



რეგიონული განვითარებისა და
ინფრასტრუქტურის სამინისტრო

Georgian Experience and Achievements in Road Safety Inspection (RSI)

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Ministry of Regional Development and Infrastructure



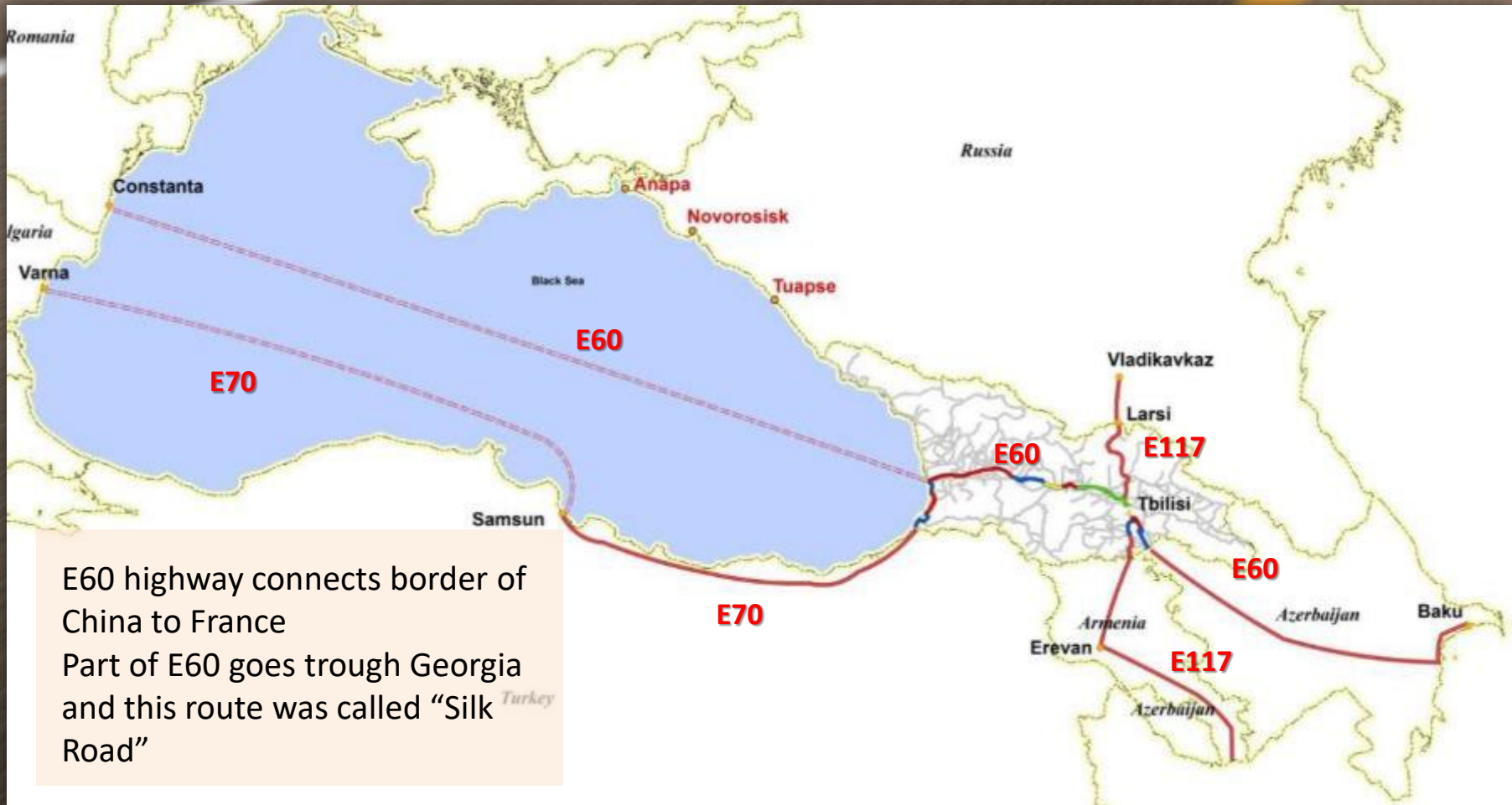
Georgia Roads Network

International Roads (managed by RD) - 1 593km
Secondary Roads (managed by RD) - 5 460km
Local Roads (managed by Municipalities) - 32 990km
Total: 40 043km

