

TRAFFIC SAFETY AND ROAD INFRASTRUCTURE MANAGEMENT ACTIVITIES IN KYRGYZSTAN

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Republic

**20th CAREC Transport Sector Coordinating
Committee Meeting**

**22-25/05/2023
Tbilisi, Georgia**



КЫРГЫЗ РЕСПУБЛИКАСЫНЫН
ТРАНСПОРТ ЖАНА
КОММУНИКАЦИЯЛАР
МИНИСТРЛИГИ



ASIAN DEVELOPMENT BANK

Main Facts about the Kyrgyzstan



- Landlocked country in Central Asia



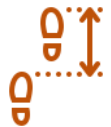
- Population 6.916.000 inhabitants



- Total roadways \pm 34.000 km



- GDP \pm 38 billion USD



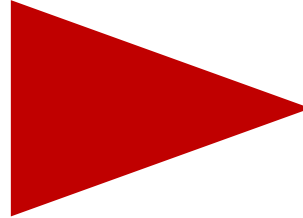
- Total area 199.951 km²



Agenda

TRAFFIC SAFETY ACTIVITIES

1. Statistics and targets
2. Road safety problems
3. Road safety strategy 2023-2027
4. RSA project
5. Achievements till 2027



ROAD INFRASTRUCTURE MANAGEMENT

1. Effective planning of the road infrastructure
2. Asset management system
3. Targets of the SUDA 2 Project
4. Road infrastructure projects



TRAFFIC SAFETY ACTIVITIES



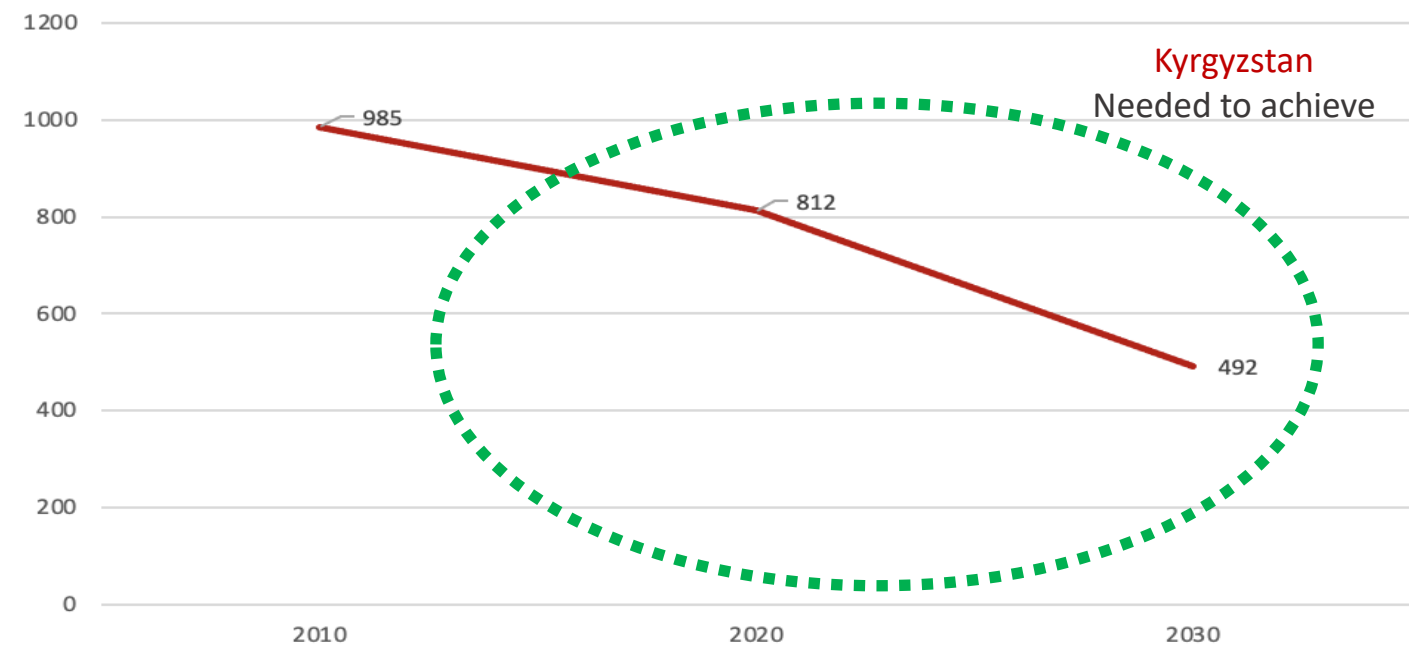
Traffic safety statistics (2021 – 2023)



Road safety targets of the Kyrgyzstan till 2030

“the overall target of the CAREC road safety strategy would be to reduce the number of fatalities on CAREC road corridors by 50% in 2030 as compared with the 2010 (985death in 2010 and 812 in 2020) base level”*

“make CAREC international road corridors safe, efficient, and attractive for all road users”*



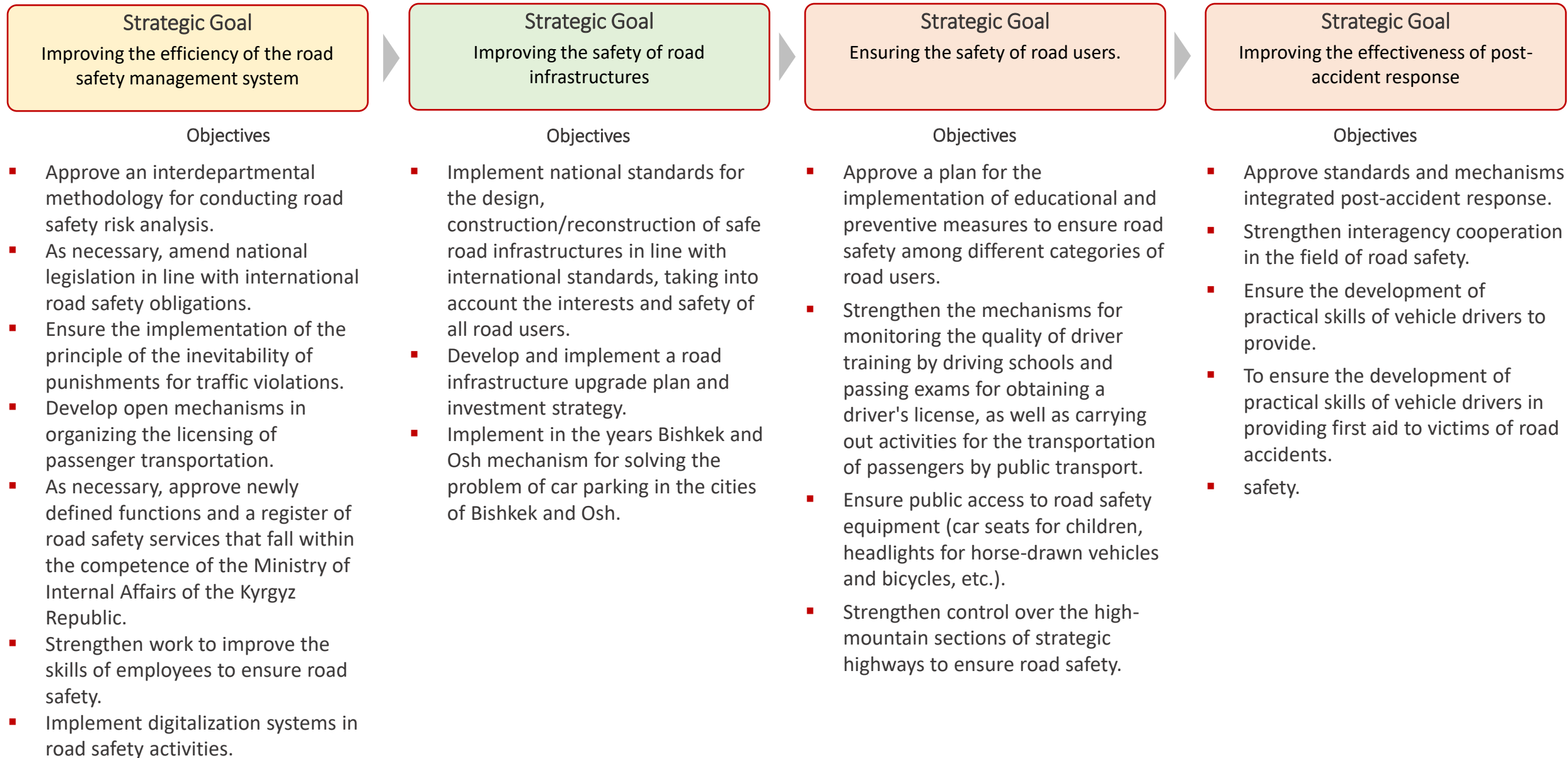
* - <https://www.adb.org/sites/default/files/institutional-document/228011/carec-road-safety-2017-2013.pdf>

