



NATIONAL ROAD  
SAFETY COUNCIL

2021




2030



# NATIONAL ROAD

SAFETY PROGRAMME

## 2021 – 2030



# DEFINITIONS

## **ROAD ACCIDENT**

A road traffic event resulting in a person being killed or injured.

## **ROAD COLLISION**

A road traffic event in which no participant was injured, only material damage reported.

## **ROAD EVENT**

Road accident or collision.

## **FATALITY**

A person who died as a result of injuries sustained in a road accident: at the scene or within 30 days of the accident.

## **SERIOUSLY INJURED VICTIM**

A person who, as a result of a road accident, has sustained injuries causing a violation of bodily organ functions or disorder of health lasting more than 7 days.

## **SLIGHTLY INJURED VICTIM**

A person who has been found by a doctor or paramedic to have suffered an injury or injuries other than those indicated in the definition of a seriously injured victim.

## **INJURED VICTIM**

Slightly and seriously injured victims counted together.

## **DEMOGRAPHIC INDICATOR**

The ratio of the number of accidents or victims in a given area to the number of inhabitants living in this area. The measure of the indicator is the number of accidents or victims per 100,000 inhabitants.

## **ACCIDENT SEVERITY**

The ratio of the number of fatalities to the number of accidents. A measure of severity of accidents is the number of deaths per 100 accidents.

## **ACCIDENT DENSITY**

The ratio of the number of accidents in a given area to the length of the road network or the area. A measure of accident density is the number of accidents per 100 km of road length or the number of accidents per 100 km<sup>2</sup>.





NATIONAL ROAD  
SAFETY COUNCIL



MINISTRY OF  
INFRASTRUCTURE

# **NATIONAL ROAD**

SAFETY PROGRAMME

# **2021 - 2030**

Ministry of Infrastructure  
Secretariat of the National Road Safety Council



# TABLE OF CONTENTS

<b>FOREWORD</b>	<b>4</b>
<b>DIAGNOSIS OF ROAD SAFETY SITUATION</b>	<b>7</b>
<b>INTERNATIONAL AND NATIONAL CONDITIONS</b>	<b>15</b>
<b>PROGRAMME OBJECTIVE, PRINCIPLES AND STRUCTURE</b>	<b>23</b>
<b>PROGRAMME OBJECTIVES</b>	<b>27</b>
<b>PROGRAMME PILLARS</b>	<b>31</b>
ROAD SAFETY MANAGEMENT SYSTEM	<b>33</b>
SAFE ROAD USER	<b>43</b>
SAFE ROADS	<b>57</b>
SAFE VEHICLE	<b>66</b>
RESCUE SERVICE AND POST-CRASH RESPONSE	<b>74</b>
<b>PRINCIPLES OF PROGRAMME IMPLEMENTATION</b>	<b>83</b>
<b>REFERENCES</b>	<b>90</b>



## FOREWORD

Must the high number of accident victims on Polish roads be an inevitable effect of the development of motorisation? The answer should be obvious, yet it still provokes discussion and doubt. Certainly, the view that the dynamic development of transport must result in an unavoidable number of negative consequences dominated until the late 1980s and early 1990s. At that time, institutions statutorily established to manage the area of transport and road traffic in the broadest sense of this term, adopted the view that the benefit of dynamic development has a price. In addition to the costs of pollution or congestion, the increasing number of accidents and their victims were also seen as part of the price to be paid.

In 1993 the Road Safety Council was established and a year later it was decided to prepare the first comprehensive government road safety programme. The GAMBIT'96 and subsequent programmes, including the GAMBIT 2000 prepared after the change of the country's administrative structure, and then the GAMBIT 2005, laid the foundations for a series of interventions based on a structured methodology and supported by the necessary transfer of knowledge. Activities implemented under the National Road Safety Programme 2013-2020 brought many positive changes. Thanks to the commitment of the National Road Safety Council's key partners, the number of road accident victims has been significantly reduced over the past 10 years.

Unfortunately, the analysis of statistical data and trends for the last 10 years indicate that, despite significant progress in reducing the number of fatalities or the most seriously injured, the level of danger on Polish roads is unsatisfactory and still falls short of the targets. This will continue to be the case as long as there is even one fatality as a result of accidents on Polish roads.



By undertaking work aimed at the preparation of the next National Road Safety Programme, we confirm our commitment to Poland's active and conscious participation in the shaping of global and European policy aimed at protecting health and life on our roads. We are fully aware that the objectives set out in the strategic EU documents are a great challenge, but also an opportunity to improve the current situation. Examples of countries with the lowest level of risk prove that it is possible to achieve exceptionally good results while maintaining a balance between the benefits coming from the development of transport and road traffic and a high level of safety of all road users.

The National Road Safety Programme 2021-2030 (NRSP) has been prepared based on experiences coming from previous prevention programmes, taking into account the latest trends and the most effective solutions, with a clearly defined vision and principles of implementation. In addition, the NRSP is a document fulfilling the basic condition for the transport sector in Poland, resulting from the proposed Regulation of the European Parliament and of the Council laying down common provisions on the Cohesion Policy funds in the 2021-2027 perspective<sup>1</sup>. The NRSP is the national strategy for road safety, which summarises the assessment of the risks existing on Polish roads. The NRSP is complemented by documents creating a financial framework for the implementation of infrastructure investments, i.e. the National Road Construction Programme 2014-2023 and its continuation, the National Programme to Build 100 bypasses in the 2020-2030 period, the Safe Road Infrastructure Programme 2021-2024, and the National Road Maintenance Programme 2020-2030 containing elements of road safety, which will continue the assumptions of the Safe Road Infrastructure Programme 2021-2024 from 2025 on-wards.

Despite the intensive investment works on the expansion and improvement of road infrastructure in Poland, carried out continuously irrespective of the limitations resulting from the COVID-19 pandemic, still the main factor influencing the number of road accidents with the most severe consequences, including loss of life, remains human element. Limiting the impact of this factor determines the achievement of a significant reduction in accidents with fatalities on Polish roads and represents the greatest challenge for the next decade.

National Road Safety Council

<sup>1</sup> Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund, as well as financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy.



# WHAT WE HAVE ACHIEVED



## SUMMARY

The 36% decrease in the number of fatalities and 22% reduction in the number of seriously injured victims recorded over the last 10 years confirm the importance of systematic and consistent preventive measures. However, based on the observation of current trends, it should be underlined that the catching up with the European leading countries with the highest level of road safety is still a big challenge. Poland is able to meet this challenge if our country will undertake more intensive work, and show great determination and courage in setting priorities, which should undoubtedly be primarily the health and lives of all road users.



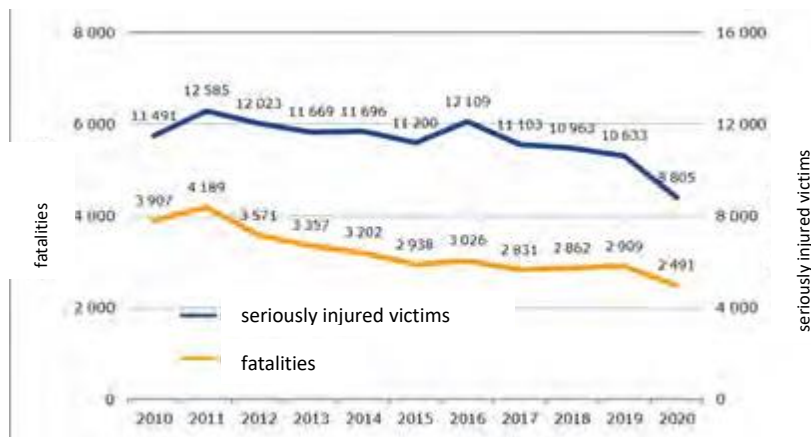
# DIAGNOSIS OF ROAD SAFETY SITUATION

## Chapter 1

### Trends 2009-2019

There has been a significant decrease in the number of fatalities and seriously injured victims of accidents on Polish roads between 2009 and 2019. The number of fatalities decreased from 4,572 to 2,909, that is, by 36%. In the case of seriously injured victims, there was a decrease of 22%, with their number decreasing from a level of 13,689 in 2009 to 10,633 in 2019.

Between 2010 and 2020, road accident fatalities were reduced by more than 36% and seriously injured victims by more than 23%.



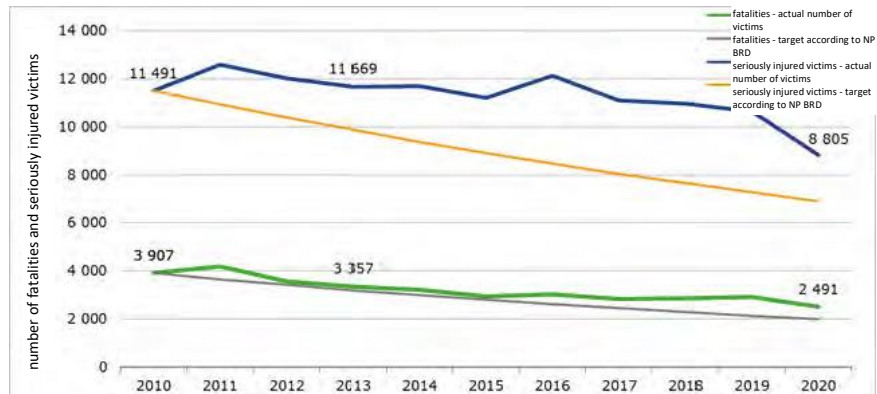
**Figure 1.1**

Number of fatalities and seriously injured victims in Polish road accidents between 2010 and 2020 /source: Secretariat of the National Road Safety Council/. The diagnosis of the state of road safety, together with the other elements of this NRSP, includes a summary of the risk assessment referred to in the criterion to the basic condition of the Cohesion Policy's specific objectives for the transport sector (Annex IV to the Regulation of the European Parliament and of the Council laying down common provisions on the Cohesion Policy Funds in 2021-2027 perspective).

The above data prove a positive trend with regard to the number of the most seriously injured road accident victims in Poland. However, bearing in mind the basic assumptions of the National Road Safety Programme 2013-2020, it should be stated that the level of reduction of fatalities and seriously injured victims recorded by 2019 and in 2020 (the pandemic year) did not reach the values assumed in the document, i.e. a 50% reduction in the number of fatalities and a 40% reduction in the number of seriously injured victims in relation to 2010, even with a significant improvement in road safety indicators in 2020. In 2019, the sub-goal was not achieved - the difference was 36.1% in the number of fatalities and 46.4% in the number of seriously injured victims, respectively. In 2020, the NRSP end target was not met, with 24.5% more fatalities and 27.6% more seriously injured victims.

**Figure 1.2**

Indicators for achieving the objectives of the National Road Safety Programme 2013-2020 (source: Secretariat of the National Road Safety Council).



In view of the above data, it should be stressed that progress in road safety is a long-term process and clear trends can be observed over many years only. It is also characteristic that a higher rate of improvement in road safety is observed during the initial phase of preventive measures, which means that further reductions in road traffic danger are relatively slower and require even greater precision in forecasting interventions and managing all critical areas affecting the improvement of road safety.

*The National Road Safety Programme 2021-2030* addresses the unquestionable challenge of further systematic improvements in the safety of road users. This is because, in line with the guidelines and recommendations of international organisations, including the United Nations, as well as the action plan of the European Union, ambitious goals should be set at the level of national strategic documents, aimed at a significant reduction in the number of the most seriously injured in road accidents. In the case of Poland, this means that the measures taken will make an extremely important contribution to achieve the European Union's long-term goal named "Vision Zero", that means zero fatalities on European roads, by 2050.

### State of Road Safety (RS) in the base year 2019

In 2019, 2,909 people were killed on Polish roads and 10,633 were seriously injured.





Compared to 2018:

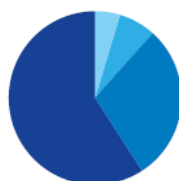
1. Number of fatalities increased by 47 (about 2%).
2. Number of seriously injured decreased by 330 (about 3%).
3. Number of total injured decreased by 1882 (5%).
4. Number of accidents decreased by 1386 (about 4%).


