention are Ministry of Communications and Transport of Bosnia and Herzegovina, Ministry of Internal Affairs, Federal Ministry of Internal Affairs, Federal Ministry of Transport and Communications, Federal Ministry of Education and Science, Bosnia and Herzegovina Automobile Club, cantons, municipalities, schools.</p>			
	<p><b>Uptake Plan</b> Traffic police training on data collection IT support and database creation Publication of material</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Regional and local level	<b>Ensuring adequate funding for road safety interventions in local roads in the vicinity of schools</b> <i>[TA4/ regional /funding]</i>	2021-2030	500.000 €	FMPIK FMUP FMON Cantons Cantonal road directorates Municipalities
	<b>Explanatory notes:</b> <b>Why?</b> At the local level, there is not only a fund to improve road safety near schools.  <b>How?</b> Such a measure is necessary because in that case there would be no financial obstacles to the implementation of specific measures. It is necessary to make a proposal for a special fund or only earmarked funds that will be directed exclusively to road safety near schools. It is necessary to make a proposal of this fund which will be taken into consideration during the adoption of the municipal budget, directorate budget, cantonal budget.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors for the implementation and financing of this intervention are responsible Federal Ministry of Transport and Communications, Federal Ministry of Internal Affairs, Federal Ministry of Education and Science, cantons, municipalities, cantonal road directorates.			
	<b>Uptake Plan</b> Proposal of the road safety fund or only earmarked funds in vicinity of schools at local level, during the creation and adoption of municipal budgets directorate budget, cantonal budget. Adopting the proposal			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Regional and local level	<b>Systematic collection of data on road crashes near schools and related casualties</b> <a href="#">[TA4/ regional /data]</a>	2021-2030	20.000 €	FMPIK FMUP Cantons Municipalities Partners
	<b>Explanatory notes:</b> <b>Why?</b> The collection of data on traffic accidents near schools aims to improve road safety. By monitoring this data it is possible to reduce the number of traffic accidents and casualties that includes children, as the most vulnerable group.  <b>How?</b> The basis of any activity on improving traffic safety, ie on preventing traffic accidents and their consequences, must be based on an accurate diagnosis of the condition and clearly defined conditions in which these phenomena occur. This measure is necessary because they would get data which roads are safe and which are not for the movement of children to school and back. According to these data, specific measures could be taken that would bring an improvement in safety near schools.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors for implementing this intervention are Federal Ministry of Internal Affairs, Federal Ministry of Transport and Communications, cantons, municipalities, and other partners.			
	<b>Uptake Plan</b> Traffic police training on data collection IT support and database creation Linking all databases Possibility of access to all relevant stakeholders			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Educational campaigns to promote safer transport to/from schools</b> <i>[TA4/ regional /campaigns]</i>	2021-2030	50.000 €	FMON BIHAMK Cantons Municipalities NGO's Partners
<b>Safe infrastructure near schools</b> <b>Regional and local level</b>	<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            Due to the lack of subjects in schools that will educate children only about traffic and traffic safety, it is necessary to introduce additional education and campaigns. Preparing children for traffic is a basic issue of traffic safety.</p> <p><b>How?</b>            It is necessary to have traffic education programs for children in all schools. To implement this intervention, the Ministry of Education must cooperate and approve the education of children in schools. It is necessary to implement campaigns concerning children and their safety in traffic, especially when going to/from school.            The proposal is to introduce into regular practice the education of children about traffic at the beginning of the school year.            Also, implement campaigns that will cover topics: ban on parking near schools, revision and improvement of road infrastructure, seat belts, speeding near schools, etc.</p> <p><b>When?</b>            Between the years 2021-2030</p> <p><b>Who?</b>            The main actors for implementing this intervention are Federal Ministry of Education and Science, Bosnia and Herzegovina Automobile Club, cantons, municipalities, NGO's, other partners.</p>			
	<p><b>Uptake Plan</b></p> <p>Publication of material            Available traffic education material for children            Number of traffic safety campaigns undertaken</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Forming a special road safety fund dedicated for direct investments in road safety, to implement upgrades in the vicinity of schools</b> <i>[TA4/ authorities /funding]</i></p>	2021-2030	50.000 €	FMPIK FMON PC Roads BIHAMK Cantons Municipalities NGO's Others (Insurance companies) Schools
<p>Safe infrastructure near schools Road authorities</p>	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> In order to bring road safety close to schools to a higher level, all relevant institutions, especially road authorities, must have special funds that will be directed exclusively to activities around schools. The first step is a budget revision. Then it is necessary to make a proposal of the fund that will be proposed for adoption.</p> <p><b>How?</b> All relevant institutions must make a fund proposal to be presented when the budget is adopted. Proposal to form a single fund where all relevant institutions and companies dealing with traffic, as well as schools, will allocate a certain amount to finance direct investments to increase road safety near schools. From the mentioned fund, tenders will be financed. Tenders will be focused on this activity, to upgrade road safety in vicinity of schools.</p> <p><b>When?</b> Between the years 2021-2030</p> <p><b>Who?</b> The main actors implementing this intervention are Federal Ministry of Transport and Communications, Federal Ministry of Education and Science, PC Roads, Bosnia and Herzegovina Automobile Club, cantons, municipalities, NGO's, others (Insurance companies), schools.</p>			
	<p><b>Uptake Plan</b> A proposal for a fund for direct investment in road safety near schools Consider the proposal when adopting the budget Adopting the proposal and publication of material Publish tenders financed from the fund</p>			



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	<b>Observation of road safety trends and good practices to plan maintenance and upgrades of existing road network in the vicinity of schools</b> <a href="#">[TA4/ authorities /good_practice]</a>	2021-2030	150.000 €	PC Roads BIHAMK Other stakeholders
	<b>Explanatory notes:</b>  <b>Why?</b> The existence of a database with integrated successful solutions and good practices applied near schools will facilitate the review of all solutions in increasing road safety. This is necessary because sometimes some solutions go unnoticed, or they do not reach a large number of people. Maybe some applied solution near one school is applicable for another school as well.  <b>How?</b> Gathering information on implemented projects, campaigns and measures that have had very great success in implementation on the roads near schools. Development a publication with all projects with all good solutions and practices, so they are all in one place and available to all relevant users. Publish the publication every year.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors in implementation this intervention are PC Roads, Bosnia and Herzegovina Automobile Club, other stakeholders.			
	<b>Uptake Plan</b> Data and information collection Development			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	<b>Use of appropriate methodologies to identify hazardous locations near schools and the causes of road safety problems, identify intervention priorities and implement countermeasures</b> <a href="#">[TA4/ authorities /methodology]</a>	2021-2030	100.000 €	FMPIK FMUP PC Roads FSK BIHAMK
	<b>Explanatory notes:</b> <b>Why?</b> The main problem in Bosnia and Herzegovina is not having any data bases which will help to recognize hazardous locations especially near schools. To have database like this will make it easier with planning which road section is priority to make road security near schools even higher as much as possible. It is necessary to do a review and revision of existing material and make a proposal for a new methodology that will be applied only in the vicinity of schools. Also, take an example from countries that have introduced a similar methodology.  <b>How?</b> The related regulations have to be reviewed, comparing them with the set of tools offered by international good practices. When defining the methodology, it is necessary to consider certain data for schools. Relevant data can be: the number of children in the school, the number of children killed near the school in traffic accidents, the number of traffic accidents, how the children come / go to / from the school, observed time period. A special part should consist of data on traffic infrastructure: whether there is a pedestrian crossing near schools, a bus stop, fences, traffic signs, etc. have been set up.  <b>When?</b> Between the years 2021-2030  <b>Who?</b> The main actors to implement this intervention are Federal Ministry of Transport and Communications, Federal Ministry of Internal Affairs, PC Roads, Bosnia and Herzegovina Automobile Club, Faculty of Traffic and Communications. They all need to cooperate together successfully. Also, responsible Ministries will be obtained fund for this intervention.			
	<b>Uptake Plan</b> Multiple workshops and educations for all participants and main actors Research of existing methodologies as well as examples of other countries Preparation of an evaluation material for decision makers for adopting methodologies Organize workshops, trainings, education			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Carrying out of “before and after” studies to evaluate the road safety effect of implemented interventions</b> <i>[TA4/ authorities /impact]</i>	2021-2030	200.000 €	PC Roads Research institutions BIHAMK Partners
<b>Safe infrastructure near schools</b> <b>Road authorities</b>	<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            Effective decisions regarding the road safety interventions can only be made with adequate knowledge regarding its effectiveness. Lack of reliable knowledge of the effectiveness of certain road safety infrastructure is a key barrier to the adoption of potentially life-saving interventions. To monitor the effect of countermeasures taken on certain stocks we need to do studies “before and after”. In this way we can monitor which countermeasures give the greatest effect and which solutions are best done.</p> <p><b>How?</b>            Before taking any countermeasure, we had to do an analysis and condition before. The same data and analysis need to be done before and after the countermeasures have been taken. Finally, it is necessary to compare the data and define the success of the implemented countermeasure. The ultimate measure of the success of a road safety policy or intervention is the effect that it has had on crash reduction, particularly the reduction in fatal and serious injuries. Unfortunately, difficulty arises in considering crashes on their own, as it may be necessary to wait several years after the countermeasure has been introduced to be able to validate the changes in crash statistics. It is often recommended to conduct an evaluation in two stages: a short-term phase (e.g. 6 months) and a longer-term phase (e.g. 3 to 5 years).</p> <p><b>When?</b>            Between the years 2021-2030</p> <p><b>Who?</b>            The main actors for the implementation of this intervention would be the implementers of certain countermeasures. PC Roads, Bosnia and Herzegovina Automobile Club, as well as the competent institutions depending on which road activities were implemented. Also, these actors would allocate funds for this intervention.</p>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>Prepares analysis and studies before implementing countermeasures</li> <li>Analysis and data collection after the implementation of the countermeasure</li> <li>Comparing data and creating a study before and after</li> <li>Publication of material</li> <li>Organizing related professional trainings, forums, education</li> </ul>			