Main road safety management problems

- 1 Outdated legal and normative regulations (GOSTs, SNiPS, etc.) not allow to implement modern road safety solutions (e.g. rumble strips, speed bump, mini-roundabouts, etc.)
- 2 Ineffective existing RSA procedure, legislation, design and approval processes not allow to implement RSA recommendations in time and in full-scope
- 3 Accidents data and data collection process are not sufficient, automated and enough quality to use for further detailed analysis and preventive solution
- 4 Lack of professional and qualified road safety specialists, auditors and designers with international experience
- 5 Too-low funding for road design and construction projects, especially for road safety measures implementation
- 6 Resistance against the changes



National Road Safety Strategy of the Kyrgyzstan for the period 2023-2027



Project: *Selection of Consulting Services for Road Safety Audit and Technology Consultants*



- Support MoTC of Kyrgyzstan to develop and adopt RSA procedure, train and licensing experts, review and upgrade technical legislation



- Client: Ministry of transport and communications of the Kyrgyz Republic



- Funded by ADB



- Selected consultant MC Mobility Consultants (Austria), NAST Consulting (Austria), TBSC (Georgia), United Group (Kyrgyzstan)



- Duration 28 months (01.03.2023 – 01.08.2025)



**Mobility
Consultants**

MC Mobility Consultants GmbH

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A-1150 Wien

office@vienna-mc.com

www.vienna-mc.com

nast consulting



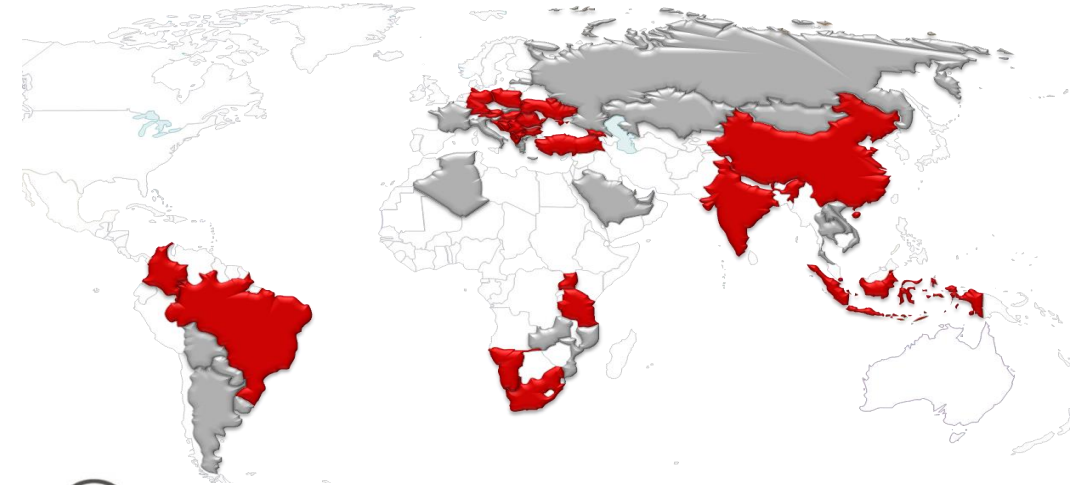
UNITED GROUP



TBSC
CONSULTING

MC Mobility Consultants GmbH

- International consulting company with strong network of specialized experts in all fields of transport, as well as an intimate knowledge of the transport markets and their major market players all over the world.
- Established in 2011 by highly experienced & professional team with extensive experience in project management, research and consulting.
- Offices in Austria (Vienna), Serbia (Belgrade) and Lithuania (Vilnius)
- Experience with various IFI's, e.g., ADB, EBRD, EIB, EuropeAid, WB, USAID, GIZ, etc.



RAILWAYS AND LOGISTICS

- Strategies
- Logistics analysis
- Market analysis
- Rolling stocks expertise
- Modelling
- Railway business and economics analysis



DEDICATED TEAMS & RESOURCES ON DEMAND

- Various experts database
- Business analytics
- Data analysis experts
- Project manager (e.g. Prince2)
- R&D development managers