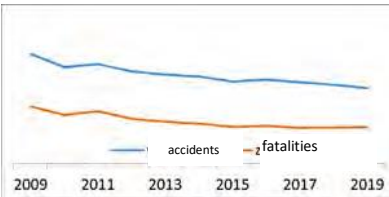




POLAND	
Population	<b>38,411.1 thousand</b>
Area	<b>312,705 km<sup>2</sup></b>
Length of public roads	<b>424,563 km</b>
Registered vehicles	<b>30,800.8 thousand</b>




<sup>2</sup> Transport - activity results 2018, Statistics Poland, 2019.

LENGTH OF ROADS BY CATEGORY <sup>3</sup>		ROAD NETWORK STRUCTURE	
National	19,403 km		4.6%
Voivodeship	28,924 km		6.8%
District/County	124,572 km		29.3%
Municipal	251,664 km		59.3%



CONSEQUENCES OF ROAD EVENTS <sup>4</sup>		TRENDS
Accidents	30,288 	
Fatalities	2,909 	
Injured	35,477 	
Seriously injured	10,633 	
Collisions	455,454 	

Compared to the last year:

 - increase of 0-5%


 - increase of 5-10%

 - increase > 10%

 - decrease of 0-5%

 - decrease of 5-10%

 - decrease > 10%

 - no changes

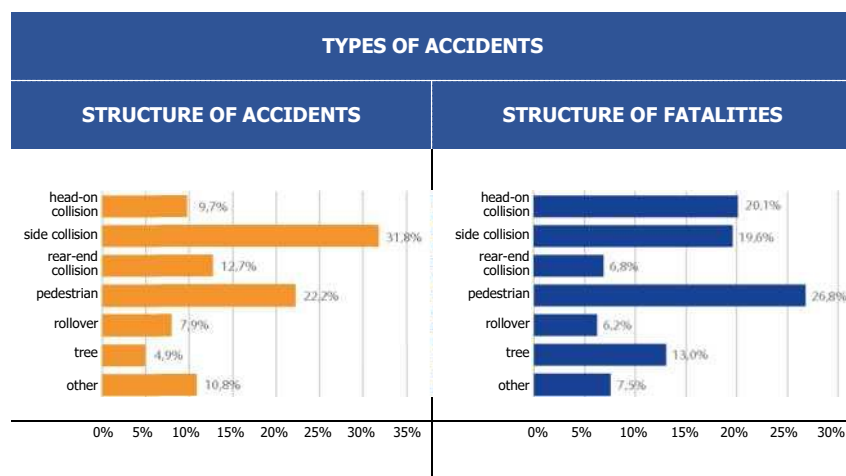
It should be noted that 2019 was the second year in a row when, despite of a decrease in the number of accidents and injured victims, the number of fatalities increased. This situation means that the severity of road events in Poland has risen and currently remains at a high, very worrying level. The demographic indicator expressed in terms of the number of fatalities per 100,000 inhabitants and determining the risk of being a fatality on Polish roads, reached 7.6 in 2019, while the accident severity index referring to the number of fatalities per 100 accidents was 9.6.

The synthetic information on the 2019 road safety status posted below is presented in a form that identifies the current values in terms of hazard indicators, the structure of road accidents and fatalities, as well as the share of each accident category.

RISK INDICATORS	
Demographic indicator I	<b>78.9</b> accidents / 100,000 citizens
Demographic indicator II	<b>7.6</b> fatalities / 100,000 citizens
Accident severity	<b>9.6</b> fatalities / 100,000 citizens
Accident density	<b>7.1</b> accidents / 100 km

<sup>3</sup> Transport - activity results 2018, Statistics Poland, 2019.

<sup>4</sup> Accident and Collision Record System (SEWIK) data as of 16 February 2020.



**PROPORTION OF ACCIDENTS**

	2018	2019
Involving pedestrians	23.8%	23.1%
Caused by failure to adapt speed to traffic conditions	19.8%	20.7%
Caused by young <sup>5</sup> drivers	16.1%	17.0%
Involving cyclists	14.9%	14.6%
Involving intoxicated persons	8.8%	9.0%
Involving motorcyclists	8.4%	8.6%
As a result of a collision with the tree	5.0%	4.9%

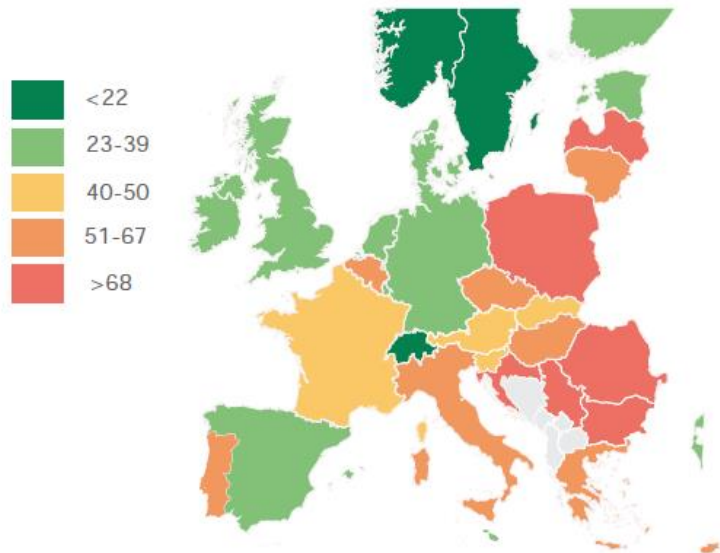
Additional information related to particular road safety problems, including victims, persons at fault, circumstances and types of accidents can be found in Chapter 5 of this study entitled *Programme Pillars*. Full statistical data on the state of road safety in Poland in 2019 is included in the National Road Safety Council's annual report entitled "The state of road safety and actions implemented in this area in 2019".

### State of road safety compared to European Union countries

Sixteen years have passed since the enlargement of the European Union to include the countries from Central and Eastern Europe, yet the level of road safety in the Member Countries is still quite different. Many countries, despite progress, are still characterised by high road traffic risks. This state of affairs is influenced by a number of factors, including the still existing socio-economic disparities, the lack of systemic solutions, and the relatively low public awareness of the impact and consequences of a low level of road safety on a country's social and economic life. This is reflected by marked differences in the level of road traffic risk between Central and Eastern European and Western European countries, as illustrated by the map below. Poland is among the countries with the highest risk to life and health. Since 2010, the risk of death in a road accident, expressed in terms of fatalities per 1

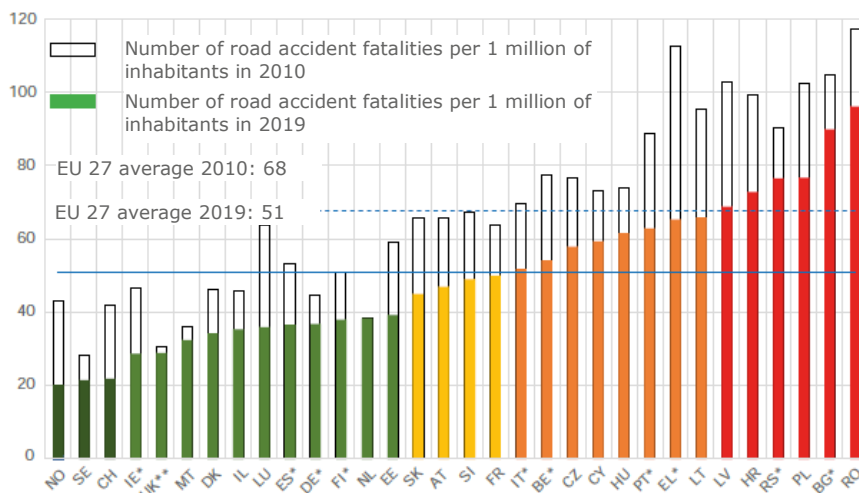
<sup>5</sup> Aged 18-24

million citizens, has decreased in our country to only 77, which means that we have not reached the average level of the European Union in 2010. This situation confirms that despite the reduction of the risk, Polish roads are still among the most dangerous in Europe, and the risk of death in a road accident places Poland, together with Romania and Bulgaria on the top.



**Figure 1.3**

Number of road accident fatalities per 1 million inhabitants in EU countries in 2019 (source: European Transport Safety Council).



**Figure 1.4**

Number of road accident fatalities per 1 million inhabitants in EU countries in 2010 and 2019 (source: European Transport Safety Council).

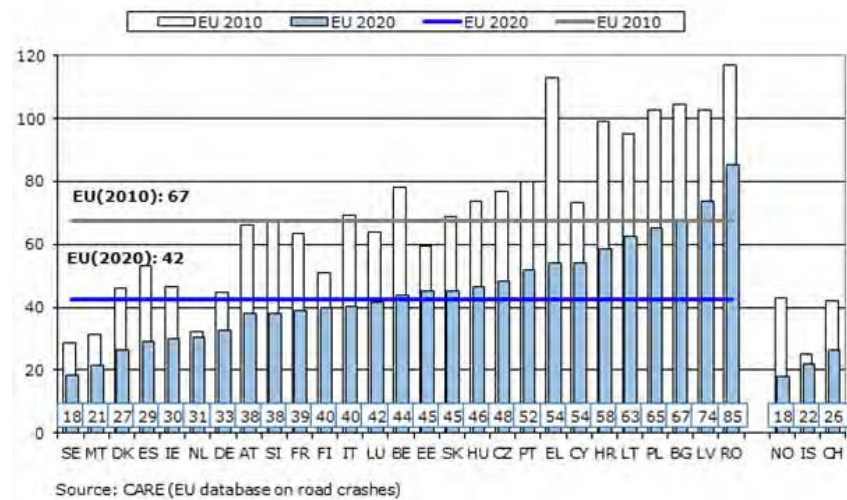
The analysis of the current state of safety on Polish roads takes into account a number of variables, enabling the most objective comparison of the level of danger. Due to differences in the level of “motorisation”, as well as the mobility structure of individual European countries, a reliable indicator describing the risk in road traffic is the number of fatalities per billion vehicle-kilometres. The data collected in this respect and included in the three-year overview of the European Transport Safety Council additionally confirm that Polish roads are characterised by an extremely high level of risk. It should be noted that the data from Poland, as well as from Slovenia and Belgium, cover the period of 2015-2017. However, this does not change the fact that the probability of dying on the roads of Poland and Croatia, expressed by the above indicator, is almost four times higher than on the roads of the countries from the top of the list.

The state of road safety in Poland compared to other European Union countries constitutes a strong argument in the discussion on future preventive measures. It is indisputable that the current situation leaves much to be desired, and a comparison of basic indicators describing the risk on national roads in relation to European leaders additionally confirms this fact.

**Figure 1.5**

The 65 road fatalities per million inhabitants in 2020 is the fourth highest rate in the EU.

This number fell by 15% in 2020, reaching its lowest level ever. Between 2010 and 2020, the figure fell by 37%, in line with the EU average (source: European Transport Safety Council).



In view of the above, the issue of the state of road safety in Poland and the need for improvement in this area was also highlighted within the framework of the so-called Recommendations of the Council for Poland 2019<sup>6</sup>, as well as in the National Report 2020, presenting the state of implementation of the Council's recommendations<sup>7</sup>.

The chance to change the status quo should certainly be sought in systemic solutions, including the implementation of measures based on the long-term strategy of the *National Road Safety Programme 2021-2030*. The adoption of ambitious goals, the allocation of organisational and financial resources appropriate to the severity of the problem, the consistent implementation of measures based on the state-of-the-art knowledge and proven practices will allow Poland to reduce the distance between itself and the European countries with the lowest road risk levels.

It should be emphasised that the prevention activities to date, centered around the *National Road Safety Programme 2013-2020* and previous programmes, have brought about many positive changes. Thanks to the involvement of the National Road Safety Council's key partners, as well as the coordination of work by the institutions set up for this purpose, including the Secretariat of the National Road Safety Council, it has been possible to significantly reduce the number of the most seriously injured victims.

<sup>6</sup> Recital (16) of the above-mentioned Council Recommendation on Poland's National Reform Programme for 2019 and containing the Council's opinion on Country Specific Recommendation 2019 Poland): "The road fatality rate is still among the highest in the Union."