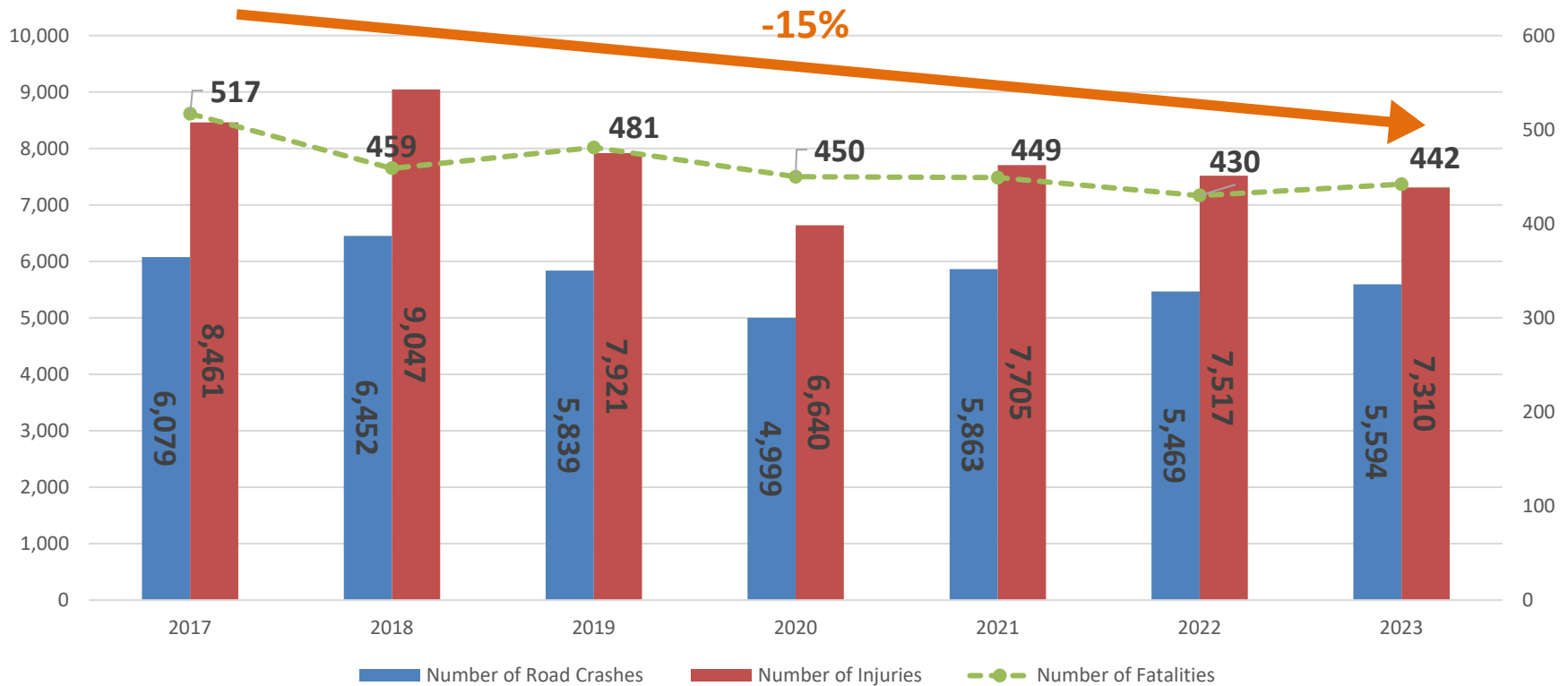




E-Road Network



E60 highway connects border of China to France
Part of E60 goes through Georgia and this route was called "Silk Road"



- According to the analysis carried out based on the methodology of the World Bank, taking into account the total number of fatalities and injuries caused by road accidents in 2019, the socio-economic expenditure amounted to 4.1% of GDP.