## 9. Danube Infrastructure Road Safety Improvement Action Plan (DIRSIAP) for Slovenia

This Action Plan has been created in the framework of the [RADAR project](#) which aims at raising road safety levels of countries in the Danube Region. It is structured along RADAR's six Thematic Areas:

- 1) Investing in safe infrastructure,
- 2) Provisions for vulnerable road users,
- 3) ITS and other techniques for speed management,
- 4) Safe infrastructure near schools,
- 5) Transport Safety and COVID-19,
- 6) Road Infrastructure Safety Management,

and is adapted to the specific road safety requirements of Slovenia. The interventions set out in this Action Plan are directed at all levels of road safety management, i.e., from national to regional and local level, with a special section on road authorities.

## Investing in safe infrastructure

	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Definition of a national minimal standard for road infrastructure safety rating for existing and new roads based on an evidence-based methodology</b> [TA1/national/standard]</p>	2021-2025	50.000 EUR	MZI
<p>Investing in safe infrastructure National level</p>	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Despite relatively high infrastructural level of safety is being maintained on the roads in Slovenia, there is a lack of unified standard that could also be compared internationally.</p> <p><b>How?</b> Existing regulations need to be reviewed and a comparison made between the existing practices and the ones offered by internationally recognized programmes and tools that they offer. The iRAP methodology should be implemented in technical design and maintenance regulations. Based on the results of the review, the regulatory environment needs to be transformed so that the aspects and requirements according to the iRAP methodology can be adopted into national regulations both for maintenance of existing as well as for projects of building new roads.</p> <p><b>Timeframe and financial resources</b> 2021-2025, estimated resources needed: 50.000€</p> <p><b>Who?</b> Ministry of Infrastructure (MZI) as main actor, road authorities (national road authority for state roads and motorway authority for motorways and expressways), national EuroRAP consortium, (AMZS+DARS), road safety agency, other interested stakeholders.</p>			
	<p><b>Uptake Plan</b> Creation of a study comparing existing and proposed approaches upon which decision-makers can analyse the possibilities of adapting the iRAP methodology. Revision of the corresponding act (Act on Roads, Regulations on Road design, Regulations on Road signage and Road equipment, Technical specifications for roads, Resolution on National programme of building motorways and expressways). Publication of new or amended legislation. Organization of corresponding professional trainings, forums, education.</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<p><b>Allocation of a certain portion of road infrastructure investments to road safety interventions</b></p> <p><a href="#">[TA1 /national/investment]</a></p>	2021-2030	15.000 EUR (preparation)	MZI
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Road safety interventions on Slovenian roads are only carried out as a part of reconstruction or when a section of road is recognized (through monitoring of locations with high level of traffic accidents) as a risk to its users due to unsafe infrastructural elements. There is no specific budget allocated for this purpose. A part of infrastructure investments could be specifically dedicated to activities improving infrastructure safety.</p> <p><b>How?</b> The corresponding ministry - Ministry of Infrastructure (MZI) should allocate a certain portion of funds, intended for infrastructural investments and/or reconstructions and delegate it to projects/stakeholders dealing with road safety interventions. Legislation needs to be adjusted and criteria prepared upon which the funds from the allocated budget would be distributed.</p> <p><b>Timeframe and financial resources</b> Continuous intervention through the decade. No additional resources needed, approx. preparation costs 15.000EUR</p> <p><b>Who?</b> MZI</p>			
	<p><b>Uptake Plan</b></p> <p>Professional consultation Preparation of the concept and criteria Preparation of legislation, harmonization, amendment</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure National level	<b>Embedding of the Safe System approach into the mainstream of road design/investment and maintenance legislation and practice</b> <a href="#">[TA1/national/SafeSystem]</a>	2021-2025	15.000 EUR (preparation)	MZI, AVP
	<b>Explanatory notes:</b>  <b>Why?</b> All pillars of Safe System approach in road safety are already present and developed to a quite high level in Slovenia. Infrastructure-wise, all activities (design/investment, maintenance...) are in general always conducted with road safety in mind. There are however no legislation fundamentals that would insure this is always the case on all levels. Therefore, the embedding of the Safe System approach into legislation would be beneficial as it would result in even higher rate of application. <b>How?</b> Development of legal environment that would impose the use of Safe System approach. Based on this, the practical application of the system should be mandatory in all corresponding cases, which would also be defined in the legislation. Responsible institution is Ministry of Infrastructure (MZI) in cooperation with Road Safety Agency (AVP). <b>Timeframe and financial resources</b> Between the years 2021-2025. No additional resources needed, approx. preparation costs 15.000EUR <b>Who?</b> MZI, AVP			
	<b>Uptake Plan</b> Professional consultation Preparation of the concept Preparation of usage criteria Preparation of legislation, harmonization, amendment			

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Institutionalisation of trainings for road safety auditors and road safety inspectors</b> <i>[TA1/national/auditors]</i>	In progress/ completed	N/A	AVP
	<b>Explanatory notes:</b> Already completed. The Slovenian National road safety agency - AVP has institutionalized the trainings for road safety auditors and road safety inspectors in 2013 and is conducting periodical trainings since then.			
<b>Uptake Plan</b> N/A				

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Transfer of the Safe System approach to local governments and local road authorities</b> <i>[TA1/national/vertical]</i>	N/A	N/A	N/A
	<b>Explanatory notes:</b> As of today and in the near future, we find this task not applicable, not real to be implemented in the near future. Local governments as well as local road authorities lack the capacity, resources, knowledge, human resources and are at the same time dealing with many way more rudimental problems they need to overcome in their local environment that are of more basic importance to them and people they are providing service to. Prior to transfer of Safe System approach, knowledge transfer of more basic elements of road safety would be appropriate.			
<b>Uptake Plan</b> N/A				



Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Enlarging the scope of roads to be treated in accordance with Directive 2019/1936 to 2nd level roads (e.g., "regional roads")</b></p> <p><i>[TA1 /national/secondary]</i></p>	In progress/ completed	N/A	Ministry of infrastructure
	<p><b>Explanatory notes:</b> Already in progress, the criteria for the roads to be included in the primary road network is already known and covers all highways and expressways, main roads Class 1 (G-1) with AADT &gt; 10.000 or where % of vehicles with mass &gt; 3.500kg exceeds 12%, and finally also main roads that are already part of TEN-T. The task is being performed by Ministry of infrastructure in the scope of their regular activities.</p>			
<p><b>Uptake Plan</b> N/A</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<b>Institutionalisation of knowledge transfer with demonstrations of good practices and approaches for road authorities and to regional/local governments</b> <a href="#">[TA1/national/good_practice]</a>	2023-2025	20.000 EUR +800.000 EUR	MZI, AVP
Investing in safe infrastructure National level	<b>Explanatory notes:</b>  <b>Why?</b> Local road authorities and regional/local governments lack the capacity, resources, knowledge, human resources and are at the same time dealing with many way more rudimental problems they need to overcome in their local environment that are of more basic importance to them and people they are providing service to. <b>How?</b> The lack of knowledge can be improved by institutionalization of knowledge transfer. A newly developed training programme, supported by attractive examples of good practice can be used to motivate participants through practical examples. The legal framework of the compulsory education and trainings also has to be developed, providing the general and basic road safety knowledge for the responsible persons at regional/local levels. The motivation can be set up to increase involvement and commitment. This can be facilitated by a tendering system under which support can be obtained for low-cost road safety interventions. Responsible institution is Ministry of Infrastructure (MZI) in cooperation with Road Safety Agency (AVP). <b>Timeframe and financial resources</b> Between the years 2023-2025, preparation costs approx. 20.000 EUR (legislation, curriculum, training), tender system approx. 800.000 EUR <b>Who?</b> MZI, AVP			
	<b>Uptake Plan</b> Design of the training system Review of the investment financing system, Adaptation of the legal framework Development and operation of the tender system			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Regional and local level	<p><b>Systematic road safety data collection and analysis to plan interventions/investments on most critical locations</b></p> <p><a href="#">[TA1/regional/data]</a></p>	2021-2030	15.000 EUR	MZI, AVP, Police
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Systematic data collection is present on all public roads in Slovenia. Analysis, on the other side, is well developed for the state operated roads and analysis is done only for the national road network. Local road authorities and regional/local governments lack the capacity, resources, knowledge, human resources to analyse road safety data in order to plan interventions/investments on most critical locations.</p> <p><b>How?</b> The lack of resources at local road authorities can be tackled with knowledge transfer. A firm cooperation between the Police (collecting the data), National road safety agency (AVP; analysing the data), Ministry of Infrastructure (coordinating institution) and local road authorities need to be established. A training programme for local road authorities need so be set up in order to elevate their knowledge at least to the extent where they are able to conduct basic analyses of the road safety data. The education can be motivated either on voluntarily basis with certain benefits or by making it mandatory for all local road authorities to take the training in a reasonable amount of time and periodically produce analyses.</p> <p><b>Timeframe and financial resources</b> Continuous intervention through the decade. No additional resources needed, approx. preparation costs 15.000EUR</p> <p><b>Who?</b> MZI, AVP, Police</p> <p><b>Uptake Plan</b> Design of the training system Setting up the motivational framework Adaptation of the legal framework Introduction</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Investing in safe infrastructure Road authorities	<p><b>Setting up of road safety funds for investments in road safety upgrades in terms of road safety equipment and measures at locations with most effectiveness</b> [TA1/authorities/funds]</p>	2022-2024	15.000 EUR	DARS, DRSI, MZI
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> There are no road safety funds for investments in road safety upgrades in terms of road safety equipment and measures at locations with most effectiveness in Slovenia. The existence of such funds would increase the accessibility of installing measures and equipment that contribute to increase of road safety.</p> <p><b>How?</b> Ministry of Infrastructure (MZI) as a coordinator of this task should after consultation with state road authorities (DARS &amp; DRSI) prepare the concept to allocate a certain amount/proportion of funds that authorities receive from the state to a special road safety fund. This task is only viable for state road authorities.</p> <p><b>Timeframe and financial resources</b> Between the years 2022-2024, No additional resources needed, approx. preparation costs 15.000EUR</p> <p><b>Who?</b> DARS, DRSI, MZI</p>			
	<p><b>Uptake Plan</b> Consultation with participating authorities Preparation of the concept Adaptation of the legal framework Introduction</p>			

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Observation of road safety trends and good practices to plan maintenance and upgrades of the existing road network in operation</b></p> <p><a href="#">[TA1/authorities/good_practice]</a></p>	In progress/ completed	N/A	DARS, DRSI
<p><b>Explanatory notes:</b> Already in progress for many years. Slovenian state road authorities (Motorways and expressways road authority (DARS) and Slovenian Infrastructure Agency (DRSI) are members of CEDR and PIARC, they follow the examples of good practise from abroad through mentioned organisations and are always trying to incorporate solutions that are appropriate and suitable to local environment here in Slovenia. The task in being performed in the scope of road authorities' regular activities.</p>				
<p><b>Uptake Plan</b> N/A</p>				

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Use of methodologies for selecting most critical locations with highest potential savings.</b></p> <p><a href="#">[TA1/authorities/methodologies]</a></p>	In progress/ completed	N/A	DARS, DRSI
<p><b>Explanatory notes:</b> Methodologies of this kind are already in use by road authorities, mostly blackspots management and MVSPN (monitoring of locations with high level of traffic accidents). Road authorities are performing this task in the scope of their regular activities.</p>				
<p><b>Uptake Plan</b> N/A</p>				

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Publication of the list of high accident concentration road sections / hot spots.</b> [TA1 /authorities/hotspots]</p>	2021-2030	15.000 EUR	MZI, Police, AMZS
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Every road user should be entitled to have the insight into this kind of data as he is actually actively participating in creating them. It is only right that road users are informed about the locations of most dangerous places and potential risks associated with them using these roads/sections/spots. Publication would also motivate road authorities to intervene and other stakeholders to support them or even encourage the authorities with new initiatives.</p> <p><b>How?</b> The publication of the list of high accident concentration road sections/hot spots should be done by the Ministry of Infrastructure (MZI) on the base of the available data that are already collected by Police. Optionally, the publication could include the lost values due to these accidents. Even more optionally, a service that can calculate risk of using different paths (for daily commuters, for example) could be offered (consultant AMZS).</p> <p><b>Timeframe and financial resources</b> Continuous intervention through the decade. Approx. costs 15.000EUR</p> <p><b>Who?</b> MZI, Police</p>				
<p><b>Uptake Plan</b> Coordination with Police Adjustment of the software Publication, dissemination</p>				

## Provisions for vulnerable road users

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Incorporation of the principles and concepts of the Safe System approach in relevant legislation and VRUs' countermeasures selection criteria</b> <a href="#">[TA2/national/SafeSystem]</a>	In progress/ completed	N/A	MZI
	<b>Explanatory notes:</b> National programme of road safety until 2022 includes taking VRUs into account when designing road infrastructure. Similarly, the need to take special care for VRUs is listed in the strategy of traffic development in Slovenia until 2030. Safe system approach is not mentioned and this could be approved. Forgiving and self-explaining roads are included in the Strategy. Ministry of Infrastructure - MZI is the institution that has done this task in the scope of their regular activities.			
	<b>Uptake Plan</b> N/A			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Development/Incorporation of a unified protocol for assessment of the risks of VRUs, which will ensure that results are understood and comparable between countries</b></p> <p><i>[TA2/ national /risk_assessment]</i></p>	2022-2030	20.000 EUR	MZI, AMZS
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Identifying the safety risks for vulnerable road users is the first step in improving their road safety level. However, in many cases the risk assessment may not be the same as for vehicle occupants, and in many cases there is no established method for this purpose.</p> <p><b>How?</b> Incorporation of a well-established and suitable assessment methodology to identify and evaluate the infrastructural safety level for vulnerable road users, focusing on all aspects in accordance with the European best practices and directives. Responsible institution is Ministry of Infrastructure with AMZS as consultant.</p> <p><b>Timeframe and financial resources</b> Between the years 2022-2030, 25.000 EUR.</p> <p><b>Who?</b> MZI, AMZS</p>				
<p><b>Uptake Plan</b></p> <p>Professional consultations Incorporation of the assessment methodology Dissemination</p>				



Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Making sure that countermeasures' selection, prioritization and implementation process for VRUs should not in any case be performed only based on subjective criteria but primarily based on official, standardized, objective methodology which considers all relevant road safety indicators (AADT, peak-hour pedestrian/cyclist flows, operating speed, traffic accidents characteristics)</b></p> <p><i>[TA2/ national /methodology]</i></p>	In progress/ completed	N/A	DRSI
<p><b>Explanatory notes:</b> Already completed, quite detailed instructions on which countermeasures can be used on which location and in which circumstances are defined in the technical specifications for roads – TSC. Organization that provides the technical specifications is the Slovenian Infrastructure Agency (DRSI) and is doing this as part of its regular activities.</p>				
<p><b>Uptake Plan</b> N/A</p>				

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Definition of a national minimal standard threshold values of relevant road safety indicators based on which high-risk road sections for VRUs will be identified</b></p> <p><i>[TA2/ national /standard]</i></p>	In progress/ completed	N/A	DRSI
<p><b>Explanatory notes:</b> High-risk road sections are identified on the base of either black spot management procedures or in the process of identification of MVSPN (monitoring of locations with high level of traffic accidents). Methodology and threshold values were defined and are regularly updated to produce the best possible results based on available input data. Done by consulting company on request of Slovenian Infrastructure Agency (DRSI) in the scope of the Agency's regular activities.</p>				
<p><b>Uptake Plan</b> N/A</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Ensuring that available funds are primarily invested in low-cost, high-impact countermeasures, by considering the concepts of tactical urbanism and space-wise planning</b> <i>[TA2/ national /funds]</i>	In progress/ completed	N/A	DRSI
	<b>Explanatory notes:</b> In general, all countermeasures are selected rationally with the goal to achieve maximum impact with the least expensive but still effective countermeasure. When a location in need of intervention is recognized, there is an assessment made on how to apply immediate countermeasure as well as long term solution in case there is a bigger intervention needed. The latter is then put into the investment plan and carried out as a part on reconstruction in suitable time.			
	<b>Uptake Plan</b> N/A			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Development/restructuring and linking datasets on road traffic accidents and road network in order to increase their precision and provide free and easy access to all stakeholders</b></p> <p>[TA2/ national /dataset]</p>	2022-2026	80.000 EUR	MZI, MNZ, AVP, Police
<p>Provisions for vulnerable road users</p> <p>National level</p>	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Road accident data are collected by the Police. The accuracy of the data is good for the motorways and expressways but could be better for other state roads and especially local roads. Data on road network is well established and maintained. The linkage between them, however, could be improved as it is poor. There is no free access, and this could also be established in order to provide free and easy access to all stakeholders.</p> <p><b>How?</b> As a first and most difficult step, the accuracy of the input data (road traffic accidents) needs to be improved. This can be achieved by additional education of staff at the Police as well as by establishment of internal control. Then, linking of datasets on road traffic accidents and road network needs to be elaborated. A free and easy access for all stakeholders needs to be established. The coordinator of this project can be Ministry of Infrastructure (MZI) in cooperation with Ministry of the Interior (MNZ) and in consultation with National road safety agency (AVP) and Police.</p> <p><b>Timeframe and financial resources</b> Between the years 2022-2026, 80.000 EUR</p> <p><b>Who?</b> MZI, MNZ, AVP, Police</p>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>Improve accuracy of data collection</li> <li>Linkage of both datasets</li> <li>Preparation of an operational action plan</li> <li>Adaptation of the legal framework</li> <li>Introduction</li> </ul>			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Linking the police database on road traffic accidents with hospital data in order to minimize the VRUs accidents under-reporting issue</b> <a href="#">[TA2/ national /database_link]</a>	N/A	N/A	N/A
	<b>Explanatory notes:</b> Not yet applied, not foreseen in the near future and not an easy task due to large amount of personal data and different actors/databases/data systems involved. Also the underreporting in Slovenia is negligible. Hospitals/doctors are obliged and do report injuries to traffic police for every intervention or visit at the doctor when road users are involved or there is a reasonable doubt that the injury is a result of traffic accident even if there is just single pedestrian or cyclist involved.			
	<b>Uptake Plan</b> N/A			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Changing traffic culture and public awareness by disseminating relevant information to the public by various media sources</b> <a href="#">[TA2/ national /awareness]</a>	In progress/ completed	N/A	AVP, Police, NGOs
	<b>Explanatory notes:</b> In progress/ongoing – there are many campaigns, led by National road safety agency - AVP, also Police and other NGOs on this topic.			
	<b>Uptake Plan</b> N/A			

Provisions for vulnerable road users National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Knowledge transfer with demonstrations of good practices and approaches in VRU safety for road authorities and to regional/local governments</b> <i>[TA2/ national /vertical]</i>	In progress/ completed	N/A	AVP, DRSI, Police
	<b>Explanatory notes:</b> Knowledge transfer between actors inside Slovenia is present but could be better (Police, Road authorities - DRSI, National road safety agency - AVP). Cooperation on a transnational level is more consistent and developed. On (to) regional/local level, the transfer is less comprehensive, but the trend of knowledge transfer is showing in the right direction as more and more local governments are doing more on the field of VRU road safety. Leadership on this topic is done in the scope of main actors' regular activities.			
<b>Uptake Plan</b> N/A				

Provisions for vulnerable road users Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Ensuring that results obtained by road safety assessments performed in individual municipalities at local level are standardized and comparable between different municipalities and on the National level</b> <i>[TA2/ regional /standard]</i>	N/A	N/A	N/A
	<b>Explanatory notes:</b> Results of the black spot management and MVSPN (monitoring of locations with high level of traffic accidents) are standardised and comparable on national level. For the regional and local levels, as of today and in the near future, we find it not realistic for this task to be completed. The challenges are similar to those at implementation of safe system approach on local level - local governments as well as local road authorities lack the capacity, resources, knowledge, human resources and are at the same time dealing with many way more rudimental problems they need to overcome in their local environment that are of more basic importance to them and the people they are providing service to.			
<b>Uptake Plan</b> N/A				

Provisions for vulnerable road users Regional and local level	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Systematic, high-quality road safety data collection and analysis to plan interventions/investments on most critical locations for VRU</b></p> <p><a href="#">[TA2/ regional /data]</a></p>	N/A	N/A	N/A
	<p><b>Explanatory notes:</b></p> <p>At regional and local levels, there is a limited amount of data collected, processing and management is not that well developed. As of today and in the near future, we find it not realistic for this task to be completed. The challenges are that local governments as well as local road authorities lack the capacity, resources, knowledge, human resources and are at the same time dealing with many way more rudimental problems they still need to overcome in their local environment that are of more basic importance to them and the people they are providing service to.</p>			
<p><b>Uptake Plan</b></p> <p>N/A</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Road authorities	<b>Use of official, standardized, objective methodology for selecting most critical locations for VRUs with highest potential savings</b> <a href="#">[TA2/ authorities /methodology]</a>	2021-2025	20.000 EUR	MZI, AMZS
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Vulnerable road users by definition face the highest safety risks in road traffic. Although both MVSPN (monitoring of locations with high level of traffic accidents) and black spot management also take into account vulnerable road users, they are not the primary focus. What is more, both these methodologies are reactive and wait for the accidents to happen, before they can detect problems and offer improvements.</p> <p><b>How?</b> The use of official, standardized, objective methodology for selecting most critical locations for VRUs with highest potential savings must be facilitated. The development of road safety audits and inspections based on existing methods and best practices could bring significant improvements by the use of a well-established and suitable assessment methodology to select most critical locations where highest potential savings can be achieved for vulnerable road users. Responsible institution is Ministry of Infrastructure with AMZS as consultant.</p> <p><b>Timeframe and financial resources</b> Between 2021-2025, 20.000 EUR</p> <p><b>Who?</b> MZI, AMZS</p>			
	<p><b>Uptake Plan</b></p> <ul style="list-style-type: none"> <li>Professional consultations</li> <li>Incorporation of the assessment methodology</li> <li>Amendments of the technical regulations</li> <li>Adaptation of the legal framework</li> <li>Introduction</li> </ul>			