<sup>7</sup> Compare the Country Report Poland 2020: "(...); Road safety in Poland has improved in recent years, but progress in this area has slowed down. (...)"

However, trends over the last ten years show that reaching the level of the European leaders will be a big challenge. Poland can meet this challenge provided that it will work harder and show great determination and courage in setting priorities, which should undoubtedly and primarily be the health, safety and life of all road users. Poland is able to meet this challenge if our country will undertake more intensive work, show great determination and courage in setting priorities, which should undoubtedly be primarily the health and lives of all road users.

## Conclusions

Based on the analysis of the long-term trends, current status and information on road safety in the EU countries, the following diagnostic conclusions can be formulated:

- Between 2009 and 2019 and between 2010 and 2020, safety on Polish roads has improved. Fatalities were reduced by 36%, seriously injured victims by 22%, which means 36% and 23% respectively.
- *The National Road Safety Programme 2013-2020* targets for reducing fatalities and seriously injured victims, indicated for 2020, were already out of reach in 2019.
- Due to the occurrence of the SARS-CoV-2 coronavirus pandemic and the resulting significant deviations in mobility, it should be assumed that the data for 2020 will not be fully reliable and should not affect the actual assessment of the state of road safety in Poland, especially when programming long-term targets.
- The basic problem of Polish roads is the extremely high severity of events. In 2018-2019, a decrease in the number of accidents and injuries has been observed, but the number of fatalities has increased. This means that the severity of road events in Poland, which is at a very worrying level, has recently increased even more.
- The accident severity index showing the number of fatalities reached 9.6 per 100 accidents in 2019, meaning that statistically, in every tenth accident a person dies.
- Excessive speed, not adjusted to the road conditions, directly results in a high severity of road events. For years, statistics have been pointing to this circumstance as a factor determining the highest number of road accidents with fatal consequences in Poland.
- The biggest number of accidents characterised by extremely high severity are precisely the consequence of excessive driving speed. This category includes vehicle collisions, hitting pedestrians or collisions with a tree. Most people die on Polish roads as a direct result of such accidents.
- The highest total proportion of fatalities occurs in all categories of vehicle collisions, including frontal and side impacts of the highest severity.
- A key problem of road traffic safety in Poland is an extremely high risk for vulnerable road users. Pedestrians, cyclists, motorcyclists, scooter and moped riders are particularly vulnerable to severe consequences as a result of committing a mistake resulting in an accident. In 2019, these categories of road users accounted for 48.6% of fatalities and 49.2% of seriously injured victims.
- The largest group of road accident fatalities in Poland in 2019 were people aged 60 and over. There were 914 fatalities in this age category, accounting for 31.4% of all fatalities.
- The greatest risk of being a fatality in a road accident in Poland concerns young people between the ages of 18 and 24. This situation has persisted for many years, confirming that road accidents are the greatest threat to the health and lives of young people just starting to drive.
- The highest severity is characterised by events involving a collision with a tree. The number of fatalities per 100 accidents for this category of events is by far the highest and exceeds the values recorded for hitting a pedestrian. The small percentage of collisions with a tree, at 4.9%, generates an unusually high proportion of fatalities, as high as 13%. This situation additionally confirms that the key factor influencing the severity of road events in Poland is the high speed of vehicles.
- The demographic indicator expressed in terms of fatalities per 1 million inhabitants reached 77 in Poland in 2019, which means that, despite the reduction in danger, Polish roads are still among the most dangerous in Europe.
- The risk of dying in a road accident places our country, together with Romania and Bulgaria, in the top three countries with the highest level of risk in road traffic.

# ACTIONS ARE NECESSARY



## SUMMARY

The current road safety policy of the European Union indicates that the success and achievement of the adopted objectives will depend on coordinated action by all Community countries, based on a well-understood responsibility and a common, voluntary commitment. To effectively monitor progress, the European Commission has prepared a number of instruments, including key performance indicators in the main areas of intervention. It is essential for national road safety programmes and strategies to incorporate the proposed solutions. This will enable effective analysis and evaluation of changes and, on the basis of European Union instruments, effective financing of measures aimed at reducing road hazards. At the same time, it should be pointed out that the main objective of national transport policy is to increase its accessibility and efficiency by creating a coherent, sustainable, innovative and user-friendly system, while ensuring the highest possible safety standards.



# INTERNATIONAL AND NATIONAL CONDITIONS

## Chapter 2

When programming measures for road safety, strategic documents as well as international and national recommendations, which cover the area of safe transport system, should be taken into account. In this way, the planned and undertaken measures will fit into the implementation of both international and national transport policy.

This programme is consistent with the most important international recommendations (United Nations, European Union), as well as key national documents directly or indirectly related to road safety.

### International conditions

#### UN recommendations for national strategies

According to the World Health Organisation estimates, the number of people who die as a result of road accidents continues to rise. The latest figures indicate that the annual number of fatalities is around 1.35 million. This situation means that the “death toll” from road accidents is still higher than the consequences of many public health problems seen as the most important and urgent to address. It should be stressed that, globally, road accidents are still the most common cause of death for children and young people aged between 5 and 29 years.

At the beginning of September 2020, the United Nations General Assembly, declared the *Second Decade of Action for Road Safety 2021-2030*. Its goal is to reduce the number of road accident fatalities by at least 50%, between 2021 and 2030.

The content of this document takes into account the provisions of the so called *Stockholm Declaration* adopted on 19-20 February 2020 during the 3<sup>rd</sup> *Global Ministerial Conference on Road Safety* and continues the work done so far at the level of international organisations, including the World Health Organisation, aimed at reducing the problem of health and life risks in road traffic. The resolution takes into account the conclusions and observations of the *Decade of Action for Road Safety 2011-2020*, promoting the idea of an integrated approach, working on the basis of the “*Vision Zero*” strategy, aiming for long-term and sustainable solutions, which also consist in strengthening the interaction of all road safety stakeholders. The UN resolution encourages Member States to make an effort

to ensure the safety and security of all road users by implementing a series of measures, aimed at:

- ensuring political commitment and accountability for safety at the highest possible level,
- adopting comprehensive legislation on key risk factors,
- designing safer road infrastructure, taking into account the needs of motorised and non-motorised road users,
- integrating road safety as an integral part of land use processes and the functioning of transport systems,
- promoting knowledge and awareness of road safety, especially among young people,
- promoting friendly, environmentally safe, accessible modes of public transport and alternative forms of non-motorised transport,
- strengthening the rescue and post-accident care system for road accident victims,
- cooperating with the private sector to reduce the number of accidents caused by professional drivers.

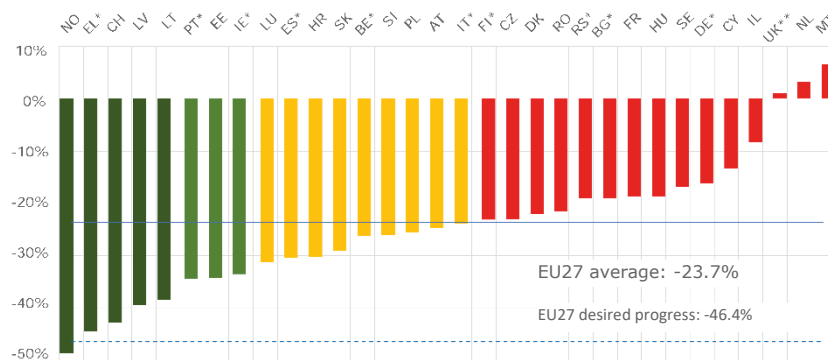
The document contains a total of 40 comprehensive actions, targeting the creation of systemic solutions that should be implemented and effectively realised at the level of United Nations Member States.

Implementing the solutions written in the *Second Decade of Action for Road Safety* and, as a result, reducing road accident fatalities by 50% until 2030 should be a key step towards the main goal of achieving the so called Vision Zero, that is, the total elimination of road fatalities by 2050.

## EU Road Safety Policy Framework 2021-2030 - next steps towards Vision Zero

Strong and comprehensive action, based on long-term strategies and a common vision, has had in recent years a significant effect in Europe in terms of reducing road danger levels. Actual data shows that, over the period 2010-2019, the average reduction in road accident fatalities for the EU countries was close to 24%. This means that road safety in European countries is improving, but at the same time shows that the main target - a 50% reduction in fatalities by 2020 - set in the *4th EU Road Safety Action Programme* has not been achieved. The country that came closest to the target is Greece, with a 44% reduction in fatalities over this period. It should be noted that Norway, as a non-EU country, recorded a reduction of 49%.

Given the fact that the number of fatalities on Europe's roads fell by 43% between 2001 and 2010, it can be concluded that the decade 2011-2020 is characterised by a significant slowdown in the rate of risk reduction. This also means that, estimated at around 2% of GDP, or EUR 280 billion, the annual cost of road accidents in the EU represents a huge expense for the Community countries.



**Figure 2.1**

Change in the number of road accident fatalities in EU countries, 2010-2019 (source: European Transport Safety Council).

Taking into account the above figures, as well as - apart from the humanitarian aspect - the extremely high economic dimension of accidents on Europe's roads, in the European Commission's latest document entitled *EU Road Safety Policy Framework 2021-2030 - further steps towards the Vision Zero*, it was assumed that the basis of European road safety policy would be an approach, which is based on the principles of the so-called *Safe System*. This assumption implies the actual adoption of the principles described by the authors of the Swedish Vision Zero, as regards the perception of road accidents. According to this approach, the only acceptable goal of action taken should be, in the long term, the complete elimination of road accident fatalities. The concentration of interventions will take into account the fact that it is unattainable to eliminate road accidents, while it is absolutely possible to significantly reduce the number of victims who are most seriously injured. The aim of

the solutions applied according to the Safe System approach is to reduce the consequences of human error. This will require a number of multi-sectoral and multidisciplinary measures in the areas of road infrastructure safety, vehicles, traffic surveillance, road rescue and education.

The communication entitled *Europe on the move - Sustainable mobility for Europe: safe, connected and green* of May 2018, reconfirmed the EU's long-term goal of achieving almost zero fatalities in road transport by 2050. It should be noted that the same target was set for the number of people suffering serious injuries. With this in mind, a 50% reduction in the number of fatalities and seriously injured victims compared to 2020 was adopted as an interim target for the next decade (by 2030), as stated by the EU transport ministers in Valletta (including Poland) in March 2017.

The current road safety policy of the European Union indicates that the success and achievement of the adopted objectives will depend on coordinated action by all Community countries, based on a well-understood responsibility and a common, voluntary commitment. To effectively monitor progress, the European Commission has prepared a number of instruments, including key performance indicators in the main areas of intervention. It is essential that national road safety programmes and strategies take account of the proposed solutions, as this will enable effective analysis and evaluation of changes, as well as the financing of actions aimed at reducing road risks, based on financial instruments of the European Union or Corporate Social Responsibility (CSR).

## National circumstances

### **Strategy for Responsible Development for the period up to 2020 (including the perspective up to 2030)**

The national strategic document *Strategy for Responsible Development for the period up to 2020 (SRD 2020)*, adopted by the Council of Ministers on 14 February 2017, is an update of the country's medium-term development strategy, namely the *National Development Strategy 2020*. It is the binding key document of the Polish state in the area of medium- and long-term economic policy.

In addition to the specific objectives, the SRD 2020 also identifies areas influencing the achievement of the strategy's goals, including transport.

*The National Road Safety Programme 2013-2020*, aimed at increasing road safety and thus reducing the number of accidents, halving the number of fatalities on Polish roads, reducing the number of serious injuries by 40%, combating excessive speed and improving the safety of pedestrians, cyclists and motorcyclists, has been identified in the SRD 2020 as one of the three most important strategic projects for the road transport sector.

### **Efficient State 2020 Strategy and Efficient and Modern State 2030 Strategy**

*The Efficient State 2020 Strategy* contains seven specific objectives. Within the seventh objective '*Ensuring a high level of public safety and order*', the following directions of intervention related to road safety have been identified:

- counteracting road hazards,
- rescue and civil protection (fire protection, prevention, rescue and extinguishing activities),
- implementation and improvement of the functioning of the emergency notification system,
- improving the functioning of the Emergency Notification System.