ITS, LOGISTICS DIGITISATION AND TRAFFIC SAFETY

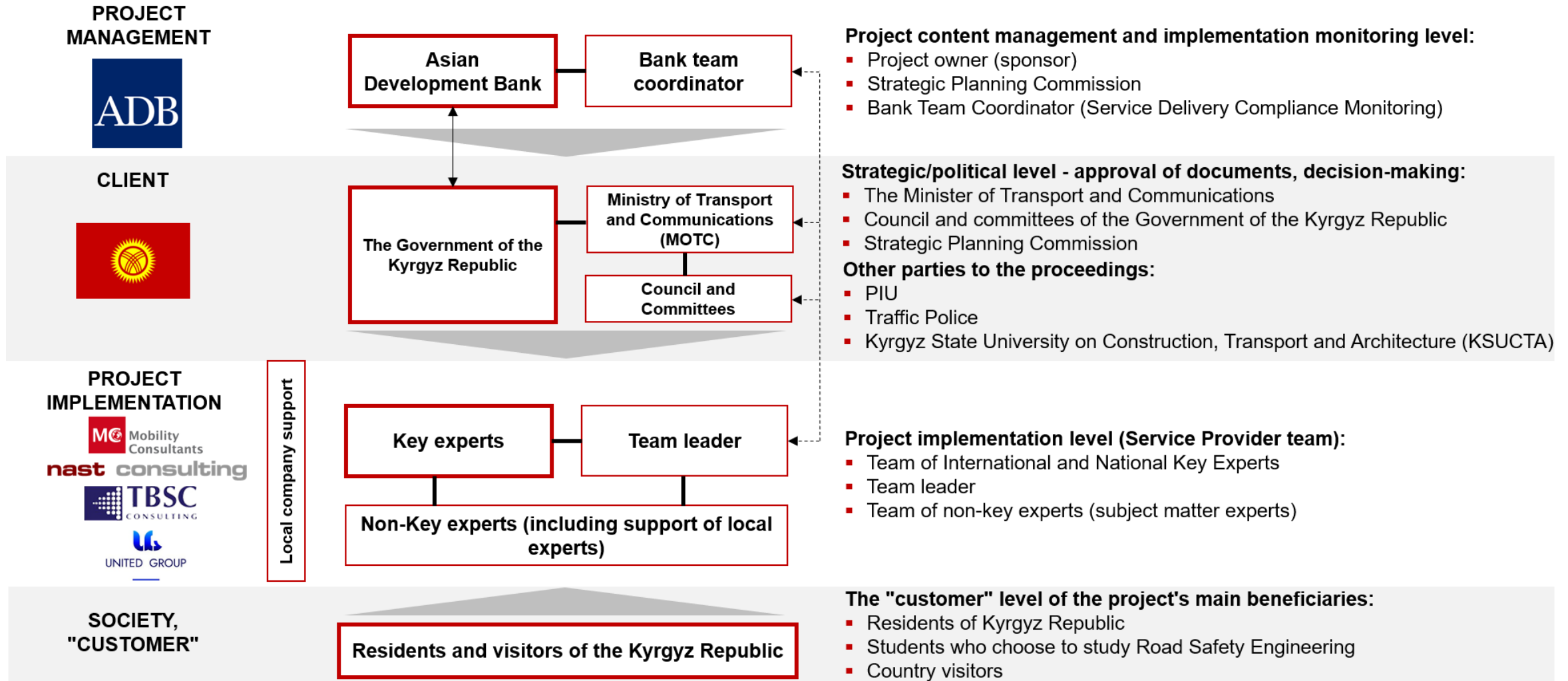
- Analysis performing
- Technical specifications
- RSA and RSI
- Trainings and certification
- Digital architecture and implementation



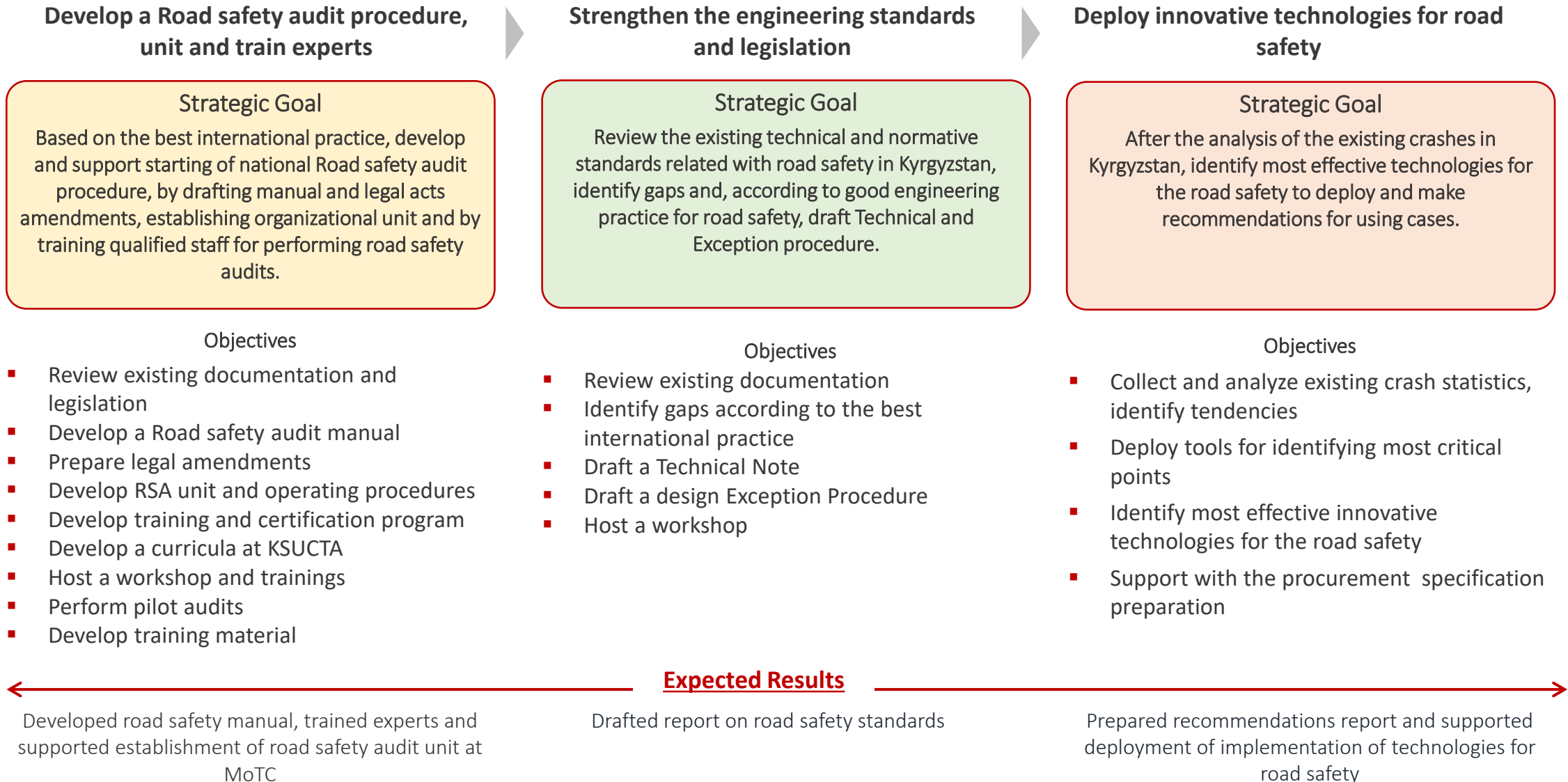
URBAN MOBILITY AND TRANSPORT PLANNING

- Strategies
- Policy implementation
- Feasibility studies
- SUMPs
- Transport modelling