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Ensuring that types of pedestrian/cyclist facilities and crossing arrangements are selected based on the operating speed of traffic flow and pedestrian, cyclists and vehicle peak-hour flow volumes</b></p> <p><a href="#">[TA2/ authorities /evidence_base]</a></p>	In progress/ completed	N/A	DRSI
	<p><b>Explanatory notes:</b> All infrastructure elements as well as facilities for VRUs are also selected on the base of mentioned criteria (speed, flow, VRU flow, structure of the flow...) Criteria is more precisely defined in Technical specifications for roads – TSC.</p>			
<p><b>Uptake Plan</b> N/A</p>				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Periodical collection of relevant supporting data on characteristic VRU crash locations on the road network on a mandatory basis and update relevant databases</b></p> <p><a href="#">[TA2/ authorities /supporting_data]</a></p>	In progress/ completed	N/A	DRSI, DARS
	<p><b>Explanatory notes:</b> Done on the whole network by road authorities. In case of suspicion on emerging MVSPN (monitoring of locations with high level of traffic accidents) location, additional collection of supporting data is made.</p>			
<p><b>Uptake Plan</b> N/A</p>				



Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Periodical analysis of effectiveness and efficiency of implemented countermeasures for VRUs</b> <a href="#">[TA2/ authorities /analysis]</a>	In progress/ completed	N/A	DRSI
	<b>Explanatory notes:</b> Periodical analysis is present and takes into account the data from MVSPN (monitoring of locations with high level of traffic accidents) and the locations of implemented countermeasures. If the location persists, additional action is taken. Done by private consulting company for the Slovenian Infrastructure Agency - DRSI.			
<b>Uptake Plan</b> N/A				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Engaging all stakeholders in the process of VRU-friendly road design (engineers need to collaborate with different stakeholders and NGOs)</b> <a href="#">[TA2/ authorities /stakeholders]</a>	In progress/ completed	N/A	DRSI
	<b>Explanatory notes:</b> There are guidelines available for VRU-friendly design and specific ones for VRU infrastructure in the vicinity of schools, prepared in collaboration with NGOs and especially in the bigger cities, where also VRU infrastructure is widely present, NGOs are regularly involved in the process of road design either by invitation or through/after their own initiatives.			
<b>Uptake Plan</b> N/A				

## ITS and other techniques for speed management

ITS and speed management National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Elaboration of guidelines for Intelligent Transportation Systems, speed management and traffic calming approaches</b> <a href="#">[TA3/ national /guidelines]</a>	In progress/ completed	N/A	DRSI
	<b>Explanatory notes:</b> Guidelines are included in the technical specifications for roads (TSC) in the corresponding parts and/or chapters. Provided by Slovenian Infrastructure Agency (DRSI) as a part of its regular activities.			
<b>Uptake Plan</b> N/A				

ITS and speed management Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Exploitation of new ideas and recommendations:</b></p> <ul style="list-style-type: none"> <li>• Speed-activated warning signs (e.g. “Slow down” in the approach of bends and other dangerous locations);</li> <li>• Variable speed limit signs on high-level roads (traffic and/or weather-dependent);</li> <li>• Time-dependent speed limits, e.g. in the vicinity of schools during opening hours;</li> <li>• Transversal rumble strips in the approach of junctions or sharp bends;</li> <li>• Efficiency of administration of fines from automatic speed enforcement;</li> <li>• Lack of resources among authorities tasked with the issuing of fines;</li> <li>• Different degrees of automation (centralized &amp; nearly full automation in France. Inefficient manual processing in other countries ...)</li> </ul> <p>[TA3/ regional /ideas]</p>	<p>In progress/ completed and/or N/A</p>	<p>N/A</p>	<p>N/A</p>
	<p><b>Explanatory notes:</b></p> <p>Speed activated warning signs, variable speed limit signs are already in use (perhaps not that frequently on regional and local level as there are not many high-level roads). Time dependant speed limits are being implemented, first one will be in operation this year. Rumble strips are also widely implemented. Efficiency of administration of fines is satisfactory, however current policy is to fine only the biggest offences i.e. highest speed violations but with relatively high fines. This is partly also due to lack of resources among authorities tasked with the issuing of fines. There is limited automation as the regulations define that only authorized personnel can do the procedure of issuing fines.</p>			
<p><b>Uptake Plan</b> N/A</p>				

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Setting of speed limits: elaboration and continuous revision of guidelines &amp; systematic implementation</b> <a href="#">[TA3/ authorities /guidelines]</a>	In progress/ completed	N/A	N/A
	<b>Explanatory notes:</b> There are general guidelines on speed limits, but every location is and needs to be treated individually due to specific combination of different factors on each location that influence the final speed limit set.			
<b>Uptake Plan</b> N/A				

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Consistency of speed limits: differentiated speed limits depending on the function, alignment, volume and structure of traffic must be defined, in accordance with the reasonable local speed limits</b> <a href="#">[TA3/ authorities /consistency]</a>	In progress/ completed	N/A	N/A
	<b>Explanatory notes:</b> According to existing guidelines this is already implemented. Still every location needs to be treated separately for its specifics.			
<b>Uptake Plan</b> N/A				

ITS and speed management Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Speed enforcement: implementation of section control, minimization of the obstacles in violation processing procedures</b> [TA3/ authorities /enforcement]</p>	Completed / 2022-2025	10.000 EUR	MZI, MNZ
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Section control was already tested and is going to be implemented shortly. The biggest obstacle in violation processing procedures is the current legislation upon which only the actual driver of the vehicle can be held responsible for the offence. If the offender is not stopped immediately, he can easily avoid the fine as the authorities do not hold sufficient evidence regarding who the actual offending driver is.</p> <p><b>How?</b> Violation processing procedures need to be simplified and a major change needs to be implemented so that the owner of the vehicle is always responsible for the violations, made with his vehicle. This would also speed up the process of issuing fines as well as open the opportunities to control speed much more frequently, on more locations and for longer periods of time as the burden of manual processing of the fines would be grossly reduced. This may as well not be needed as the immediate effect of the awareness of responsibility may discourage the drivers to make offences in the first place. The technology is already present, only a certain part of legislation needs to be changed. Responsible institution is Ministry of Infrastructure (MZI) in cooperation with Ministry of the Interior (MNZ).</p> <p><b>Timeframe and financial resources</b> Between 2022-2025, 10.000 EUR</p> <p><b>Who?</b> MZI, MNZ</p> <p><b>Uptake Plan</b> Revision of the legislation and interministerial coordination Adaptation of the legal framework Introduction</p>				

ITS and speed management Road authorities	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
	<p><b>Speed data collection and analysis: systematic collection of speed data development in anonymized speed database. Further development of the methodology of analysis (for example speed development by road types, etc.)</b> [TA3/ authorities /data]</p>	2022-2026	30.000 EUR	MZI, DARS, DRSI
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> There are numerous counters on the road network and all of them also measure speed. Systematic analysis was done a few years ago but it is not done or repeated on regular basis. This could be implemented as it is not yet developed, data is only being analysed and processed in specific cases.</p> <p><b>How?</b> Firstly, a framework needs to be designed to define goals and outputs of such analyses. Legal basis needs to be established for the whole process from collection, via analysis to provision of analysed data/results. The coordinating institution is the Ministry of Infrastructure, partners are state road authorities DARS and DRSI.</p> <p><b>Timeframe and financial resources</b> Between 2022-2026, 30.000 EUR</p> <p><b>Who?</b> MZI, DARS, DRSI</p>			
<p><b>Uptake Plan</b> Design of the framework Definition of outputs Adaptation of the legal framework Introduction</p>				

## Safe infrastructure near schools

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Development and support of specific design guidelines for road sections in the vicinity of schools</b> <a href="#">[TA4/ national /guidelines]</a>	In progress/ completed	N/A	DRSI
	<b>Explanatory notes:</b> Safe routes to school guidelines available since 2019, they provide extensive design guidelines for safety on roads in the vicinity of schools. Prepared by Slovenian Infrastructure Agency (DRSI) as part of their regular activities.			
<b>Uptake Plan</b> N/A				