The above directions of intervention include issues such as the development of a National Road Safety Programme, the harmonisation of laws, the upgrading of existing infrastructure, the improvement of structures and the functioning of procedures.

### **Sustainable Transport Development Strategy until 2030**

On 24 September 2019, the Council of Ministers approved a resolution on the adoption of the *Sustainable Transport Development Strategy until 2030 (STDS 2030)* submitted by the Minister of Infrastructure. The main objective of the national transport policy outlined in this strategy is to increase the country's transport accessibility, improve the safety of traffic participants and the efficiency of the transport sector through the creation of a coherent, sustainable, innovative and user-friendly transport system at national, European and global levels. The achievement of this objective will allow the development of favourable conditions, promoting stable economic development of the country.

Achieving the main objective by 2030 requires the following actions:

- building an integrated and interconnected transport network serving the competitive economy,
- improving the way the transport system is organised and managed,
- changing individual and collective mobility (i.e. promotion of public transport),

- improving the safety of road users and transported goods,
- reducing the negative impact of transport on the environment,
- improving the efficiency of the use of public funds for transport projects.

Road safety has been indicated in the STDS 2030 as an independent activity 7.1 under the direction of intervention 4 - improvement of safety of traffic participants and transported goods. Description of this activity includes a diagnosis of the state of road safety together with a summary of the most relevant directions of actions aimed at improving this state and resulting from the *National Road Safety Programme 2013-2020*. The *Sustainable Transport Development Strategy until 2030* makes numerous references to road safety, including the possibility of financing of infrastructure investment projects from the Local Government Roads Fund. . In addition, Action 4.1.2 Road transport states that the proper functioning of road transport on a modern infrastructure network requires, among other things, an improvement in the state of traffic safety, which should involve all road managers, using the framework directions provided by programmes of national scope, such as the *National Road Safety Programme 2013-2020*, and the next road safety programme after 2020.

#### **Selected studies of other organisations authorised to carry out inspection and analysis activities or statutorily involved in road safety in Poland**

Given the importance of the problem of road accident victims, a number of advisory and analytical studies have been prepared under national conditions, pointing to the most important aspects of the problem and possible ways of improvement. Among the key documents are multifaceted studies by the Supreme Audit Office addressing the subject of the safety of vulnerable road users and indicating the need to organise the financing, management and programming of the activities carried out. The Secretariat of the National Road Safety Council commissioned a comprehensive review of functional solutions in the area of systemic road safety management in the EU Member States, indicating in its conclusions the legitimacy of undertaking immediate legislative work aimed at establishing a leading institution responsible for coordinating the process of road safety improvement. The study of the Polish Chamber of Insurance, on the other hand, showed that restructuring processes should be considered in the area of road safety management, as well as the importance of this issue at the highest levels of state governance should be increased..

Due to the global nature of road accident problems, issues related to solutions under Polish conditions have been the subject of analyses by many international organisations and institutions specialising in analytical and advisory processes. It results from the World Bank studies that the prerequisite for success in permanent reduction of the level of danger on Polish roads should be the creation of optimal conditions for functioning of an efficient road traffic safety management system. This means, inter alia, the need to establish a strong National Lead Institution, equipped with a set of organisational and financial tools and instruments, responsible for the management and success of national road safety programmes.

# WHAT WE WANT TO ACHIEVE BY 2030



## SUMMARY

Taking into account the present high level of danger on Polish roads, as well as the circumstances resulting from the global and European road safety policy, the main goal of the National Road Safety Programme 2021-2030 will be to reduce the number of fatalities and seriously injured victims by 50% within a decade. This means that in 2030 on Polish roads the number of road accident fatalities should not exceed 1455, and the number of seriously injured victims should not exceed 5317. It needs to be emphasised that the above assumptions are only an intermediate goal, assumed for 2030, and the target vision of the Polish road traffic safety policy and long-term programmes and strategies is the complete elimination of fatalities and seriously injured victims, which is in line with the far-reaching perspective of the European transport policy, adopted within the framework of implementation of the so-called Vision Zero by 2050.



# PROGRAMME OBJECTIVE, PRINCIPLES AND STRUCTURE

## Chapter 3

### Programme objectives

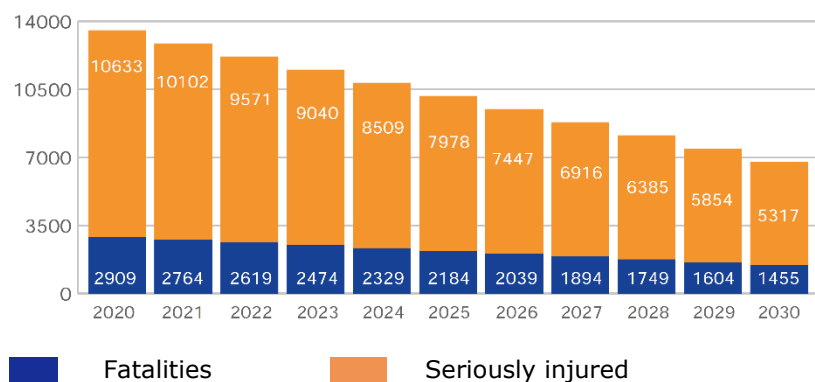
#### Main objectives

As in the case of the National Road Safety Programme 2013-2020, the main targets adopted in the perspective to 2030 refer to the number of most seriously injured victims. In this respect, the National Road Safety Programme 2021-2030 indicates the following values:

- Fatalities - reduction of 50%  
i.e., **no more than 1455 in 2030**
- Seriously injured victims - reduction of 50%  
i.e., **no more than 5317 in 2030**

#### Milestone objectives

Achieving the main objectives means that there should be a gradual decrease in road traffic danger throughout the implementation period of the National Road Safety Programme 2021-2030. Accordingly, it has been assumed that the number of fatalities and seriously injured victims in each year should not exceed the following values:



**Figure 3.1**

Milestone objectives of the National Road Safety Programme 2021-2030 /source: National Road Safety Council/.

### Assumptions of the programme

#### Vision Zero

The experience of countries with the highest level of road safety shows that it is possible to significantly reduce the number of accidents and, in particular, their most serious consequences. Such a situation confirms the basic assumptions of Vision Zero, the philosophy that in the long term no one should be seriously injured or killed in road accidents. However, the prerequisite for adopting such an approach is a complete change in the perception of the problem of road traffic hazards. The objectives adopted in the *National Road Safety Programme 2021-2030*, according to the assumptions of its authors and all Polish stakeholders, are therefore only a milestone in the realisation of the far-reaching vision of complete elimination of seriously injured victims of road accidents on Polish roads.

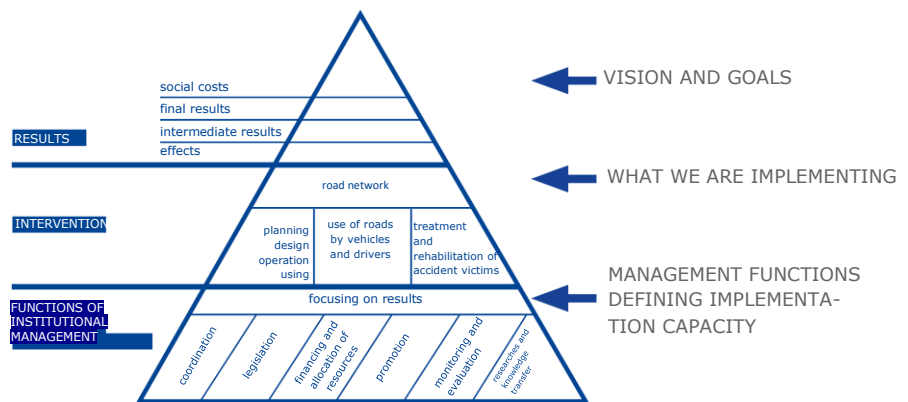
### Safe System

The modern, systemic approach to road safety takes two assumptions as the most important. Firstly, humans are fallible beings and make mistakes, and secondly, human resistance against the energy generated during an accident is limited. And it is these limitations that should be the primary criterion for system design and the determinant for preventive action. In line with the philosophy of *Vision Zero*, road safety system managers, aware of human limitations, including biomechanical ones, and of the tendency to make mistakes, should only allow solutions that are able to protect people's health and lives in situation whereas as a result of his/her own mistakes he/she finds himself/herself in a dangerous situation. It is the duty of road users to obey the law, but it is the responsibility of system managers to allow or introduce compromise solutions.

### Systematic management

A comprehensive approach to road safety management is a prerequisite for effective action. The scale of progress is often limited by implementation possibilities, while success is primarily determined by a proper understanding of the importance of the road safety management system, including institutional management functions, specific interventions and their results. Past experience shows that a common practice among road safety managers is to focus entirely on single interventions, ignoring the importance of the management functions that condition the actual implementation capacity, and consequently the actions taken, critical to the final outcome.

**Figure 3.2**  
Systematic management of road safety  
(Source: Bliss, Breen, Implementing the recommendations of the World Report on Road Traffic Injury Prevention, Washington 2009)



In line with the latest knowledge and practice of the countries with the highest level of road safety, the basis for a long-term prevention policy should be, first and foremost, the optimisation of institutional management functions, including coordination, legislative solutions, funding mechanisms, comprehensive promotion, monitoring tools and the effectiveness of interventions, as well as the transfer of the most recent scientific knowledge about road accidents and the most effective ways to reduce their consequences.

## Structure of the programme

### Principles

The *National Road Safety Programme 2021-2030* sets specific objectives and indicates priorities for actions, the implementation of which should result in a significant improvement of safety on Polish roads. A prerequisite for success will be awareness on the part of all programme stakeholders, not only of the basic assumptions, but also of the principles which should accompany the actions taken and the most important decisions. A clear definition and understanding of the key principles will allow a common rhetoric and approach to be adopted in the discussion of road accidents. In this way, a synergy effect will be achieved, resulting from the mutual support of the key partners responsible for the implementation of the project. For the purposes of the programme, 7 key principles have been identified referring to responsibility and other key priorities, not exchangeable for other benefits, and resulting from transport and traffic development.

### Pillars

The intervention structure of the *National Road Safety Programme 2021-2030* is based on five pillars, which are the main areas of action dedicated to improving road safety by 2030. These are, respectively:

- Pillar I - Road Safety Management System
- Pillar II - Safe Road User
- Pillar III - Safe Road
- Pillar IV - Safe Vehicle
- Pillar V - Rescue Service and Post-Crash Response

### Priorities and directions of action

Priorities and directions of action have been identified for each of the pillars set out in the programme, taking into account the most important road safety problems and conditioning their solution. Activities have been programmed to address all the most important areas of intervention, namely:

- engineering - understood as technical solutions, e.g. road networks or vehicles, which protect drivers, passengers and other road users and reduce the severity of a possible event,
- supervision - understood as control by authorised services to enforce existing regulations and prevent their violation,
- education - understood as a comprehensive process of increasing knowledge about the dangers existing on the road, through learning and understanding the risks. The aim of educational activities is to change attitudes and behaviour at the level of the individual road user, but also at the level of the community or organisation.

Due to the separate nature and specificity of *Pillar 1, namely the Road Safety Management System*, it has been designed in a different format from the above and includes activities of an organisational and management nature, conditioning the success of the entire programme.

# WHAT VALUES WE WILL BE GUIDED BY



## SUMMARY

The principles of the National Road Safety Programme 2021-2030 ensure a proper understanding of the key values that accompany interventions and decisions. They constitute a kind of catalogue of principles to be taken into account at each stage of planning and implementing actions dedicated to improving road safety. The programme's principles are as follows:

1. We reduce the consequences of mistakes.
2. We design solutions that are friendly to all road users.
3. We improve all elements of the road transport safety system.
4. We share responsibility for road safety.
5. We promote actions based on the latest knowledge and modern solutions.
6. We promote health prevention and sustainable development.
7. We give safety the highest priority.