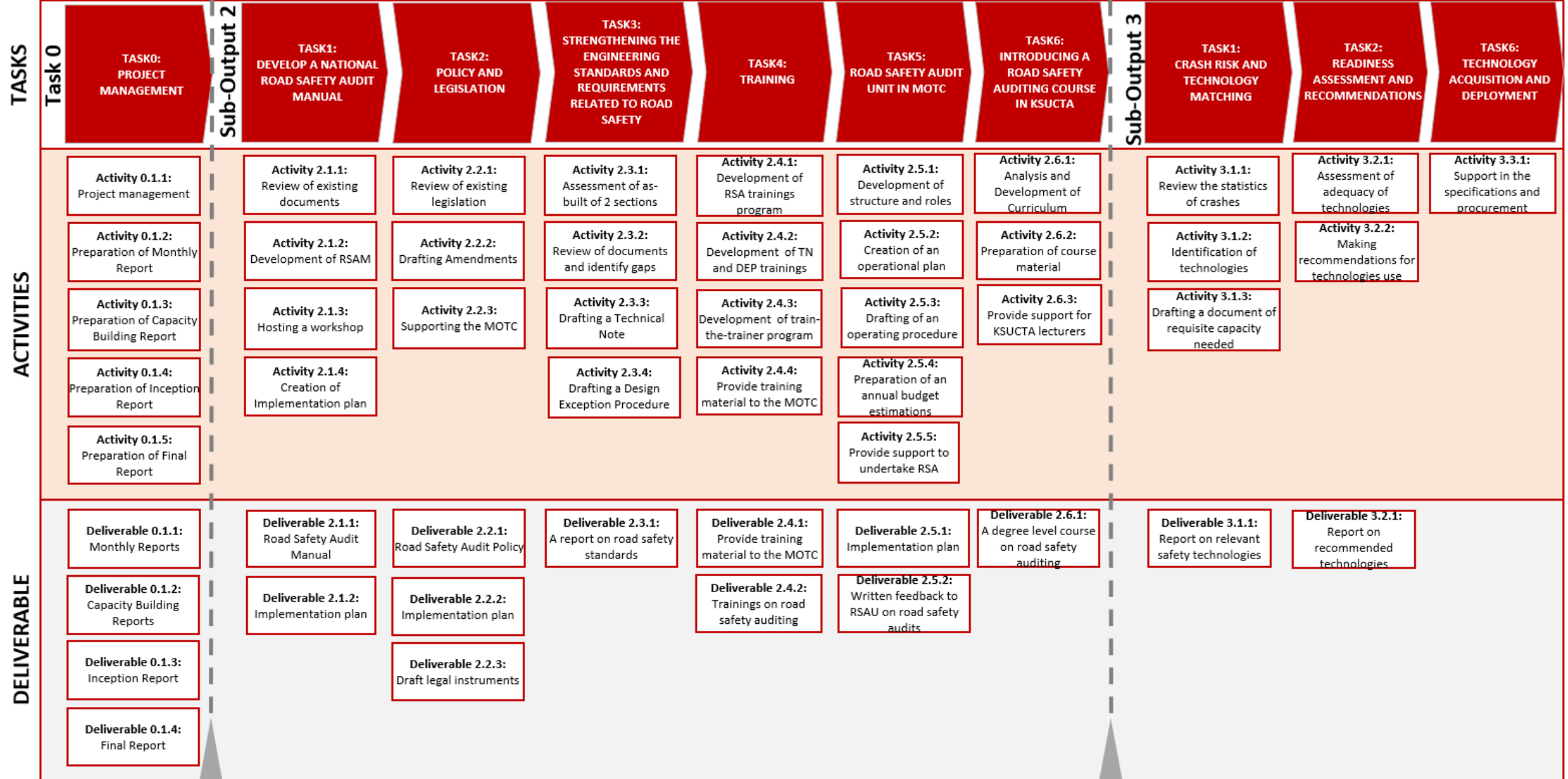
Project Team structure



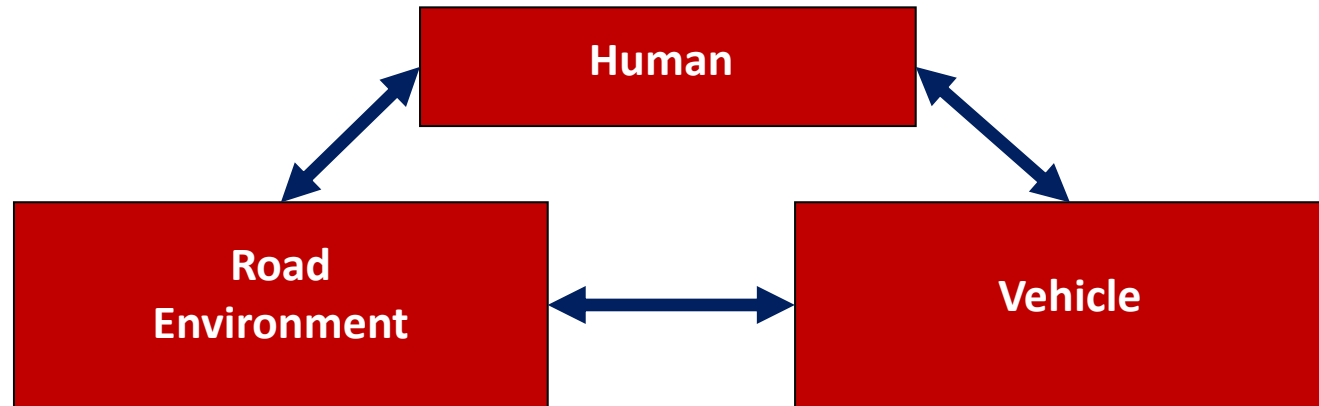
Project Objectives and Expected Results



General scope of Project



Main approach of the Project – to build totally safe roads, adopted by users needs, in Kyrgyzstan

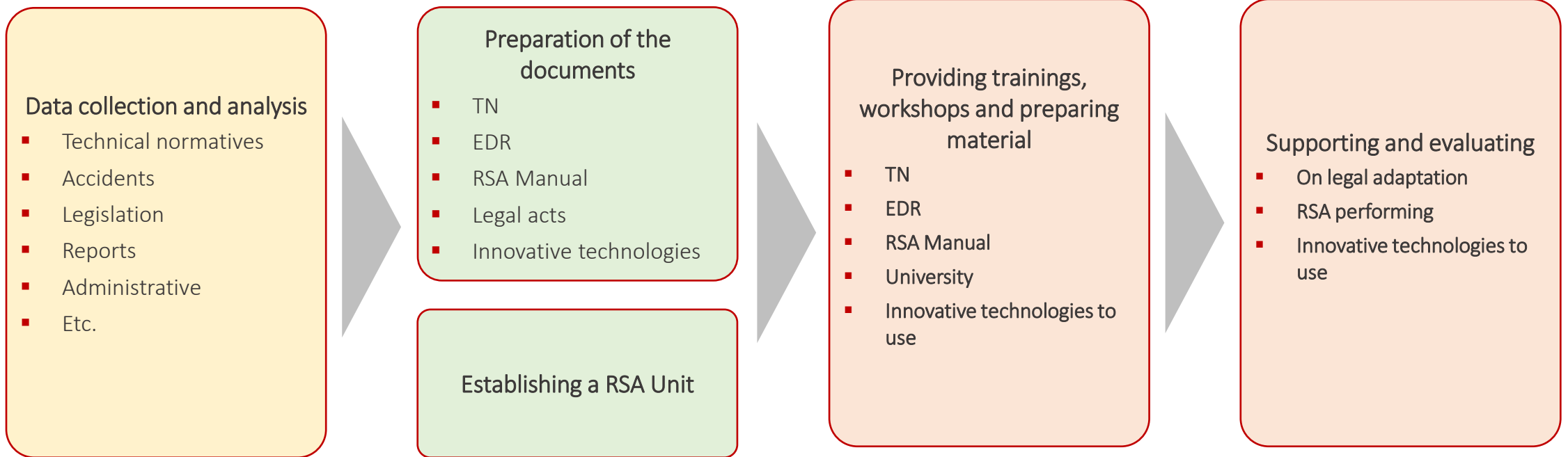


The most important in transport system is
HUMAN !!!!!