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Definition of special speed limits in the Road Traffic Code to be applied on road sections in the vicinity of schools</b> <a href="#">[TA4/ national /limits]</a>	In progress/ completed	N/A	N/A
	<b>Explanatory notes:</b> Not explicitly defined, however in vicinity of schools the act on roads enables the use of reduced speeds as well as traffic calming measures in the vicinity of schools to be implemented just for the reason of presence of the school.			
<b>Uptake Plan</b> N/A				

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Ensuring adequate funding for road safety interventions on primary roads in the vicinity of schools</b>  <a href="#">[TA4/ national /funding]</a></p>	2021-2022	N/A / TBA	DRSI, MZI
<p><b>Explanatory notes:</b></p> <p><b>Why?</b>            As the schoolchildren are the most vulnerable among vulnerable road users, therefore special care needs to be taken on locations where primary roads are situated in the vicinity of school environment.</p> <p><b>How?</b>            By backing up and spreading awareness about an investment project that is already in preparation at the State road authority (DRSI). After implementation on the state roads, an evaluation should be made (responsible institution Ministry of Infrastructure) and if appropriate the project can be (modified, if needed) expanded to local and regional level too. The project itself will be based on evaluation of accidents in the vicinity of schools on state roads outside of city boundaries and will have a special road safety fund for interventions in the vicinity of schools. Single cycle will last for a few years, the budget is not yet known, the project should be active in the second half of 2021.</p> <p><b>Timeframe and financial resources</b>            Between 2021-2022, N/A / TBA</p> <p><b>Who?</b>            DRSI, MZI</p>				
<p><b>Uptake Plan</b>            Finalization of the project framework            Implementation            Evaluation, modification            Publication, dissemination</p>				

Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Systematic collection of data on road crashes near schools and related casualties</b></p>	In progress/ completed	N/A	Police, AVP
<p><b>Explanatory notes:</b>            Police systematically collects data on crashes also in the vicinity of schools, data is available for further analysis. Slovenian Road safety agency - AVP also holds and manages this kind of data.</p>				
<p><b>Uptake Plan</b>            N/A</p>				



Safe infrastructure near schools National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Systematic collection and publishing of key performance indicators on the road network around schools</b> <i>[TA4/ national /indicators]</i>	N/A	N/A	N/A
	<b>Explanatory notes:</b> Systematic collection, publishing or even defining key performance indicators is a hard task and we do not see that it could be realised in Slovenia in the near future. Mostly due to the fact that it is very hard to define KPI in road safety/traffic.			
<b>Uptake Plan</b> N/A				

Safe infrastructure near schools Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Ensuring adequate funding for road safety interventions in local roads in the vicinity of schools</b> <i>[TA4/ regional /funding]</i>	In progress/ completed	N/A	Municipalities and/or DRSI
	<b>Explanatory notes:</b> Road safety interventions in the vicinity of schools are adequately funded from two sources. If the school is located within boundaries of the city, then the municipality is regulating and financing it. They can also approach road authority with an initiative and they usually meet in between regarding finances, given the circumstances that municipality comes with articulated plan and some prerequisites (design plans, applicable land ownership...) If the school is located outside the city, then the road authority (DRSI) finances all road safety interventions.			
<b>Uptake Plan</b> N/A				

Safe infrastructure near schools Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Systematic collection of data on road crashes near schools and related casualties</b> <a href="#">[TA4/ regional /data]</a>	In progress/ completed	N/A	Police, AVP
	<b>Explanatory notes:</b> Police systematically collects data on crashes on all roads and also in the vicinity of schools, data is available for further analysis. Slovenian Road safety agency - AVP also holds and manages this kind of data.			
<b>Uptake Plan</b> N/A				

Safe infrastructure near schools Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Educational campaigns to promote safer transport to/from schools</b> <a href="#">[TA4/ regional /campaigns]</a>	In progress/ completed	N/A	Schools, Police, AVP
	<b>Explanatory notes:</b> Safer routes to school as well as safe transport to/from schools in general are already extensively promoted by schools themselves, Police, and Road safety agency - AVP. Especially the latter is very active on the field of prevention with numerous campaigns and events throughout the year with a peak at the beginning of each school year.			
<b>Uptake Plan</b> N/A				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	<b>Forming a special road safety fund dedicated for direct investments in road safety, to implement upgrades in the vicinity of schools</b> <i>[TA4/ authorities /funding]</i>	2021-2022	N/A / TBA	DRSI
	<b>Explanatory notes:</b>			
	<p><b>Why?</b> As the schoolchildren are the most vulnerable among vulnerable road users, therefore special care needs to be taken on locations where primary roads are situated in the vicinity of school environment.</p> <p><b>How?</b> There is an investment project in preparation at the State road authority. It will be based on evaluation of accidents in the vicinity of schools on state roads outside of city boundaries and will have a special road safety fund for interventions in the vicinity of schools. Single cycle will last for a few years.</p> <p><b>Timeframe and financial resources</b> Between 2021-2022, N/A / TBA</p> <p><b>Who?</b> DRSI</p>			
	<p><b>Uptake Plan</b> Finalization of the project framework Implementation</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	<b>Observation of road safety trends and good practices to plan maintenance and upgrades of existing road network in the vicinity of schools</b> <i>[TA4/ authorities /good_practice]</i>	In progress/ completed	N/A	DRSI
	<b>Explanatory notes:</b>			
	Slovenian Infrastructure Agency (DRSI) as a member of CEDR and PIARC, is following the examples of good practise from abroad through mentioned organisations and is always trying to incorporate solutions that are appropriate and suitable to local environment here in Slovenia. The task in being performed in the scope of its regular activities.			
<p><b>Uptake Plan</b> N/A</p>				

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	Use of appropriate methodologies to identify hazardous locations near schools and the causes of road safety problems, identify intervention priorities and implement countermeasures <i>[TA4/ authorities /methodology]</i>	In progress/ completed	N/A	DRSI
	<b>Explanatory notes:</b> Ongoing activity, black spots management and MVSPN (monitoring of locations with high level of traffic accidents) also covers the vicinity of schools. However, this is rarely the case as the infrastructure in these places is in general already at a high level.			
	<b>Uptake Plan</b> N/A			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Safe infrastructure near schools Road authorities	Carrying out of “before and after” studies to evaluate the road safety effect of implemented interventions <i>[TA4/ authorities /impact]</i>	In progress/ completed	N/A	DRSI
	<b>Explanatory notes:</b> State road authority - Slovenian Infrastructure Agency (DRSI) is regularly conducting before/after analyses using speed monitoring, cameras and surveys.			
	<b>Uptake Plan</b> N/A			

## Transport Safety and COVID-19

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Revision of the default speed limit for rural roads and consider adaptations where necessary (possibly only on sub-sets of the network, e.g. roads with narrow cross-sections, or roads with vulnerable road user traffic), with a view to preventing collision forces that humans cannot survive or would cause serious injury.</b></p> <p><a href="#">[TA5/national/speed limit]</a></p>	N/A	N/A	N/A
	<p><b>Explanatory notes:</b> Not applicable, at the time there are no studies or other evidence available to back up such intervention.</p>			
<p><b>Uptake Plan</b> N/A</p>				

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Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Implementation of a Safe System, with emphasis on rural roads, so that they eventually become self-explaining and forgiving to human error</b></p> <p><a href="#">[TA5/national/SafeSystem]</a></p>	N/A	N/A	N/A
	<p><b>Explanatory notes:</b> As of today and in the near future, we find this task not applicable, not real to be implemented in the near future. Local governments as well as local road authorities lack the capacity, resources, knowledge, human resources and are at the same time dealing with many way more rudimental problems they need to overcome in their local environment that are of more basic importance to them and people they are providing service to. Prior to transfer of Safe System approach, knowledge transfer of more basic elements of road safety would be appropriate.</p>			
<p><b>Uptake Plan</b> N/A</p>				

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	Provide police forces and other enforcement entities with adequate resources and legal precautions for re-instated & intensified and effective speed enforcement; this may include section (average speed) controls – also on rural roads <a href="#">[TA5/national/enforcement]</a>	In progress/ completed	N/A	Police, MZI, MNZ
	<b>Explanatory notes:</b> Already implemented, a section of Police - motorway police - was established in the beginning of this year and first unit – central Slovenia – started with operation on March 31 this year. Other units will be gradually activated by May 1, 2022. Section control was already tested and is going to be implemented shortly.			
<b>Uptake Plan</b> N/A				