# PROGRAMME OBJECTIVES

## Chapter 4

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**1**

**WE REDUCE THE CONSEQUENCES OF MISTAKES**

**2**

**WE DESIGN SOLUTIONS THAT ARE FRIENDLY TO ALL ROAD USERS**

**3**

**WE IMPROVE ALL ELEMENTS OF THE ROAD TRANSPORT SAFETY SYSTEM**

**4**

**WE SHARE RESPONSIBILITY FOR ROAD SAFETY**

**5**

**WE PROMOTE ACTIONS BASED ON THE LATEST KNOWLEDGE AND MODERN SOLUTIONS**

**6**

**WE PROMOTE HEALTH PREVENTION AND SUSTAINABLE DEVELOPMENT**

**7**

**WE GIVE SAFETY THE HIGHEST PRIORITY**

## **1 We reduce the consequences of mistakes**

We expect all road users to behave appropriately, obeying generally applicable rules and regulations, but we also recognise that some of them will make mistakes and take risky decisions. Experience shows that even the most skilful driver or the most responsible pedestrian or cyclist may sometimes make a mistake. By implementing effective solutions based on the *Safe System* approach, the consequences of such, often unintentional, mistake should not end in serious injury or death.

## **2 We design solutions that are friendly to all road users**

As a key criterion for the design of safe road transport and traffic solutions we take into account the biomechanical limitations of the human body. The overload tolerance for pedestrians and cyclists ends at around 30 km/h, and for people in vehicles it is around 50 km/h for side impacts, and 70 km/h for frontal impacts. Above these values, the chances of surviving or avoiding serious injury decrease rapidly. An additional argument for the adoption of such a criterion is the change of social structure, including the ageing of population, as well as changes in mobility resulting in an increasing number of vulnerable road users, which makes it necessary to intensify protective measures aimed at pedestrians, cyclists, moped riders and motorcyclists.

## **3 We improve all elements of the road transport safety system**

In view of the multidimensional aspect of road accidents, we are working to improve all critical elements of the road transport safety system. Therefore, we take care of modern and safe solutions in the area of road infrastructure, good technical condition of vehicles, as well as proper behaviour of road users, in particular in relation to speed, use of protective devices (seatbelts, child safety seats, helmets) or avoidance of driving under the influence of alcohol or other similarly acting substances. The measures we take cover the entire road safety triad: man-vehicle-road.

## **4 We share responsibility for road safety**

The problem of road accidents and their consequences cannot rest with the individual road user alone. Particular responsibility for road safety lies with the managers of the individual elements of the system: road infrastructure, traffic supervision, education of traffic participants or the area of road rescue. Therefore, we assume that it is the task and responsibility of traffic participants to observe the rules and restrictions adopted to guarantee an appropriate level of safety. On the other hand, it is the role and responsibility of the managers of the various elements of the system to design it in such a way that, in the event of an accident resulting from a lack of knowledge, skills, individual psycho-physical limitations or an unintentional error, the consequences are minimised as much as possible. Such an approach completely changes the way in which the issue is viewed towards a focus on victims and not only on perpetrators, whose error or deliberate misbehaviour is very often seen as the main cause of road accidents and their consequences.

## **We promote actions based on the latest knowledge and modern solutions**

5

The measures we take are based on scientific knowledge and their effects are accurately measured. We focus our efforts on the most effective solutions with the best cost-effectiveness ratio. In view of changing behavioural patterns, the development of new technologies and changes in the social structure, it is necessary to update the importance of emerging road safety problems and the catalogue of interventions dedicated to them towards the most effective solutions adapted to changing circumstances. Research and modelling of variables should be an essential investment, enabling earlier identification and, as a result, “getting ahead” of new problems and taking effective preventive action. All key activities should be subject to continuous evaluation and effectiveness monitoring. This will make it possible to optimise the whole process of improving road safety towards the most effective solutions, and will further strengthen support for the work being carried out at every level of government, local government and non-governmental organisations and institutions.

## **We promote health prevention and sustainable development**

6

The implementation of tasks aimed at the improvement of road safety is in close correlation with the universally understood policy of health protection and the promotion of sustainable development, with respect for the surrounding environment and the properly enacted rights and privileges of individual groups of road traffic participants. The planned solutions should gradually reduce the main external costs of road transport, including environmental pollution, road accidents and their consequences, noise or congestion. On the other hand, they should support pro-social and pro-health behaviour, enabling the public to undertake many activities, including those related to mobility, in a safe and sustainable manner.

## **We give safety the highest priority**

7

Achieving the ambitious goals of the National Road Safety Programme 2021-2030 requires decisive action and decisions. A prerequisite for success will be to give this issue the highest priority placing the safety aspect of road users first, before other values arising from the transport and traffic system. Investment and regulatory action in this area must be as intensive as other interventions dedicated to public health or sustainable development. The difficulty of such an approach lies in finding the right balance between supporting the development of road transport and the resulting benefits for the economy, and the necessary constraints favouring the preservation of the indisputable priorities that are the health and lives of road users.

# WHAT WE WILL FOCUS ON



## SUMMARY

The prerequisite for achieving the objectives of the National Road Safety Programme 2021-2030 will be the implementation of a number of planned measures translating into a permanent reduction in the level of danger on Polish roads. The main areas of intervention are contained in five pillars covering infrastructural measures, changing the behaviour of traffic participants, improving vehicle safety and increasing the effectiveness of rescue service and post-crash response. Final effect of the interventions undertaken in all pillars, should be a comprehensive improvement in the level of road safety resulting from a continuous increase in the safety of transport and road traffic. This will mean that the public's expectations of the high quality of existing solutions will increase significantly, putting safety ahead of mobility and other benefits of road transport and traffic. It should be stressed that action in the above areas must be based on an effective management system, which is the starting point for a comprehensive and strategic approach to road safety and, in the long term, a prerequisite for the success of individual interventions.



# PILLARS OF THE PROGRAMME

## Chapter 5

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# 1

**ROAD SAFETY MANAGEMENT SYSTEM**

# 2

**SAFE ROAD USER**

# 3

**SAFE ROADS**

# 4

**SAFE VEHICLE**

# 5

**RESCUE SERVICE AND POST-CRASH  
RESPONSE**

*The National Road Safety Programme 2021-2030*, due to the interdisciplinary nature of road safety issues, assumes a number of systematised interventions in specific areas, to which appropriate priorities and directions of actions have been assigned. The document takes into account comments and conclusions resulting from the evaluation of current transport and road safety programmes and strategies.

*Compared to the National Road Safety Programme 2013-2020*, the part concerning the action pillars has been modified in this document. With a view to keeping the document in line with solutions and recommendations adopted at global and European level, the new programme adopts the following 5 pillars:

- I Road Safety Management System
- II Safe Road User
- III Safe Roads
- IV Safe Vehicle
- V Rescue Service and Post-Crash Response

The division in force in the *National Road Safety Programme 2013-2020* was intended to highlight the issues of speed as a dominant feature of road accidents and, in particular, their consequences. Unfortunately, as a result of such a breakdown, the readability of the intervention structure has been diffused.

The current division means that speeding, which is the main problem on Polish roads, has been included in pillar two, *Safe Road User*, and pillar three, *Safe Road*. Such a solution allows to clearly assign the issue of too high and inappropriate speed as immanent and causing fatal consequences behaviour of a significant part of drivers, as well as linking the most effective methods of limiting the speed problem with interventions in the area of road infrastructure.

It should be emphasised that the *Safe Road User* pillar comprehensively addresses all the key problems resulting from the behaviour of road users, such as, in addition to speed, issues related to the proper use of safety equipment (seatbelts, child safety seats, helmets), driving under the influence of alcohol or similar substances, and the growing problem of driving with distracted attention caused by the inappropriate use of mobile electronic devices.

The fourth and fifth pillars also address key road safety issues. A high level of vehicle safety solutions translates into an adequate level of protection for drivers and minimisation of injuries to vulnerable road users. It is therefore a kind of protective barrier against the risks and consequences of accidents. Additionally, in the event of an accident, the last element of the system, which is the rescue and medical services, has the task of reaching and assisting the injured as quickly as possible, in such a way as to minimise the consequences of the crash.

# ROAD SAFETY MANAGEMENT SYSTEM

## **Implementation of a road safety management system based on the best and most effective solutions**

Road safety is a common concern and depends on the attitudes and behaviour of all road users. It is also a result of the action taken by the many partners involved in the processes of infrastructure design and management, education, traffic supervision, and victim assistance activities. The streamlining of organisational structures, stable funding, coordination and commitment, as well as continuous monitoring of the activities carried out and consistent communication in this regard are a prerequisite to achieve the ambitious goals of the National Road Safety Programme 2021-2030.



## **OUR GOAL**

The implementation of the *National Road Safety Programme 2021-2030*, as adopted, will be based on the long-term *Vision Zero*, the principles of the *Safe System* approach and the so-called *Systemic Management*, a model of interventions based on related and consecutive elements:

- institutional management functions,
- concrete actions,
- results.

In line with the latest knowledge and practice of the countries with the highest level of road safety, the basis for a long-term prevention policy should be, first and foremost, the optimisation of institutional management functions, including coordination, legislative solutions, funding mechanisms, comprehensive promotion, monitoring tools and the effectiveness of interventions, as well as the transfer of the most recent scientific knowledge about road accidents and the most effective ways to reduce their consequences. With this in mind, and taking into account national considerations as well as existing organisational solutions, the following areas of intervention and lines of action are planned under the *Road Safety Management System* pillar:

#### **Optimising the organisational structures of the road safety management system at national and regional level**

Following the experience of other countries and the recommendations of international organisations, the role of the so-called National Lead Institution should be assigned to an executive body specifically appointed for this task, equipped with the competences and necessary tools for effective planning, monitoring, coordination, communication and financing of interventions.

This type of model assumes the functioning of an organisationally integrated institution with high financial and organisational capacities and, at the same time, responsible for the quality and effectiveness of the implemented solutions in all areas of transport safety, including the area of transport and road traffic safety. The comprehensiveness of such a solution additionally strengthens the system processes in the area of road traffic safety by implementing the best solutions and experiences from the branches of transport characterised by a much higher level of safety culture and lower risk, which will ultimately contribute to improving the effectiveness of road safety interventions.

An intermediate model for this type of improvement may relate to the NRSC's existing model solution, in which key institutional management functions are carried out by the Secretariat of the National Road Safety Council.

Circumstances resulting from frequent changes in the structure of government administration are an additional factor that is not favourable to long-term processes, also in the area of transport and road safety policy. It should be emphasised that one of the conditions for success is to ensure the greatest possible stability of the organisation or entity responsible for assessing, planning and then implementing specific solutions. This makes it possible to proceed more smoothly with very often difficult decisions and opinions as to the state of the public's will and expectations in terms of ensuring a high level of safety.

As the present experience and the analyses proposed in the *National Road Safety Programme 2013-2020* show, assigning the role of National Lead Institution to the National Road Safety Council alone is not the target solution. In principle, the current competences of the National Road Safety Council should be limited to acting as an inter-ministerial team for road safety being a subsidiary body of the Council of Ministers. It should, as before, influence the directions of the government administration's activities in this area, while the activities and projects implemented by the NRSC members and the Secretariat of the National Road Safety Council itself should be systematically strengthened both organisationally and financially, adequate to the scale of the threat on Polish roads.

Solutions to organisational structures at regional level should be derived from national solutions. The current model of road safety management system in the provinces is based on Voivodeship Road Safety Councils. They perform analogous functions at the regional level to those performed by the National Road Safety Council at the central level. The executive units of the Voivodeship Road Safety Councils shall be the Secretariats of the Voivodeship Road Safety Councils.

The functioning of the regional organisational structures of the Road Safety Management System needs to be improved. A key problem is that the executive units, which are the Secretariats of the Voivodeship Road Safety Councils, operate on the basis of the Voivodeship Road Traffic Centres, which have the status of independent self-governmental units. This means that they are self-financing organisations, with the revenues coming mainly from the examination activities of candidates for driving licences. According to the law, the profit generated by the above units may be allocated to road safety activities in strictly defined areas, especially those related to traffic education. Such a situation, meaning the dependence of the entity's activity on its financial condition, results in a lack of stability and continuity of funding, which are critical at the regional level of the elements of the Road Safety Management System.