That's means, that car, road and environment must be suitable for human needs and possibilities



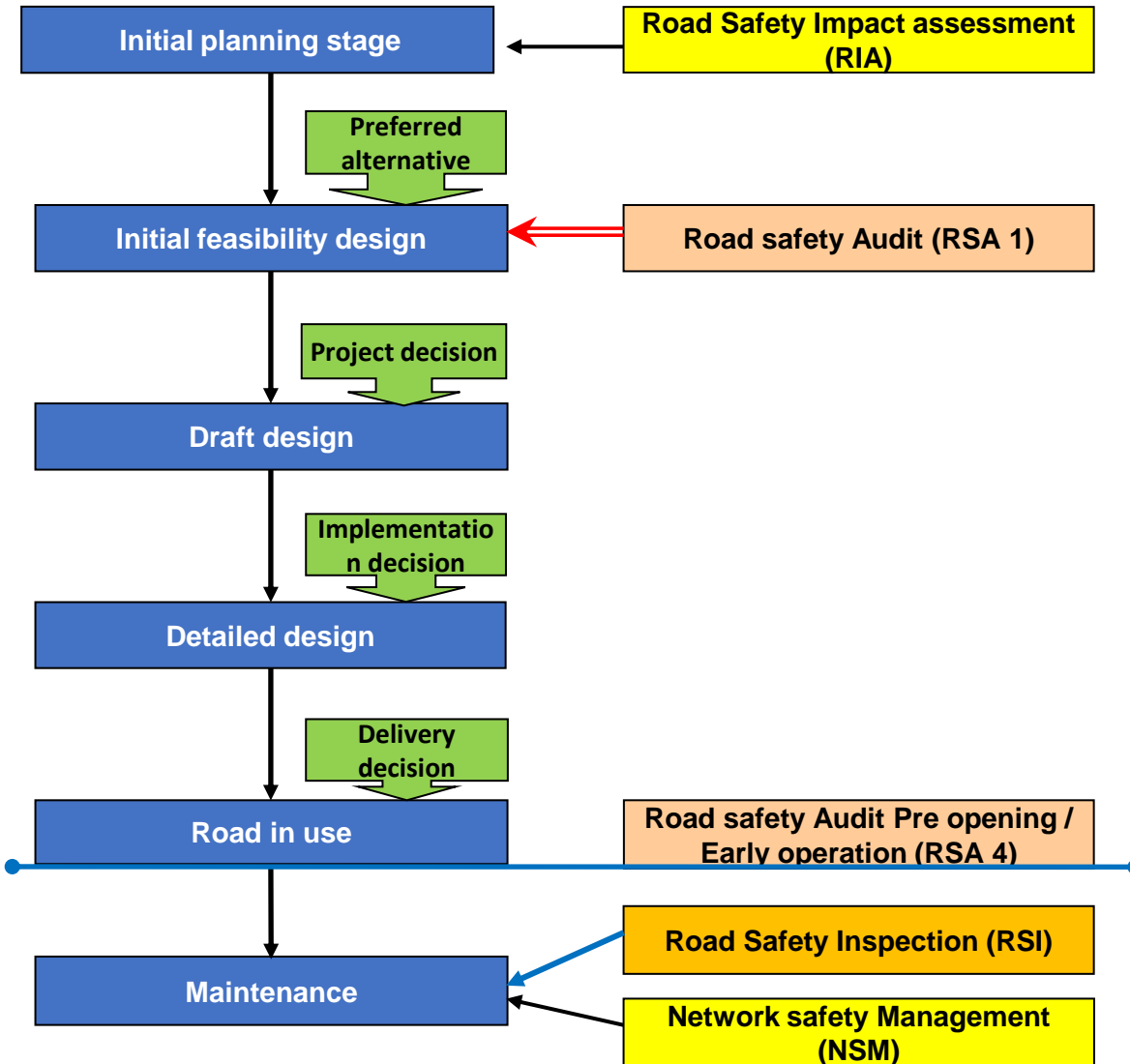
Project logic



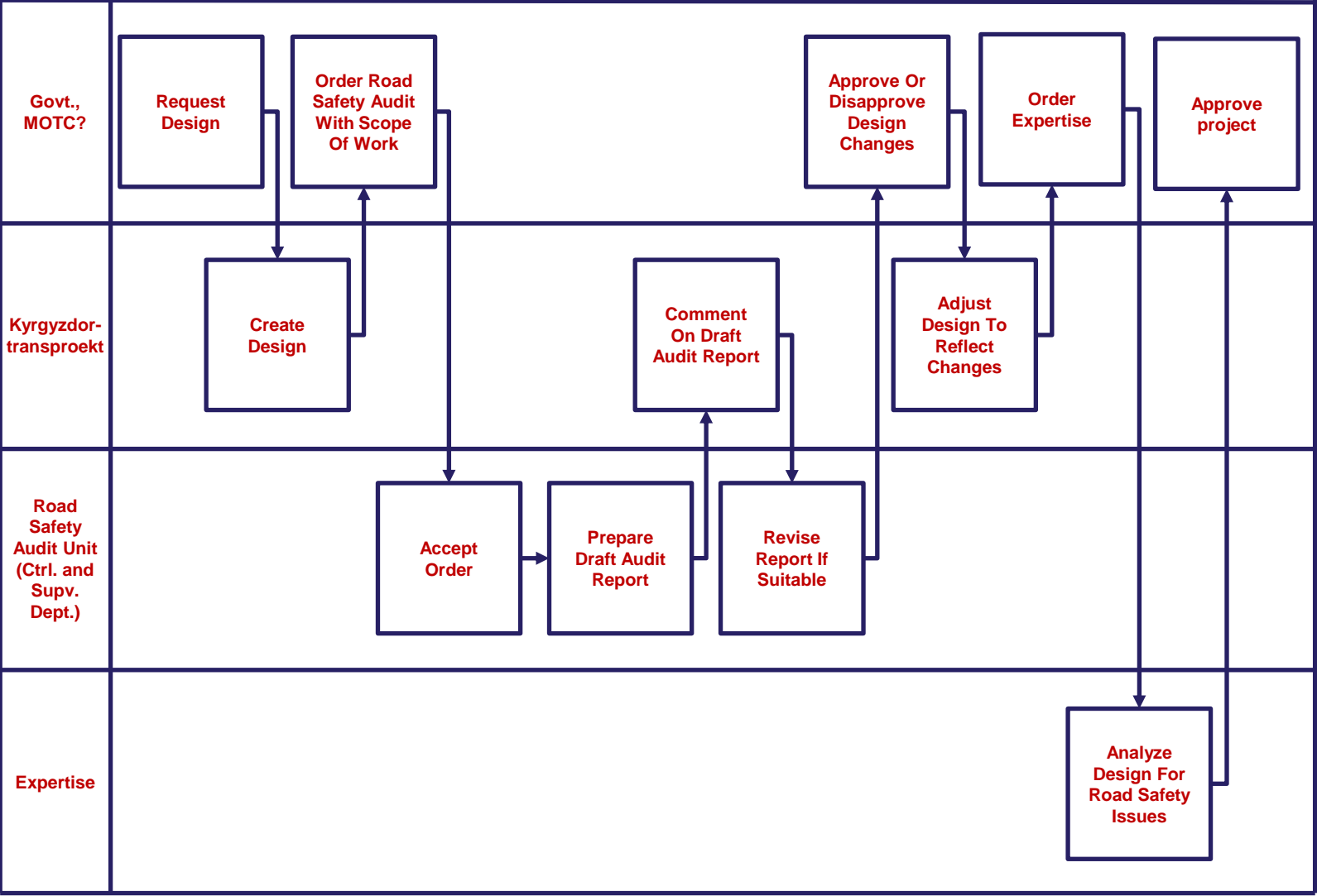
Support of MoTC 28 Month



RSA procedure will lead to safe and comfortable infrastructure for users development in Kyrgyzstan



Established RSA process and RSA unit will perform RSA for main road design and construction projects

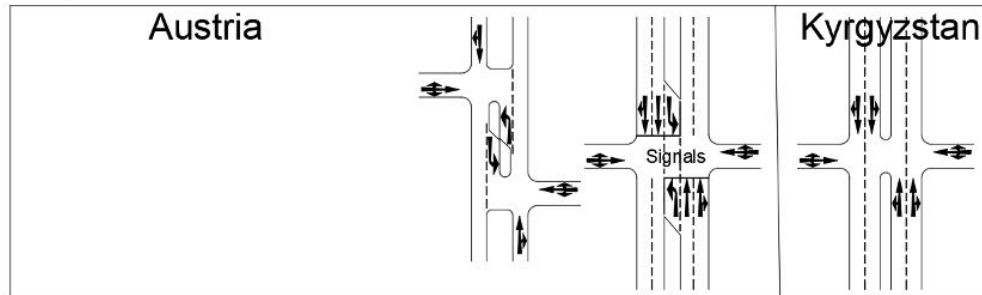


Reviewed and updated SNiPS, GOSTs and other normative documents by best international practice will help to design safe roads in Kyrgyzstan

Intersection Layouts



City Area



Rural Area

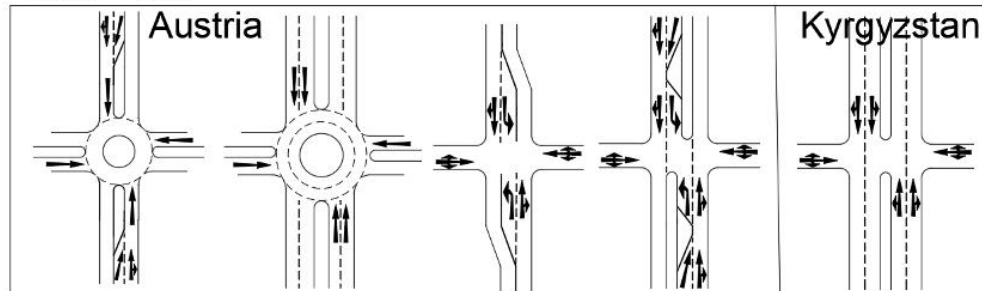


Figure 9. Typical intersection layouts in Austria and Kyrgyzstan

Pedestrian Crossings



Pedestrian Crossings

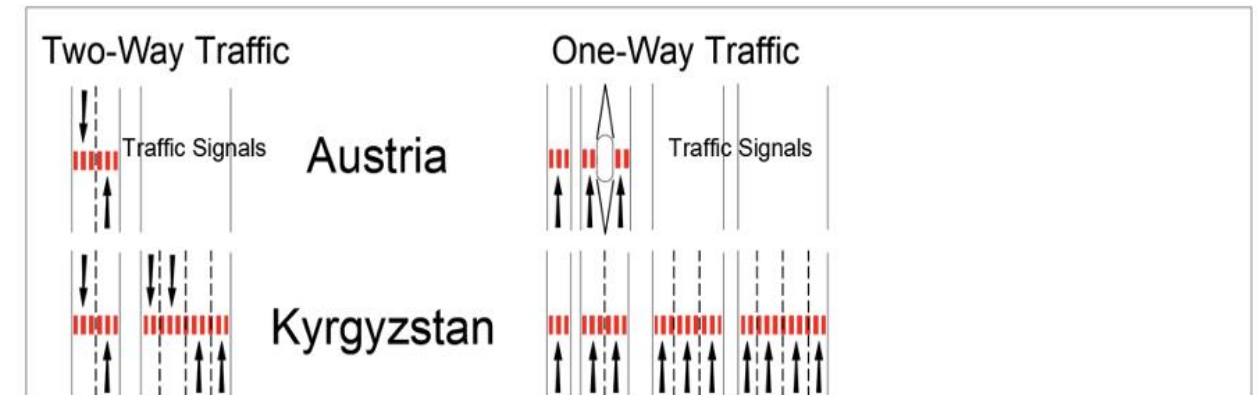


Figure 10. Typical pedestrian crossings in Austria and Kyrgyzstan

RSA will be implemented in the education programs in KSTU university and RSA certification program will be developed



- Prepared and adopted university Curricula at KSTU university



- Prepared qualification improvement program for road sector professionals



- Developed RSA auditors' certification program



- Trained RSA unit experts at MoTC



- Organized workshops for designers, police, MoTC, etc.



The Consultant will support MoTC and police on road accidents investigation, data collection and management



- Support on road accidents investigation process review and propose recommendations



- Support on road accidents data collection and management process, technologies review and propose recommendations



- Most dangerous places and “Black spots” identification and propose measures to improve situation



- Support on road accident data analysis and statistics



The Consultant will support MoTC on constructing and implementing innovative technologies for road safety in Kyrgyzstan



- The most effective and cost-benefit technologies to use in Kyrgyzstan will be identified



- Technical descriptions and specifications of the technologies will be prepared



- Consultant will support MoTC during the selection and implementation of innovative technologies process



- Innovative technologies for national level public transport management will be identified



- Innovative technologies will cover average speed cameras, WIM, VMS, ITS



Expected achievements in road safety management till 2027

1

Updated and approved legal and normative legislation in-line with the best international practice and raised road design quality to next level

2

Trained and certified enough number of road safety specialists and auditors

3

Implemented and piloted innovative, cost-benefit road safety and traffic management solutions, such as average speed cameras, bus management platforms, rumble strips, WIMs, variable message signs, mini roundabouts, etc.