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	Consider tougher legal sanctions for excessive speed violations, such as higher/ income-dependent fines, licence withdrawal, and confiscation of vehicles <a href="#">[TA5/national/sanctions]</a>	In progress/ completed	N/A	Police, MNZ
	<b>Explanatory notes:</b> Despite recent reduction of fines they are still quite high, there is license withdrawal present for some violations as well as confiscation of vehicle under certain conditions.			
<b>Uptake Plan</b> N/A				

Investing in safe infrastructure National level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Encourage the use of seatbelts in passenger cars through awareness and enforcement measures</b> <a href="#">[TA5/national/seatbelt]</a>	In progress/ completed	N/A	AVP, DRSI, Police
	<b>Explanatory notes:</b> Done through many campaigns and actions.			
<b>Uptake Plan</b> N/A				

Investing in safe infrastructure Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Put high priority on enforcement and educational &amp; awareness-raising activity to curb inappropriate speeds</b> <a href="#">[TA5/regional/speed]</a>	In progress/ completed	N/A	AVP, DRSI, Police
	<b>Explanatory notes:</b> Already implemented through ongoing preventive campaign for speeding and numerous enforcement actions through the year.			
<b>Uptake Plan</b> N/A				

Investing in safe infrastructure Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Consider the implementation of local safe zones (30 km/h) around educational and medical institutions, area-wide 30 km/h limits in urban areas (potentially excluding major urban thoroughfares) and other traffic calming measures</b></p> <p><a href="#">[TA5/regional/traffic_calming]</a></p>	In progress/ completed	N/A	DRSI, Local governments
	<p><b>Explanatory notes:</b> Already implemented, almost all mentioned institutions are surrounded by “zone 30” as well as city centres, where traffic is still allowed as many of them are already turned into pedestrian zones.</p>			
<p><b>Uptake Plan</b> N/A</p>				

Investing in safe infrastructure Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Help making the increased usage levels of active mobility (walking, cycling) sustainable by providing them with safe facilities and an adequate share of road space</b></p> <p><a href="#">[TA5/regional/active_mobility]</a></p>	In progress/ completed	N/A	DRSI, Local governments, Municipalities
	<p><b>Explanatory notes:</b> This is being implemented on a large scale partially also through EU funding, there are many projects nationwide.</p>			
<p><b>Uptake Plan</b> N/A</p>				



Investing in safe infrastructure Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Set the necessary promotive steps to re-establish the modal share of public transport – by far the safest and most sustainable transport mode – at least to pre-pandemic levels</b> <a href="#">[TA5/regional/public_transport]</a>	In progress/ completed	N/A	MZI
	<b>Explanatory notes:</b> Already implemented; there is free public transport for elderly/pensioners, from 1.6.2020 for intercity public transport and rail. From 1.10.2021 this is also valid for urban buses. Monthly tickets for students are heavily subsidized and students that are registered athletes can get additional nation-wide ticket for free.			
<b>Uptake Plan</b> N/A				

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<b>Establish an evidence base to prioritise infrastructure investments based on safety indicators: crash locations, traffic flows, speed levels, road infrastructure design &amp; safety data.</b> <a href="#">[TA5/authorities/prioritisation]</a>	In progress/ completed	N/A	DRSI, DARS, AMZS
	<b>Explanatory notes:</b> Ongoing activity, black spots management and MVSPN (monitoring of locations with high level of traffic accidents) as well as iRAP Risk mapping and Star rating are done in regular intervals for the whole network.			
<b>Uptake Plan</b> N/A				

Investing in safe infrastructure Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Make sure that for each road construction, reconstruction or maintenance project, the implementation of Safe System principles is considered</b> <a href="#">[TA5/authorities/SafeSystem]</a></p>	2021-2025	15.000 EUR (preparation)	MZI, AVP
<p><b>Explanatory notes:</b></p> <p><b>Why?</b> All pillars of Safe System approach in road safety are already present and developed to a quite high level in Slovenia. Infrastructure-wise, all activities (design/investment, maintenance...) are in general always conducted with road safety in mind. There are however no legislation fundamentals that would insure this is always the case on all levels. Therefore, the embedding of the Safe System approach into legislation would be beneficial as it would result in even higher rate of application.</p> <p><b>How?</b> Development of legal environment that would impose the use of Safe System approach. Based on this, the practical application of the system should be mandatory in all corresponding cases, which would also be defined in the legislation. Responsible institution is Ministry of Infrastructure (MZI) in cooperation with Road Safety Agency (AVP).</p> <p><b>Timeframe and financial resources</b> Between the years 2021-2025. No additional resources needed, approx. preparation costs 15.000EUR</p> <p><b>Who?</b> MZI, AVP</p>	<p><b>Uptake Plan</b> Professional consultation Preparation of the concept Preparation of usage criteria Preparation of legislation, harmonization, amendment</p>			

## Road Infrastructure Safety Management

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>In the process of definition of Primary road network, national authorities should encourage including roads where at least 50% of fatal and serious accidents occur</b> <a href="#">[TA6/national/primary]</a>	N/A	N/A	N/A
	<b>Explanatory notes:</b> In Slovenia, the majority of fatal and serious accidents occur on regional and rural roads which by all other criteria do not meet the requirements to be included in the Primary road network, which is already defined. In short, such criteria is not applicable in Slovenia.			
	<b>Uptake Plan</b> N/A			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Country specific national classification criteria should be encouraged in order to enable proper classification of high, medium and low risk roads, based on accident reduction potential as a direct consequence of road infrastructure improvements</b> <a href="#">[TA6/ national /classification]</a>	2022-2026	8.000 EUR (preparation)	MZI, AMZS
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Current model of the Risk mapping is equal for all users, regardless of the specific conditions in particular Country. As the differences between countries around the world are quite big, defining a custom standard for a single country based on the boundary values of road safety indicators for this country would make results even more accurate and correct.</p> <p><b>How?</b> Implementation of Risk mapping protocol nationwide is the first step, followed by development of country specific national criteria for the Risk mapping model that is based on the boundary values of road safety indicators for every country. Responsible institution is Ministry of Infrastructure (MZI) in cooperation with Automobile and motorcycle club of Slovenia (AMZS).</p> <p><b>Timeframe and financial resources</b> Between the years 2022-2026. No additional resources needed, approx. preparation costs 8.000EUR</p> <p><b>Who?</b> MZI, AMZS</p> <p><b>Uptake Plan</b> Implementation of Risk mapping protocol nationwide Collection of the results Definition of national criteria Validation of the amended protocol</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Safe System concept should be built in in all road infrastructure related legal acts</b> <a href="#">[TA6/ national /SafeSystem]</a>	2021-2025	15.000 EUR (preparation)	MZI, AVP
	<b>Explanatory notes:</b>  <b>Why?</b> All pillars of Safe System approach in road safety are already present and developed to a quite high level in Slovenia. Infrastructure-wise, all activities (design/investment, maintenance...) are in general always conducted with road safety in mind. There are however no legislation fundamentals that would insure this is always the case on all levels. Therefore, the embedding of the Safe System approach into legislation would be beneficial as it would result in even higher rate of application. <b>How?</b> Development of legal environment that would impose the use of Safe System approach. Based on this, the practical application of the system should be mandatory in all corresponding cases, which would also be defined in the legislation. Responsible institution is Ministry of Infrastructure (MZI) in cooperation with Road Safety Agency (AVP). <b>Timeframe and financial resources</b> Between the years 2021-2025. No additional resources needed, approx. preparation costs 15.000EUR <b>Who?</b> MZI, AVP			
	<b>Uptake Plan</b> Professional consultation Preparation of the concept Preparation of usage criteria Preparation of legislation, harmonization, amendment			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Special attention needs to be given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure</b> <i>[TA6/ national /VRU]</i>	In progress/ completed	N/A	MZI, Local governments, Municipalities, DRSI
	<p><b>Explanatory notes:</b> National programme of road safety until 2022 includes taking VRUs into account when designing road infrastructure. Similarly, the need to take special care for VRUs is listed in the strategy of traffic development in Slovenia until 2030. Safe system approach is not mentioned and this could be approved. Forgiving and self-explaining roads are included in the Strategy. Ministry of Infrastructure - MZI is the institution that has done this task in the scope of their regular activities. Promoting active modes of transport is being implemented on a large scale partially also through EU funding, there are many projects nationwide.</p>			
	<p><b>Uptake Plan</b> N/A</p>			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>All investment plans in road infrastructure safety improvements should be made based on cost/benefit analysis with modelling of savings in terms of fatal and serious injuries prevented</b> <a href="#">[TA6/ national /investment]</a>	2021-2025	50.000 EUR	MZI
	<b>Explanatory notes:</b>  <b>Why?</b> Despite relatively high infrastructural level of safety is being maintained on the roads in Slovenia, there is a lack of unified standard that could also be compared internationally. <b>How?</b> Existing regulations need to be reviewed and a comparison made between the existing practices and the ones offered by internationally recognized programmes and tools that they offer. The iRAP methodology should be implemented in technical design and maintenance regulations. Based on the results of the review, the regulatory environment needs to be transformed so that the aspects and requirements according to the iRAP methodology can be adopted into national regulations both for maintenance of existing as well as for projects of building new roads. <b>Timeframe and financial resources</b> 2021-2025, estimated resources needed: 50.000€ <b>Who?</b> Ministry of Infrastructure (MZI) as main actor, road authorities (national road authority for state roads and motorway authority for motorways and expressways), national EuroRAP consortium, (AMZS+DARS), road safety agency, other interested stakeholders.			
	<b>Uptake Plan</b> Creation of a study comparing existing and proposed approaches upon which decision-makers can analyse the possibilities of adapting the iRAP methodology. Revision of the corresponding act (Act on Roads, Regulations on Road design, Regulations on Road signage and Road equipment, Technical specifications for roads, Resolution on National programme of building motorways and expressways). Publication of new or amended legislation. Organization of corresponding professional trainings, forums, education.			