Experience from many years of functioning of Voivodeship Road Safety Councils and their executive units, namely Secretariats of the Voivodeship Road Safety Councils, shows that the key problem at the regional level is the lack of stable sources of funding for the managing institutions. It is noticeable, due to the complete independence of the decisions of the management of Voivodeship Road Traffic Centres, that there is an exceptionally large variation in the activity of individual centres, in relation to road safety issues. Apart from extremely active units, acting as de facto regional leaders, it is possible to show centres that are less involved, implementing processes at a minimum level and, as a result, slowing down the improvement of safety in individual regions. Due to demographic and mobility pattern changes, and consequently a lower number of candidates for driving licence, the above situation may deteriorate significantly without the necessary optimisation. This means that a prerequisite for the smooth functioning of the regional road safety management system will be the optimisation of existing solutions towards an independent model budgetary linked to a permanent source of funding from the provinces and, as a result, guaranteeing stability and continuity of cooperation between the regional and national levels.

Given the diverse and multi-level nature of road accident issues, mechanisms should be developed to support systemic solutions (including organisational ones) at the local level. Long-term road safety strategies carried out by a properly prepared local management team, based on ongoing cooperation at regional and national level, provide a greater guarantee of effectiveness than ad hoc measures aimed at improving road safety. It is also important that interventions at county, municipality or city level should fit into the long-term safety policy of the region and the country, taking into account its key priorities and orientations.

### **Optimisation of legislation with respect to the Road Safety Management System**

Critical to the success of a long-term road safety strategy is the creation of optimal legislative circumstances for all pillars of activity. The content of the *National Road Safety Programme 2013-2020* included provisions on the legitimacy of preparing a single legal act equivalent to act of parliament, referring directly and comprehensively to systemic solutions in the area of road safety. Unfortunately, the proposal suggested in the document, during the timeframe of the programme, has not been realised. As a result, a number of dispersed legal acts, directly or indirectly related to road traffic safety, are still in force. They refer to various areas of intervention, including traffic legislation and education, the operation and management of the road network, or traffic supervision.

Bearing in mind that the relevant legal circumstances determine the feasibility of specific actions with regard to the Road Safety Management System, in the perspective of the new *National Road Safety Programme 2021-2030*, steps should be taken to optimise the existing legislation based on uniform statutory provisions, guaranteeing the coherence and complementarity of the legal circumstances, as well as the organisational and financial stability of the system solutions.

The model operating so far at national level is based on the activities of the Secretariat of the National Road Safety Council fulfilling the tasks ascribed to the National Lead Institution. Due to its organisational affiliation, the activities of this unit are financed from the budget of the Ministry of Infrastructure and additionally supported with funds from, inter alia, European Union programmes. The current structure of the Secretariat of the National Road Safety Council, as well as the level of funding, are not sufficient considering the scale of the problem of the threats on Polish roads. Further organisational and financial solutions should be sought to enable even more efficient road safety management, thus guaranteeing the continuity and effectiveness of the work carried out. The process of substantive cooperation between the institutions of all branches of transport safety and the tasks assigned in the respective areas should be deepened in such a way as to ensure the coherence of the initiatives undertaken.

In the case of the regions, the objective should be to develop a permanent funding mechanism for the implementing units, which are the Secretariats of the Voivodeship Road Safety Councils, from provincial funds. Analogous to the national level, but on a smaller scale, at the level of the voivodeships there are tasks included in the catalogue of institutional management functions, which ultimately condition the implementation capacity. In view of this fact, stable and continuous financing of tasks in this area should be sought. The organisational structures of the Secretariats of the Voivodeship Road Safety Councils function for the most part within the Voivodeship Road Traffic Centres, so they have organisational capacity and experience that is worth taking into account when designing target solutions. Unfortunately, these units do not have a stable source of funding. Due to their statute, a self-governing provincial legal entity, and the assumed mechanism of self-financing, these units have an individual financial policy, and can allocate any surpluses to specific activities dedicated to road traffic safety. It should be underlined that the level of involvement of particular centres is subject to individual management policies, with no guarantee and continuity of funding for the necessary mechanisms, especially those aimed at regional system solutions. The situation is aggravated by the fact of changing business circumstances and the consequent worsening economic situation of the examination centres.

The final shape of solutions at the regional level will additionally depend on the changing legal circumstances concerning examination centres. In the event that the function of examining driver candidates currently assigned to marshals is transferred to provincial governors, it will be necessary to sanction the activity of Secretariats of the Voivodeship Road Safety Councils in regional structures of government administration, instead of the existing model.

Regardless of the final administrative solutions, the necessity of separating a dedicated fund for the implementation of regional tasks in the area of the Road Safety Management System, with a fully separate system of control of the funds spent, should be highlighted. Such a solution is a necessary investment, without which the effectiveness of the national road safety management system and, ultimately, the level of safety on Polish roads will not increase as expected.

### **Optimisation of the data collection and analysis system**

The National Lead Institution should have full access to reliable data on road safety in Poland. At present, most of the data relating to road events and their consequences comes from the Police Accident and Collision Record System /SEWiK/, which allows extracting information on events in the context of the circumstances of their occurrence, characteristics of victims and perpetrators. Additional data on road safety issues comes from the data bases of road managers and from the healthcare system. An attempt to integrate road traffic safety data has been made under national conditions by the Motor Transport Institute, by creating the Polish Road Safety Observatory. The solution, which operates within the institute's structures, allows access to and monitoring of a wide range of data and provides a collection of information on road traffic issues over the last few decades.

Bearing in mind the highest possible quality of data, as well as the fact that the current system of data collection is based on many different sources, efforts should be made to create a complete, coherent and integrated database, constituting an element of a broader Information System on Road Traffic Safety in Poland. Such a model will make it possible to optimise and improve the analysis of the information held, as well as to use it in the most effective way in order to pursue a targeted information policy on all key aspects of road safety.



### **Optimisation of the road safety research and knowledge transfer system**

The National Lead Institution should have the best possible access to the latest knowledge resulting from in-depth research in the field of mobility and, in particular, transport and traffic safety. In addition, it should be able to analyse the acquired knowledge and information in a larger context, relating to policies for broader social health and changing socio-economic circumstances.

In view of the above, one of the competences of the National Lead Institution should be long-term planning of the subject matter and scope of research in areas relating directly or indirectly not only to road safety, but also to issues correlated with it. The improvement of the process currently carried out by the Secretariat of the National Road Safety Council will allow a more effective assessment of all factors and circumstances affecting the level of road danger, as well as forecasting of changes that may occur in the future.

In addition, it is necessary to take into account the need to optimise the long-term mechanism of cooperation between the National Lead Institution and the research community in the field of transport and road safety. The experiences and conclusions from a number of research projects should be used both at the level of present analyses and to complete the Road Safety Information System.

The role of the National Lead Institution should also be to plan and conduct staff training, both in terms of systemic solutions and in relation to specific problems. Staff training at national and regional level should be carried out on a regular and repeated basis, thus guaranteeing the transfer of the latest knowledge on the most effective solutions and trends in all areas and aspects of transport and road safety.

**Intervention areas and directions  
of system activities of the pillar**  
*Road Safety Management System*

**AREAS OF INTERVENTION**

**Optimising the organisational structures of the road safety  
management system at national level**

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**Optimising the organisational structures of the road safety  
management system at regional level**

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**Optimisation of legislation with respect to the  
Road Safety Management System**

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**Creating funding mechanisms for the  
Road Safety Management System**

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**Optimisation of the data collection and analysis system**

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**Optimisation of the road safety research  
and knowledge transfer system**

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**Optimisation of traffic safety communication measures**

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## DIRECTIONS OF SYSTEMIC ACTIVITIES

- Strengthening and restructuring the NRSC (Secretariat of the National Road Safety Council) as the National Lead Institution for road safety, equipped with the tools and powers necessary to effectively carry out institutional management functions and, at the same time, responsible for the quality and effectiveness of the solutions implemented in cooperation with other organisations, in all sectors of transport safety, including the area of transport and road safety.
- Strengthening and restructuring the executive units of the Voivodeship Road Safety Councils, which are the Secretariats of the Voivodeship Road Safety Councils, particularly in organisational and financial terms.
- Determining the minimum scope and principles of financing the main system tasks of the Secretariats of the Voivodeship Road Safety Councils, regardless of the existing solutions resulting from the provisions of the Road Traffic Law and the economic situation of the Voivodeship Road Traffic Centres.
- Revising existing legislation related to systemic solutions in the area of road safety.
- Creating optimal legislative circumstances for all pillars of activities.
- Optimising the existing legislation related to systemic solutions in the area of road traffic safety based on a uniform law - guaranteeing consistency and complementarity of legal circumstances, as well as organisational and financial stability of systemic solutions.
- Identifying and sanctioning long-term sources and mechanisms of financing NRSC/Secretariat of the NRSC activities.
- Identifying and sanctioning long-term sources and mechanisms of funding for the executive units of the Voivodeship Road Safety Councils, such as the Secretariats of the Voivodeship Road Safety Councils.
- Assigning the role of database owner and operator.
- Creating a complete and integrated road safety database as a key element of the wider Road Safety Information System in Poland.
- Optimising the analysis of information, and using it in the most effective way to pursue a targeted and coherent national information policy, on all key aspects of road safety.
- Defining competences with regard to planning the subject matter and scope of research, in areas directly or indirectly related to road safety and associated issues.
- Update and improve the long-term cooperation mechanism between the National Lead Institution and the scientific community conducting research on transport and road safety issues.
- Planning and implementing the staff training process, both in terms of system solutions and in relation to specific problems, at national and regional levels.
- Assigning to the National Lead Institution the competence and responsibility for the preparation and implementation of a coherent information policy on the measures included in *the National Road Safety Programme 2021-2030*.
- Preparing a unified model for a communication strategy based on an analysis of current road safety problems taking into account the activities of key national and regional partners, based on a so-called annual calendar of communication activities, drawn up by the National Lead Institution.

### Optimisation of traffic safety communication measures

Given the scale and importance of the road safety issue and the projected activities of the *National Road Safety Programme 2021-2030*, a coherent information policy based on a unified communication strategy should be pursued.

The unit responsible for conducting a long-term and effective information policy should be the National Lead Institution. Due to the fact that information and promotion activities are an essential element of each project of social character, a uniform model of communication strategy should be created at the national level. Such a solution will allow obtaining a synergy effect resulting from the fact that the involvement of many partners implementing similar activities, very often dispersed in time and place, will be supported from the level of the implementing and coordinating authority at the national level. The existing model, operating under an independent information policy of the national level, and very often under autonomous regional activities, did not fully exploit the potential arising from the involvement of all partners, in particular local authorities and NGOs.

An example of good practice and an efficient solution could be the effective use of an annual calendar of communication activities, prepared by the National Lead Institution based on the analysis of data and current road safety problems. Using such a calendar (communication action strategy), it will be possible to prepare an annual plan of specific projects and campaigns, and then to establish an implementation framework taking into account the scope of activity and the role of regional partners. This solution will make it possible to significantly optimise cooperation between national and regional lead institutions such as the Secretariats of the Voivodeship Road Safety Councils.

# SAFE ROAD USER

## Safe and responsible behaviour of all road users

An integral part of participating in road traffic is making choices. We decide on the speed at which we travel, we choose whether to answer the phone while driving, and whether to continue travelling when we are increasingly tired. It is significant that, despite the obvious cause-and-effect relationship between the choices and decisions made and their consequences, most road users assume that they are doing the right thing and blame other road users for the given situation. In view of the ambitious goals of the National Road Safety Programme 2021-2030, it should be stressed that critical to their achievement will be actions that effectively promote responsible and safe behaviour by vehicle drivers and other road users.



## OUR GOAL

Minimising the risk to road users' health and life is the primary goal of institutions and entities implementing road safety measures. In line with *Vision Zero* and the *Safe System*, it is the human being and his or her limitations that are the starting point for shaping a long-term prevention policy and designing solutions which, taking into account the possibility of making a mistake, minimise its consequences.