Georgian Experience and achievements in Road safety inspection (RSI)

TECHNICAL GUIDELINES

Road Safety Inspections

2011

Roads Department of
Georgia
Ministry of Regional
Development and Infrastructure



- With the support of the World Bank, technical guideline for road safety inspection has been developed in 2011 in accordance with Euro directives.
- A systematic assessment of the safety standard of an existing road, in particular with respect to hazards related to traffic signs, roadside features, environmental risk factors and road surface conditions;
- RSI an ordinary periodical verification of the characteristics and defects that require maintenance work for reasons of safety.



Georgian Experience and achievements in Road safety inspection (RSI)

Most of roads are old:

- Often, the roads were designed and constructed some years or even decades ago;
 - for different amount of traffic, motor vehicle fleet or even different types of vulnerable road users (bicyclists or pedestrians).

View from outside:

- Local road administrations (municipal) do not have enough safety related knowledge to analyze the road risks in a same way and efficiency that road safety engineer can do.

It is a popular misconception that the faults or bad behavior of a road user are considered to be often the main cause of road accidents:

- But we know already from a number of research findings that road infrastructure has a great influence on safety outcomes, as contributing or even a main factor of the crash occurrence.
- Road safety inspection results are related to the auditors' experiences and safety knowledge in general;
 - That is why two parallel inspections carried out on the same site could result with more or less different recommendations;
- All inspections should take into account a range of human factors which relate to road user errors that are induced by the road.



Georgian Experience and achievements in Road safety inspection (RSI)

Road Safety Inspections (RSI) are carried out once in a 3 years period for international road network and once in a 5 years period for secondary road network.

RSI is done by group of 3-4 person they are making different steps according EU Directive 2008/96/EC and with Georgian other normative legal acts:

- Road Safety Inspections on the site;
- Identification of the problematic areas;
- Making RSI report;
- Sending low cost improvement measures as a RSI report to maintenance and supervision companies;
- In case of high cost improvement measures RSI report's recommendation is sent to design group and goes design stages.

Annually RSI is done on 1 500-2 000 km of road section.



Example of the template Road safety inspection (RSI) on highways and motorways

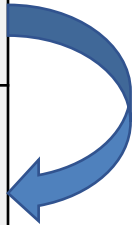
| <i>Check list-descriptions</i> | <i>done by</i> | <i>comments</i> |
|---|----------------|-----------------|
| On tunnels | | |
| - At the Entry – check signing / tunnel length | | |
| Speed limits | | |
| Use of lights | | |
| Distances between cars | | |
| Check for transition on guardrails-flexible and rigid | | |
| - In the tunnel -check lights / normal lights (more intense at entries and way outs) | | |
| Evacuation lights (no more than 1,5 above ground for people) | | |
| Safety lights (for vehicles on the absence of normal lights) | | |
| - In the tunnel – check road markings quality | | |
| - In the vicinity of tunnel check for discontinuities on median to ensure detours | | |
| | | |
| On open sections | | |
| - Check design radius on interchanges – see if there are indications of the use of brakes | | |
| - Check guardrails and look for indications of impacts | | |
| - Check visually vertical signs reflection quality/damages | | |
| - See quality of road markings | | |
| - Position of vertical signs and their protection (big boards and normal size signs) | | |
| - Check if Newjerseys profile are absorbed by pavement surface | | |
| - See transitions on guardrails flexible and rigid on bridges | | |
| | | |
| On junctions | | |
| cross section slopes are acceptable? | | |
| superficial drainage from from pavement is enough to reach ditches? | | |
| are ditches at the right position without interruptions? | | |
| street lighting poles are positioned at a safe position? Crash protection was considered? | | |
| any risk of glare caused by street lighting? | | |
| Any induction perception mistakes caused by lighting? | | |
| any conflit with street lighting from other road closed to this one? | | |
| is there any dangerous area without street lighting? | | |
| road markings are coherent and visible enough specially in night time? | | |
| vertical signs can be seen from drivers at a safe distance? Messages are clear? | | |
| are they properly positioned? | | |
| are vertical signs affecting visibility? | | |
| type of curbs used are the most adequate? Are they in good shape? | | |
| any visible indications of impact? | | |
| pedestrian crossings are illuminated? | | |
| irregular pedestrian crossing were seen? Are they protected if needed? | | |
| any rigid objects next to the carriageway well protected? | | |
| signing are obstructed by vegetation? | | |
| pavement looks at a general good condition? Skid resistance seems to be adequate? | | |
| overtaking are prohibited at the right places? | | |
| speed limits and speed of vehicles are compatible and coherent? | | |



