Road and railroad safety

How is the number of people killed and seriously injured in traffic reduced?

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Did you know that

statistics for the years 2020–2022 show that the three-year average number of fatalities has not decreased at the planned rate, with an average of 55 fatalities over three years.

Did you know that

The National Audit Office carried out most of its audit activities before 1 July 2023. Therefore, the Ministry of Economic Affairs and Communications is referred to as the ministry responsible for transport (including road and railroad safety) and cybersecurity until this time throughout the report. However, forward-looking recommendations have been made to the Ministry of Climate that took the functions over from the Ministry of Economic Affairs and Communications.

Summary of audit results

The goal set with the road safety programme is to reduce the number of people killed and seriously injured in traffic. Actions have been added and omitted from the programme, and funding for actions has been reduced, but the main objective of the road safety programme has not been adjusted. In the opinion of the National Audit Office, it is unlikely that the goal of the road safety programme for 2016–2025, which is that there are no more than average 40 fatalities in traffic from 2023–2025 and the average number of seriously injured people does not exceed 302 people per year as the average value for 2023–2025, will be achieved with the planned measures by the end of 2025¹.

The audit showed that the actions that are expected to have the greatest impact on improving road safety are either implemented to a lesser extent than planned or are not implemented at all. At the same time, actions with unknown planned impacts are added to the road safety programme. This means that after the end of the programme period, it is not known whether and what impact a particular action had. Therefore, there is a risk that actions that have little impact on the achievement of objectives are carried out; and that some actions with a higher impact will be unfunded.

In the opinion of the National Audit Office, the Ministry of Climate and the Transport Administration should not accept actions in the road safety programme the impacts of which have not been assessed. Also, the cost of implementing the actions of the road safety programme and achieving its objectives has not been assessed.

Another obstacle to the targeted planning of road safety actions and the assessment of their effectiveness is the lack of a clear definition of who should be considered a person seriously injured in traffic, and because the accidents that have occurred in road traffic cannot always be linked to the scene of the accident precisely enough.

Although the goal of the road safety programme is to reduce the number of seriously injured people, it is not clear who should be considered seriously injured in road accidents and how to share information that, among other things, could be the basis for the development of road safety policy. Verification of the correctness of the data on the locations where road accidents occurred is organised in such a way that these data cannot always be trusted. At the same time, it is necessary to know the exact

¹ Although the document of the road safety programme for 2016–2025 still includes the objective that the number of seriously injured people does not exceed 330 people per year as the annual average value for 2023–2025, it is stated in the "<u>Transport Competitiveness and Mobility Programme for 2023–2026</u>" that the number of seriously injured people as an average for the years 2023–2025 should not exceed 302 people per year as the annual average value for 2023–2025.

Level crossing for vehicles — a place where a road crosses a railway at the same level.

Level crossing for pedestrians – a place where a path, pavement or cycle path crosses a railway at the same level.

Source: Minister of Economic Affairs and Infrastructure Regulation No 71 "Rules for Technical Use of Railways", § 2, clauses 70)

Did you know that

on roads, the following information systems are used for traffic management: the Smart Road traffic information portal, the central traffic management system, the road weather monitoring information system.

On railway the traffic management systems include for example, the automatic traffic light system on level crossings, which is used to control the movement of vehicles, passengers and other traffic on the crossing. The traffic management system allows the operator of train traffic to remotely control station points and signals and monitor the movement of trains.

Integrity – the guarantee that data are correct, complete and up-to-date, their origin is authentic and no unauthorised changes have been made.

Main recommendations

location of an accident to identify the links between the traffic environment and the accident, which would make it possible to further improve the safety of places that are a risk to road safety.

Objectives have been set to improve safety on railways, and actions have been planned and implemented to achieve them. However, if train speeds are increased to 160 km/h, it will be impossible to achieve railroad safety before level crossings for pedestrians and vehicles are safe enough. The objective of rail traffic to increase speeds and thereby reduce the time-space distance between major cities is set out in the Transport Competitiveness and Mobility Programme and the action plan for the development of public rail infrastructure.

The objective set in the action plan is that by 2028, the railway infrastructure will be renovated to a level that would allow trains to run at 160 km/h. However, the action plan does not address improvement of the safety of level crossings. According to Eesti Raudtee AS, the investments needed to improve the safety of level crossings can only be made by 2033. This means that the new trains of AS Eesti Liinirongid, which will be delivered in 2025, would only be able to travel at 141–160 km/h in 2028 on sections where there are no level crossings, and the journey from Tallinn to Tartu would take longer than the desired 1 hour and 40 minutes.

Possible cyber risks should be acknowledged more, as their materialisation may lead to serious consequences in traffic.

Information security measures for traffic management systems are planned and implemented on both roads and railways, but there are risks that still need to be reduced. Measures have been taken to reduce the impact of the risks of traffic management system failures, but more attention needs to be given to the information security of data integrity.

Recommendations of the National Audit Office to the Minister of Climate:

- assess and define the desired impacts of the actions of the programme implementation plan in cooperation with those in charge of the actions of the road safety programme, only add actions with a previously assessed impact to the programme and prepare a plan for funding the actions that would include the cost of each action. Change the objective of the road safety programme so it matches the actual possibilities;
- analyse the cost of introducing the level crossings determined in the rules for technical use of railways when speeds are increased to 160 km/h and whether the investments can be made by the deadline set in the action plan; and plan the necessary funding in cooperation with railway infrastructure operators. If necessary, the objectives of the action plan for the development of public railway infrastructure should be adapted to real possibilities.

The Minister of Climate agreed that the structure and justification of the actions of the road safety programme and the action plan for its implementation must be critically assessed and confirmed that the collection of ideas for the preparation of the road safety programme for the next period will start in 2024 and the recommendations of the

Response of the Minister of Climate:

National Audit Office will be taken into account. However, the Minister of Climate did not find that changing the goals of the road safety programme to make them correspond to the actual possibilities would be practical, as according to the Minister, goals must be set for the long term and be ambitious enough so that they would not have to be changed depending on the state budget strategy that is updated every year.

The Minister of Climate also did not support the approach that the future road safety programme could only include actions that have an expected impact and can be assessed, as in the case of the actions planned in the programme implementation plan for the period 2020–2023, it is largely not possible to assess the direct link between the actions and the reduction of fatalities or injuries, as there are no generally accepted methodologies for this.

Comment of the National Audit Office: however, in order to make well-considered choices in a context of limited resources, the National Audit Office believes that the impact of policy implementation measures should be assessed during their planning and implementation, and after their implementation. The National Audit Office notes that such an approach is also supported by the methodology for impact assessment approved by the Government of the Republic in 2021², according to which, among other things, decisions with consequences that are unpredictable or largely unclear should be avoided. According to the methodology, it should also be clear which means are necessary to achieve the goals.

The Minister of Climate also stated in the response that according to the Action Programme of the Government of the Republic for 2023–2027, the action plan for the development of public railway infrastructure will be amended by November 2024 at the latest. The investment needs and opportunities related to level crossings will also be addressed in the revised action, but due to a lack of funds, investments cannot be made before 2033.

Report of the National Audit Office to the Riigikogu, Tallinn, 12 February 2024

² Accessible at: Impact Assessment | Government Office (01.02.2024).

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