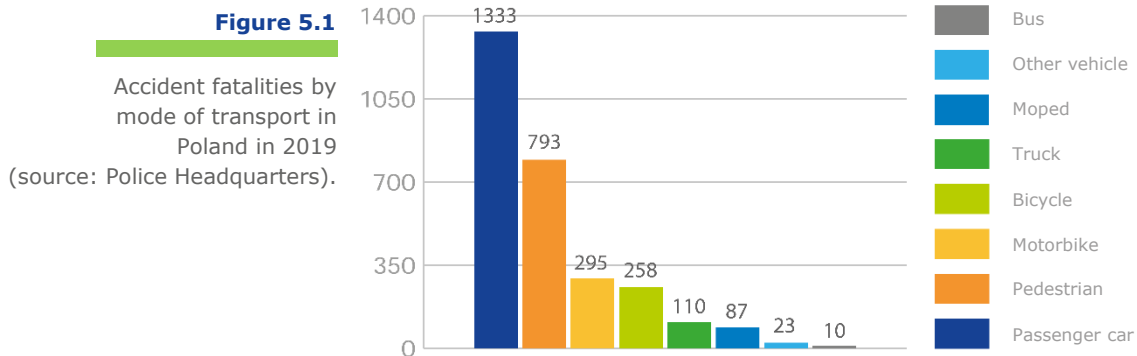
However, it should be stressed that even the best-constructed road safety system, which limits the consequences of errors, will not be fully effective if its users do not respect the principles and rules relating to behaviour which is a cause or circumstance conducive to the most serious road events.

This chapter deals directly with those categories of behaviour whose consequences result in a high level of danger on Polish roads. The most important of these include the issues of excessive or inappropriate speed, driving under the influence of alcohol, driving under the dispersed attention, and failure to use seatbelts or child safety seats as well as other safety equipment.

## Facts and figures

### Victims

A key problem of road traffic safety in Poland is an extremely high risk for vulnerable road users. Pedestrians, cyclists, motorcyclists, scooter and moped riders are particularly vulnerable to severe consequences as a result of committing a mistake resulting in an accident. In 2019, these categories of road users accounted for 48.6% of fatalities and 49.2% of seriously injured victims.



An analysis of the number of accidents and their consequences in relation to vulnerable road users shows a worrying increase of danger in the group of motorcyclists and moped riders. Compared to 2018:

- the number of motorcyclists killed on the roads increased by 24.8%,
- the number of moped riders killed on the roads increased by 12.3%.

There has been a significant improvement in pedestrian safety between 2010 and 2019. The number of fatalities in this category of road users decreased during this period by 36% and the number of seriously injured victims by 24%. This means a significant increase in pedestrian safety on Polish roads, however, the percentage of fatalities in this group is still higher than the European average in relation to all categories of road users. In 2019, pedestrians accounted for 27% of all accident fatalities in Poland against an average value of 21% recorded in EU countries.

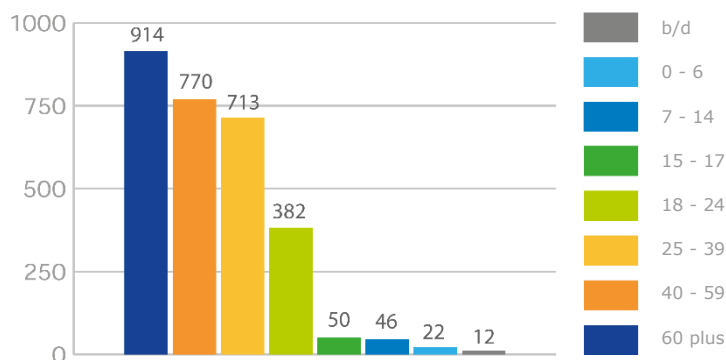
MODE OF TRANSPORT	2010		2018		2019		CHANGE 2019/2018	CHANGE 2019/2010
	NUMBER	% OF TOTAL	NUMBER	% OF TOTAL	NUMBER	% OF TOTAL		
Pedestrians	1236	31.6	803	28.1	793	27.3	-1%	-36%
Passenger car	1853	47.4	1291	45.1	1333	45.8	3%	-28%
Bicycle	280	7.2	285	10	258	8.9	-9%	-8%
Motorbike	259	6.6	238	8.3	295	10.1	24%	14%
- of which vehicles up to 125 cc	No data	No data	35	1.2	33	1.1	-6%	No data
Truck	142	3.6	119	4.2	110	3.8	-8%	-23%
- of which with MPLW up to 3.5 tonnes	No data	No data	83	2.9	84	2.9	1%	No data
Moped	83	2.1	76	2.7	87	3	14%	5%
Bus	14	0.4	19	0.7	10	0.3	-47%	-29%
Other vehicle	40	1	31	1.1	23	0.8	-26%	-43%
- of which four-wheeled	No data	No data	12	0.4	5	0.2	-58%	No data
Total in vehicles	2671	68.4	2059	71.9	2116	72.7	3%	-21%
<b>TOTAL</b>	<b>3907</b>	<b>100</b>	<b>2862</b>	<b>100</b>	<b>2909</b>	<b>100</b>	<b>2%</b>	<b>-26%</b>

**Table 5.1**

Accident fatalities by mode of transport in Poland in 2010, 2018, 2019 (source: Police Headquarters).

The most endangered group of vehicle users in Poland are drivers and passengers of passenger cars. In 2019, 1,333 fatalities and 4,584 seriously injured victims were recorded in this group of road users, accounting for 45.8% and 43.1% of all fatalities and seriously injured victims respectively.

The largest group of road accident fatalities in Poland in 2019 were people aged 60 and over. There were 914 fatalities in this age category, accounting for 31.4% of all fatalities.



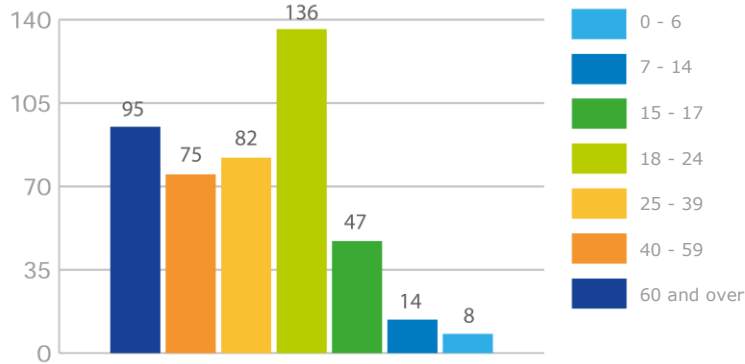
**Figure 5.2**

Road accident fatalities by age of users in Poland in 2019 (source: Police Headquarters).

The greatest risk of being a fatality in a road accident in Poland concerns young people between the ages of 18 and 24. The rate of road accident fatalities per 1 million population in this age group is 136, which means an extremely high-risk level. This situation has persisted for many years, confirming that road accidents are the greatest threat to the health and lives of young people just starting to drive.

**Figure 5.3**

Road accident fatality rate per 1 million population of a given age group in Poland in 2019 (source: Police Headquarters).

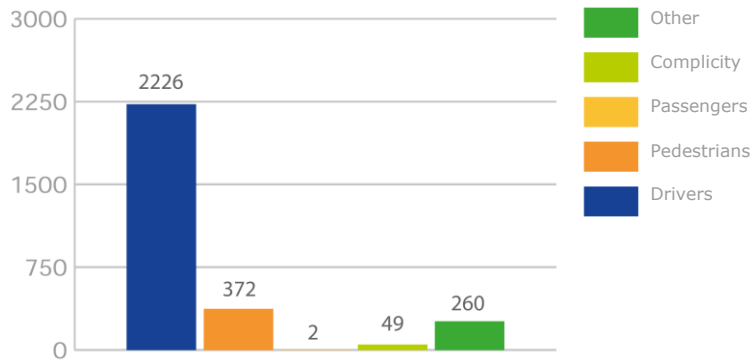


**Perpetrators**

The largest group of road accident perpetrators, also causing the most severe consequences, are vehicle drivers. In 2019, this group of users were the perpetrators of 26,534 accidents resulting in 2,226 deaths. During the same period, pedestrians were the perpetrators of 1,879 accidents resulting in 372 deaths.

**Figure 5.4**

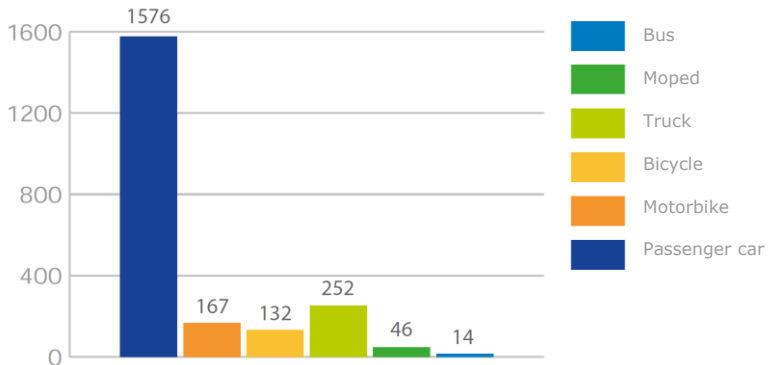
Perpetrators of fatal accidents in Poland in 2019 (source: Police Headquarters).



As for the type of vehicle driven by the perpetrators of accidents resulting in fatalities, passenger cars definitely dominate. As a consequence of accidents involving such vehicles, 1,576 people died in 2019.

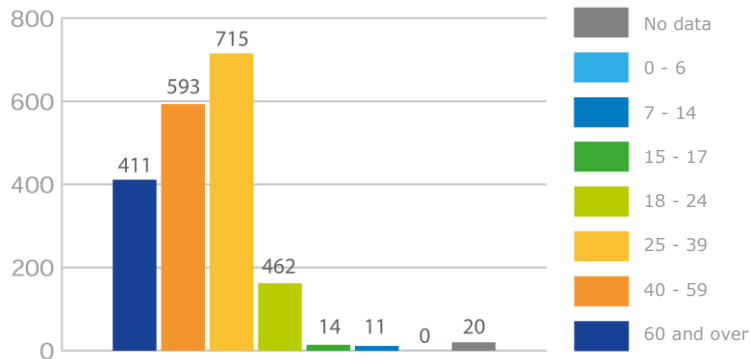
**Figure 5.5**

Perpetrators of fatal accidents by mode of transport in Poland in 2019 (source: Police Headquarters).





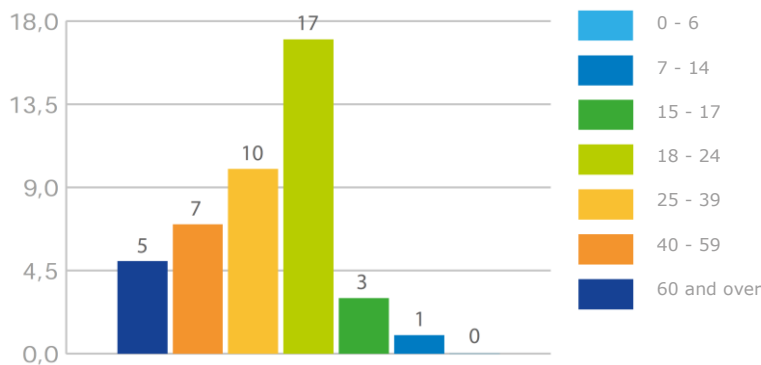
The perpetrators of 73.1% of accidents in 2019 were men and 22.9% women. Among the driving road accident perpetrators with the highest number of fatalities, those between the age from 25 to 39 should be identified. In 2019, this age group was the perpetrator of road accidents resulting in a total of 715 fatalities.



**Figure 5.6**

Perpetrators of fatal accidents by age of driver in Poland in 2019 (source: Police Headquarters).

Young drivers aged 18-24 are a particular problem. In 2019, they caused 4,910 accidents, resulting in 462 deaths and 6,409 injuries. Taking into account the population of this age group, such a state means that the risk rate of causing an accident expressed in terms of number of accidents per 10,000 people is 17.4 and is definitely the highest in comparison to other age groups driving and being the perpetrators of road accidents in Poland.