Georgian Experience and achievements in Road safety inspection (RSI)

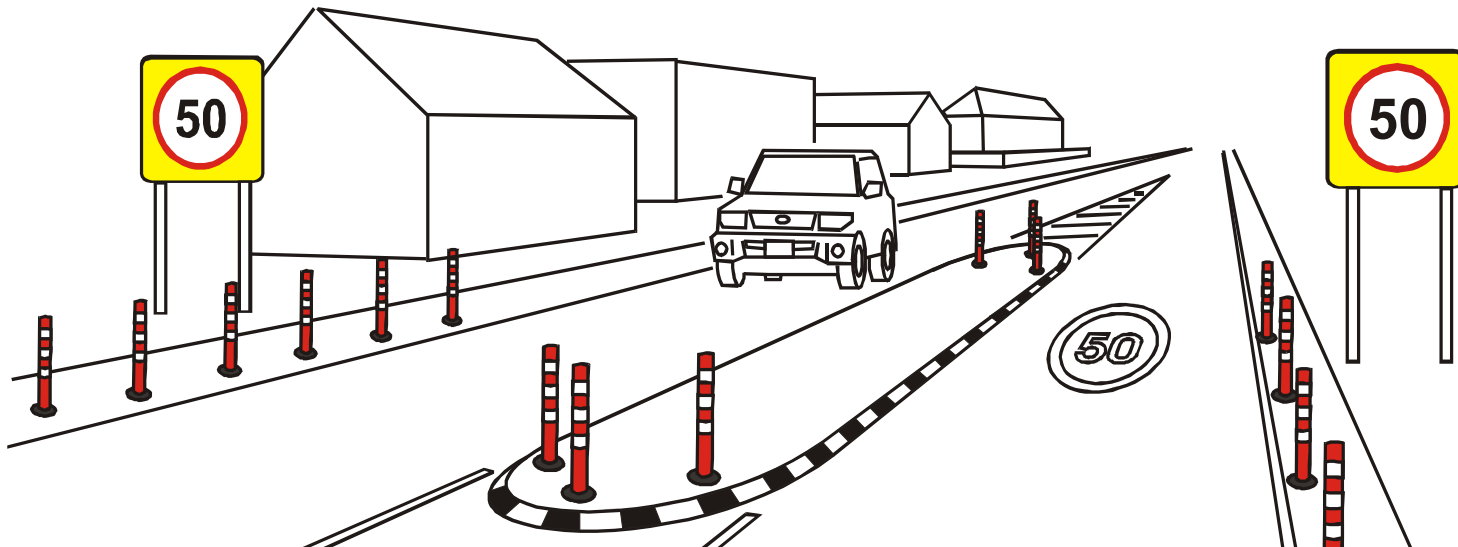
TYPICAL STAGES IN ROAD NETWORK SAFETY AND HIGH ACCIDENT CONCENTRATION SECTIONS RANKING

| | STAGE | DESCRIPTION |
|----|---|--|
| 1. | Data collection | It is necessary collect data about traffic volume, road design and the surrounding environment |
| 2. | Definition of homogenous road and junction groups | Definition of road groups and junction groups according to selected criteria |
| 3. | Dividing | Dividing the road network into homogenous road sections and junctions. |
| 4. | Identification | Road network safety ranking and identification of hazardous road sections |
| 5. | Analysis and evaluation | In office analysis of hazardous road sections and junctions and on-site observations of road-user behavior |





Georgian Experience and achievements in Road safety inspection (RSI)



It should be mentioned that with Roads Department of Georgia's high involvement, in 2020, with Ministry of Regional Development and Infrastructure's and Ministry of Internal Affairs joint command approved rule: "On approval of the procedure for the implementation of measures for the black spots elimination on international and secondary road network to ensure safe movement on these roads".