4

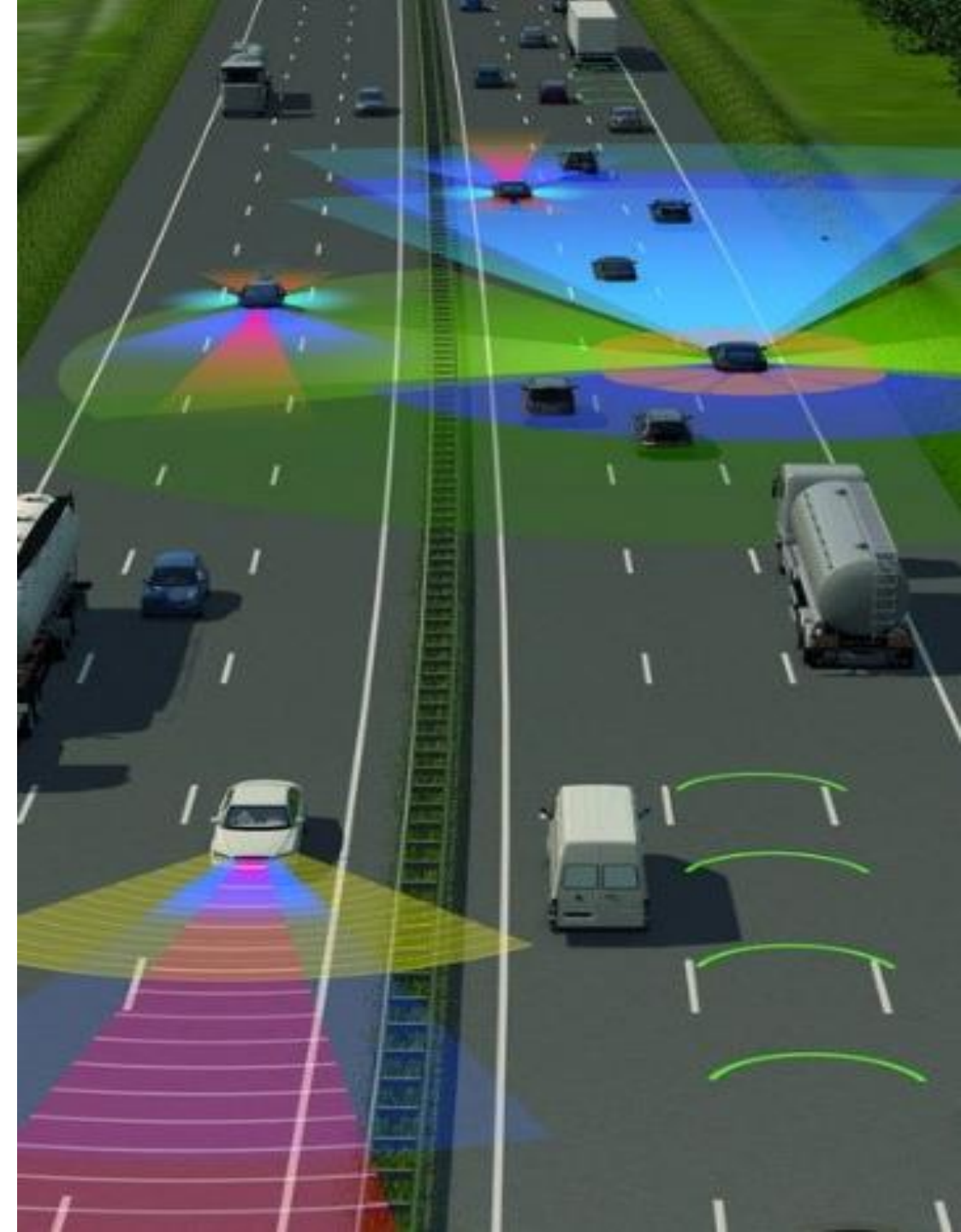
Established qualified road safety audit management unit under the MoTC and ensured effective RSA process

5

Reviewed, improved and automated (e.g. with GPS devices and software) accident data collection, investigation and analysis processes

6

**THE MOST IMPORTANT! SIGNIFICANTELLY REDUCED
NUMBER OF FATALITIES ON THE KYRGYZSTAN ROADS**



ROAD INFRASTRUCTURE MANAGEMENT



Efficient planning of road repairs and allocation of funds



- Planning of road repairs and allocation of funding is based on the database and the Road Asset Management System (SUDA), depending on the technical condition of the roads.



- The Road Fund, which provides for the formation of financial resources for the design, maintenance, repair, construction and development of public roads, has been created and is in operation



- The Ministry of Transport and Communications of the Kyrgyz Republic has drafted a new Law of the Kyrgyz Republic "On Roads", which is currently under consideration in the Jogorku Kenesh of the Kyrgyz Republic and has passed the first reading. As of February 20, 2023, the law has passed its second reading and is undergoing its third reading in the Jogorku Kenesh of the Kyrgyz Republic.



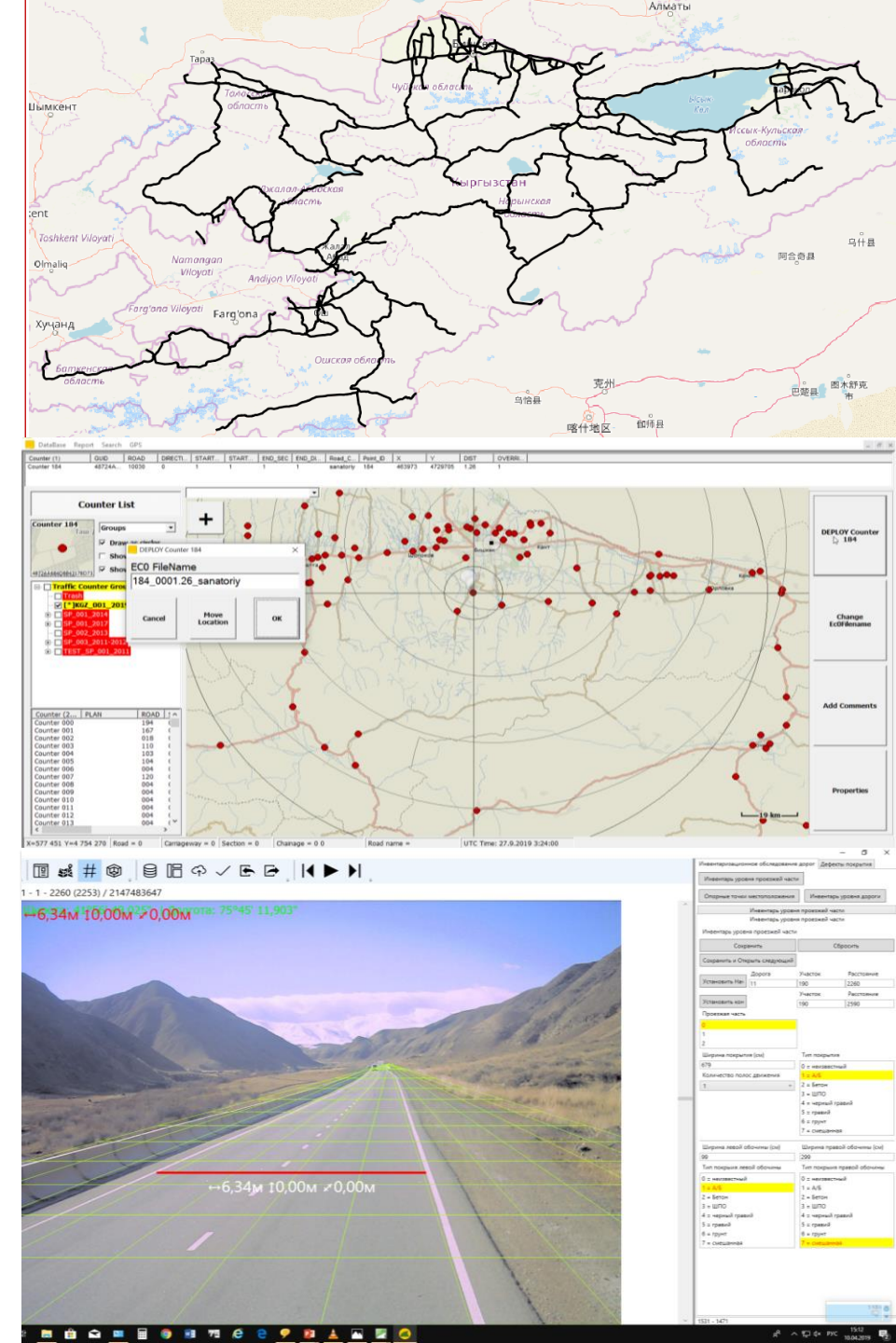
- A draft Law of the Kyrgyz Republic "On Amendments to the Code of the Kyrgyz Republic "On non-tax revenues", in terms of the introduction of additional fees, which is under consideration by the Cabinet of Ministers, has been developed.