	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users National level	<b>Raise the minimal road safety design standards for new and existing road infrastructure.</b> <a href="#">[TA6/ national /standards]</a>	2021-2025	50.000 EUR	MZI
	<b>Explanatory notes:</b>  <b>Why?</b> Despite relatively high infrastructural level of safety is being maintained on the roads in Slovenia, there is a lack of unified standard that could also be compared internationally. <b>How?</b> Existing regulations need to be reviewed and a comparison made between the existing practices and the ones offered by internationally recognized programmes and tools that they offer. The iRAP methodology should be implemented in technical design and maintenance regulations. Based on the results of the review, the regulatory environment needs to be transformed so that the aspects and requirements according to the iRAP methodology can be adopted into national regulations both for maintenance of existing as well as for projects of building new roads. <b>Timeframe and financial resources</b> 2021-2025, estimated resources needed: 50.000€ <b>Who?</b> Ministry of Infrastructure (MZI) as main actor, road authorities (national road authority for state roads and motorway authority for motorways and expressways), national EuroRAP consortium, (AMZS+DARS), road safety agency, other interested stakeholders.			
	<b>Uptake Plan</b> Creation of a study comparing existing and proposed approaches upon which decision-makers can analyse the possibilities of adapting the iRAP methodology. Revision of the corresponding act (Act on Roads, Regulations on Road design, Regulations on Road signage and Road equipment, Technical specifications for roads, Resolution on National programme of building motorways and expressways). Publication of new or amended legislation. Organization of corresponding professional trainings, forums, education.			



	<b>Intervention</b>	<b>Time frame</b>	<b>Financial resources</b>	<b>Main actor(s)</b>
Provisions for vulnerable road users Regional and local level	<p><b>Road safety audit and inspection procedures should be performed on regional road network based on crash occurrence analysis</b></p> <p><i>[TA6/ regional /audit]</i></p>	2021-2030	15.000 EUR	MZI, AVP, Police
	<p><b>Explanatory notes:</b></p> <p><b>Why?</b> Systematic data collection is present on all public roads in Slovenia. Analysis, on the other side, is well developed for the state operated roads and analysis is done only for the national road network. Local road authorities and regional/local governments lack the capacity, resources, knowledge, human resources to analyse road safety data in order to plan interventions/investments on most critical locations.</p> <p><b>How?</b> The lack of resources at local road authorities can be tackled with knowledge transfer. A firm cooperation between the Police (collecting the data), National road safety agency (AVP; analysing the data), Ministry of Infrastructure (coordinating institution) and local road authorities need to be established. A training programme for local road authorities need so be set up in order to elevate their knowledge at least to the extent where they are able to conduct basic analyses of the road safety data. The education can be motivated either on voluntarily basis with certain benefits or by making it mandatory for all local road authorities to take the training in a reasonable amount of time and periodically produce analyses.</p> <p><b>Timeframe and financial resources</b> Continuous intervention through the decade. No additional resources needed, approx. preparation costs 15.000EUR</p> <p><b>Who?</b> MZI, AVP, Police</p> <p><b>Uptake Plan</b> Design of the training system Setting up the motivational framework Adaptation of the legal framework Introduction</p>			

Provisions for vulnerable road users Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Special attention needs to be given to protecting the Vulnerable Road Users and promoting Active modes of Transport by developing dedicated road infrastructure in urban and suburban areas</b> [TA6/ regional /VRU]</p>	In progress/ completed	N/A	MZI, Local governments, Municipalities, DRSI
<p><b>Explanatory notes:</b> National programme of road safety until 2022 includes taking VRUs into account when designing road infrastructure. Similarly, the need to take special care for VRUs is listed in the strategy of traffic development in Slovenia until 2030. Safe system approach is not mentioned and this could be approved. Forgiving and self-explaining roads are included in the Strategy. Ministry of Infrastructure - MZI is the institution that has done this task in the scope of their regular activities. Promoting active modes of transport is being implemented on a large scale partially also through EU funding, there are many projects nationwide.</p>				
<p><b>Uptake Plan</b> N/A</p>				

Provisions for vulnerable road users Regional and local level	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Promote and expand 30 km/h speed limit zones in residential areas</b> [TA6/ regional /residential]</p>	In progress/ completed	N/A	DRSI, Local governments
<p><b>Explanatory notes:</b> Already implemented, almost all mentioned institutions are surrounded by “zone 30” as well as city centres, where traffic is still allowed as many of them are already turned into pedestrian zones.</p>				
<p><b>Uptake Plan</b> N/A</p>				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Significantly increase weight of road safety priorities in investment and maintenance plans development</b></p> <p><a href="#">[TA6/ authorities /priorities]</a></p>	N/A	N/A	N/A
<p><b>Explanatory notes:</b> As of today, investment priorities are focused on dealing with damaged surface of roads and even this task (which is also contributing to increased level of infrastructural road safety) is facing lack of resources in terms of insufficient funding. Therefore, we do not find this task applicable in Slovenia.</p>				
<p><b>Uptake Plan</b> N/A</p>				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Define clear strategy and action plan to reduce 50% of fatal and serious accident on managed road network by 2030</b></p> <p><a href="#">[TA6/ authorities /strategy]</a></p>	In progress/ completed	N/A	MZI, DRSI, Local governments
<p><b>Explanatory notes:</b> Currently, there is a 2013-2022 strategy in place, the new strategy 2023-2030 is already being prepared and is expected to be developed in 2022. Within the framework of new national strategy, road authorities are preparing their part on contribution to reducing fatal and serious accidents.</p>				
<p><b>Uptake Plan</b> N/A</p>				

Provisions for vulnerable road users Road authorities	Intervention	Time frame	Financial resources	Main actor(s)
	<p><b>Set internal guidelines above the minimal road safety standards</b> [TA6/ authorities /guidelines]</p>	In progress/ completed	N/A	MZI, AVP, DRSI, DARS
	<p><b>Explanatory notes:</b> There are already developed and used guidelines that exceed minimal road safety standards for infrastructure in the vicinity of schools, use of special advisory signs for motorcyclists where high percentage of motorcyclist is detected, use of safety barriers with higher levels of containment etc..</p>			
<p><b>Uptake Plan</b> N/A</p>				