Implementation of iRAP in Georgia

- As part of the SLRPIII/CS/SSS-07 agreement signed with the Roads Department of Georgia (RD), the International Road Assessment Program (iRAP) was introduced in the RD.
- The agreement provided training and certification of the RD's employees and iRAP production in Mtskheta-Mtianeti, Kakheti and Kvemo Kartli regions.
- In 2019-2020 trainings were held in the building of the RD, after which six employees of the department obtained annually renewable certificates (Survey, Coding and Analysis).

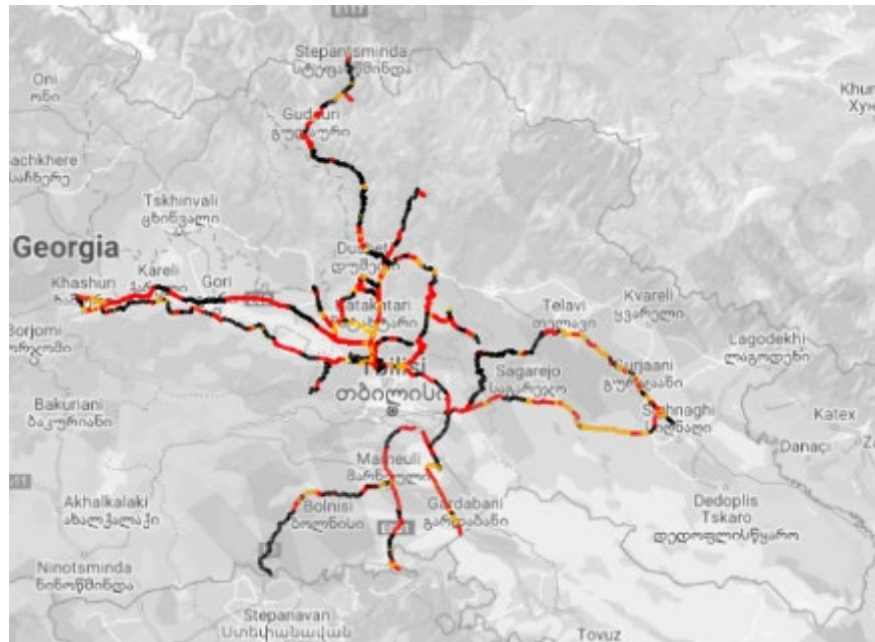
i RAP





Implementation of iRAP in Georgia

- In 2020 the first iRAP project in the Mtskheta-Mtianeti region was completed, this project was conducted by foreign consultants, but it is worth noting the maximum involvement of internal personnel in the mentioned project.
- iRAP assessments in Kakheti, Kvemo Kartli and Shida Kartli regions conducted in 2020-2023, those projects were carried out entirely with the internal resources of the RD. Employees of the department carried out survey, coding and analysis work independently.
- iRAP assessments are already done on 1 111 road network in Georgia.
- For the upcoming 2 years period it is planned to carry out iRAP assessments in Imereti, Guria and Adjara regions, for 350 km road networks.





List of iRAP accredited suppliers

| Name/Organisation (Alphabetically) | Country | Survey | Coding | Analysis and Reporting | SR4S Quality Review |
|--|---------|---|---|---|------------------------|
| Guram Jincharadze Roads Department of Georgia | Georgia | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | |
| Davit Kurdadze Roads Department of Georgia | Georgia | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | |
| Mamuka Patashuri Roads Department of Georgia | Georgia | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | |
| Davit Pashalishvili Roads Department of Georgia | Georgia | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | |
| Giorgi Taktakishvili Roads Department of Georgia | Georgia | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | Status = F Since date: 25/10/22 Expiry date: 15/11/24 | |

More information about iRAP accredited suppliers can be seen on: <https://irap.org/accreditation/>



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Thank you