Road asset management system



- The Road Asset Management System is a specially designed information system that, based on detailed data from an instrumental survey of roads, predicts the necessary amount of funds for repairs
- It optimizes road life cycle costs by eliminating defects at an early stage, thus reducing capital expenditures and optimizing road maintenance costs
- By using the SUDA, the MoTC of the Kyrgyz Republic will have accurate data on the necessary amount and priority of repair work, which will eliminate the human factor in budgeting. Such mechanisms significantly reduce the risk of corruption in road maintenance and allow for an actual assessment of road condition
- Together with the Production and Innovation Center (PIC) of the Ministry, data were collected from **7,514 km of paved roads** and traffic data were collected from 341 locations. The roads surveyed were of international, state and partly local importance, GPS coordinates of roads, IRI, rutting and photos of roads were collected. Based on the photos, a road inventory and pavement condition survey were conducted.



Expectations from SUDA 2

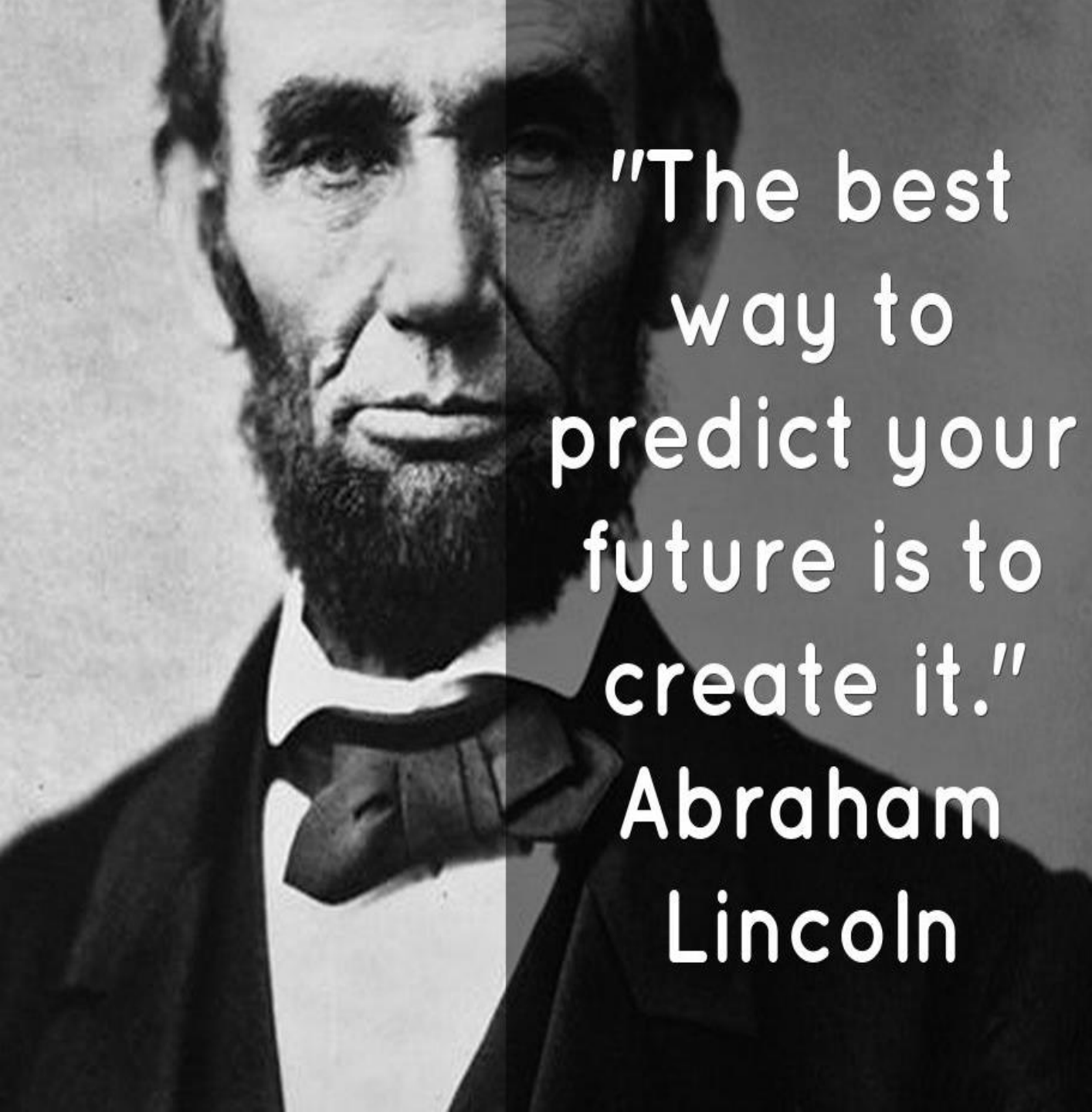
- Update data for part of the paved road network (about 7,500 km) and expand data collection to include the unpaved road network
- Further develop the web-based maintenance planning system to include functionality to present and merge data from the database, further improve planning for paved roads and cover planning for unpaved roads and other assets
- Supporting the MoTC of the Kyrgyz Republic in developing a legal framework for integrating SUDA into annual planning and budgeting procedures, and preparing an Action Program for the further development of Phase III of SUDA
- Identification of annual funding requirements and suitable sources of funding for road maintenance and repair
- Providing capacity building and staff training for the Department of Roads, PIC and subordinate agencies
- Assist KSTU with a new course on SUDA



Road infrastructure projects in Kyrgyzstan



Thank You

A black and white portrait of Abraham Lincoln, showing him from the chest up. He has a full beard and is wearing a dark suit with a white shirt and a dark bow tie. The image is split vertically down the middle, with the left half being lighter and the right half being darker.

**"The best
way to
predict your
future is to
create it."
Abraham
Lincoln**