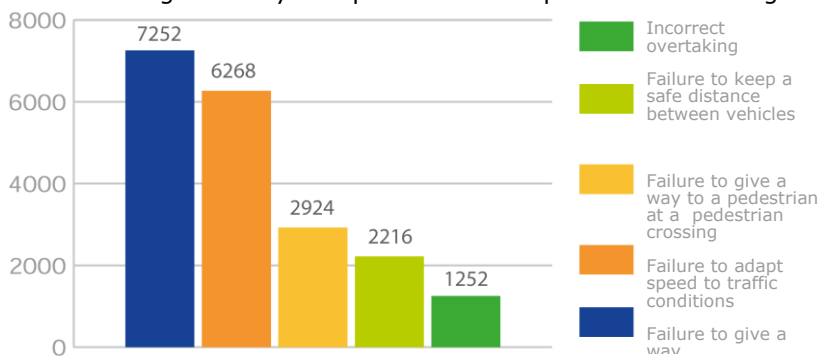
**Figure 5.7**

Road accident rate per 10,000 people of a given age group in Poland in 2019 (source: Police Headquarters).

**Causes**

The most common reasons of accidents caused by drivers include:

- failure to give a way,
- failure to adapt speed to traffic conditions,
- failure to give a way to a pedestrian at a pedestrian crossing.



**Figure 5.8**

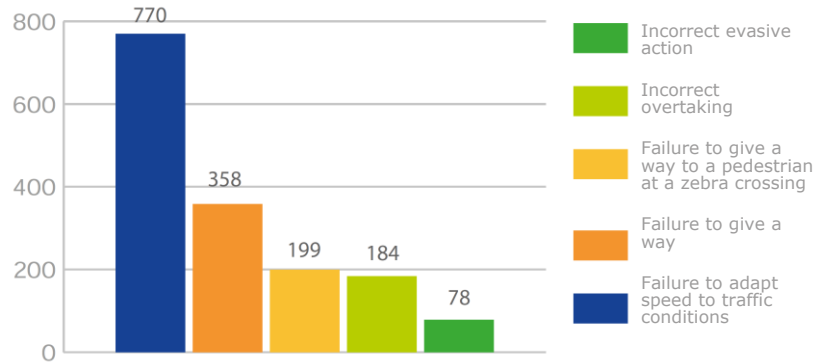
Number of road accidents committed by drivers by cause in Poland in 2019 (source: Police Headquarters).

The main causes of road accidents with the most severe consequences are closely related to speed. In 2019, the three key causes of fatal accidents caused by drivers included:

- failure to adapt speed to traffic conditions,
- failure to give a way,
- failure to give a way to a pedestrian at a pedestrian crossing.

**Figure 5.9**

Number of road accident fatalities committed by drivers by cause in Poland in 2019  
/source: Police Headquarters/.

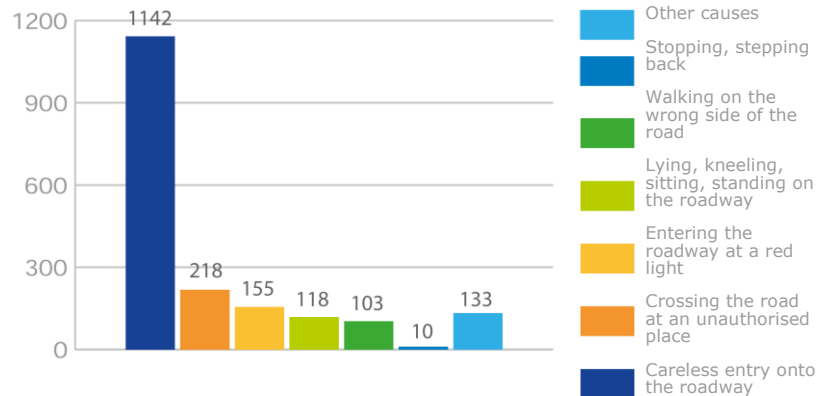


The most common reasons of accidents caused by pedestrians include:

- careless entry onto the roadway,
- crossing the road at an unauthorised place,
- entering the roadway at a red light.

**Figure 5.10**

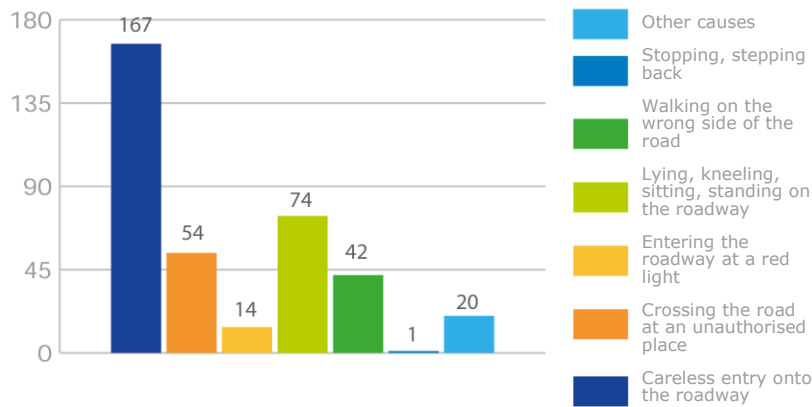
Number of road accidents committed by pedestrians by cause in Poland in 2019  
(source: Police Headquarters).



In 2019, the three key causes of fatal accidents caused by pedestrians included:

- careless entry onto the roadway,
- staying on the roadway,
- crossing the road at an unauthorised place.

Such a situation means that in the Polish reality, with regard to the behaviour of pedestrians as perpetrators of accidents with the most serious consequences, the causes (indicated in reports) related to careless or inappropriate behaviour of the pedestrian on the road prevail.

**Figure 5.11**

Number of road accidents and fatalities committed by pedestrians by cause in Poland in 2019 (source: Police Headquarters).

Statistics show that a significant circumstance that increases the risk on the road is driving under the influence of alcohol. In 2019, intoxicated drivers were involved in 1,914 accidents, resulting in 225 deaths and 818 serious injuries. It should also be stressed that the problem of alcohol as a factor affecting road safety does not only concern drivers, but also pedestrians. In 2019, pedestrians were involved in 728 accidents, resulting in 86 deaths and 292 serious injuries.

YEAR	ACCIDENTS		FATALITIES		SERIOUSLY INJURED	
	NUMBER	%	NUMBER	%	NUMBER	%
drivers under the influence of alcohol						
2017	1820	6	218	8	766	7
2018	1864	6	227	8	786	7
2019	1914	6	225	8	818	8
2019/ 2018	3%		1%		4%	
pedestrians under the influence of alcohol						
2017	874	3	97	3	331	3
2018	819	3	88	3	331	3
2019	728	2	86	3	292	3
2019/ 2018	-11%		-2%		-12%	

**Table 5.2**

Accidents involving persons under the influence of alcohol in Poland in 2017-2019 (source: Police Headquarters).

## RISK FACTORS

Based on scientific knowledge and available statistical data, it is possible to identify the most important risk factors related to the Safe Road User pillar. Bearing in mind that human error is the most common cause of road accidents, the following factors and road participant behaviour can be identified as dominant and having the greatest impact on the number and severity of events:

### Speed

Driving at excessive or inappropriate to the road conditions speed is the biggest challenge to road safety. The results of the vast majority of scientific studies show that excessive speed causes the higher probability of a road accident, and influence the severity of such an event. In the case of Poland, inappropriate speed is the cause of about 20.7% of accidents and, as a consequence, 26.5% of fatalities. In addition, high speed of vehicles contributes to higher levels of air pollution, noise, fuel consumption, consequently reducing the quality of life of people living near roads and streets.

According to the Vision Zero philosophy, the speed of moving vehicles must be limited to the extent that takes into account the bio-mechanical limitations of the human body and its level of tolerance to overloading, resulting from a collision between a vehicle and an vulnerable road user or from a collision of two vehicles. The condition for permanent improvement of road traffic safety will be the preparation and implementation of comprehensive solutions for effective speed management on Polish roads and its enforcement.

### Alcohol and other similarly acting substances

Intoxication of road users due to alcohol or other similarly acting substances is one of the key factors increasing the risk in traffic. While not being the cause of accidents on its own, through its impact on the psychomotor skills of the road accident participant, it encourages mistakes, as well as an inadequate understanding of the situation and the consequences of decisions taken. The biggest problem, much more serious than the mistakes of intoxicated pedestrians or cyclists, is the inappropriate behaviour of intoxicated drivers, which results from the high speed and weight of vehicles driven by them, and in consequence from the high severity of accidents caused.

Based on best practices, it should be emphasised that the condition for success in terms of permanent reduction of the danger resulting from the behaviour of intoxicated road traffic participants will be ad hoc: multiplied sanctions for such punishable acts, comprehensive educational and information activities supported by effective supervision, and in the long term: broadly implemented state policy regarding prevention and treatment of addiction.

### Driving while distracted and tired

A prerequisite for a high level of road safety is, among other things, a high level of driver concentration while driving. As a result of distraction (visually: looking aside, cognitively: thinking about other things while driving, or physically: taking the hands off the wheel to perform another activity while driving), the risk of causing or being involved in a road accident is significantly increased.

Given the dynamic development of modern technologies, including mobile phones and other nomadic devices used in vehicles, attention should be paid to intensifying information activities promoting appropriate behaviour to prevent driving with distracted attention. It is also important to educate road users, especially drivers, about the impact and direct consequences of fatigue on the performance of functions necessary for safe driving, and to educate on travel planning tactics and relaxation techniques.

### **Non-use or improper use of seatbelts and child safety seats in vehicles as well as other safety equipment**

Lack of use or inadequate use of protective devices significantly increases the consequences of road accidents. Essential elements for the protection of road users include seatbelts and child safety seats in vehicles, as well as bicycle and motorbike helmets.

From the point of view of road safety prevention, activities aimed at the dissemination of safety devices are an extremely effective means of reducing the consequences of road accidents. It should be stressed that the greatest effectiveness in this respect will be possible if interventions in the area of education and promotion and effective supervision are intensified simultaneously. Widespread provision of information on the benefits of vehicle safety devices and protective equipment, backed by scientific knowledge and argumentation from authorities, combined with a consistent prevention policy, still provides ample scope for changing behaviour in the desired direction.

## **RISK GROUPS**

The identification of problems and risks should take place in relation to all road users. In view of the different phenomena and circumstances pertaining to the various categories of road users, the differences resulting from age, experience, as well as social, economic or health circumstances, the following risk groups should be fully analysed:

1. Young drivers
2. Children
3. Older road users (aged 60+)
4. Disabled people
5. High-risk drivers
6. Pedestrians
7. Cyclists
8. Moped/scooter riders
9. Motorcyclists

Taking into account the necessity of adopting priorities and then defining the directions of action dedicated to them, based on the analysis of the current state of road safety in Poland, as well as the biggest problems, the following categories of road traffic participants should be identified as key risk groups of the Safe Road User pillar:

### **Vulnerable road users: pedestrians, cyclists, moped/scooter riders, motorcyclists**

In 2019, these four groups of road users accounted for 48.6% of fatalities and 49.2% of seriously injured victims. In-depth analyses show an increase in risk for cyclists, moped riders and motorcyclists. Between 2010 and 2019, there was a decrease in the number of pedestrians who were the most seriously injured, but despite this fact, the risk associated with this group of road users is still extremely high and significantly exceeds the average values recorded in the EU countries.

A circumstance which contributes to a particularly high risk of vulnerable road users in Poland is too high speed of vehicles. Pedestrians, cyclists, motorcyclists and moped riders (themselves moving at speeds not adjusted to traffic conditions) are confronted with traffic of vehicles with high speed and weight. While lacking physical protection, they are particularly vulnerable to serious injury during an accident. Designing solutions to prevent collisions between vulnerable road users and fast-moving vehicles should be the most important criterion for a safe road system. In the case of motorcyclists, an additional circumstance that increases the risk of serious injury is the speed of these vehicles and, as a result, the smaller error margin. The consequence of this situation is the extremely high, increasing level of danger for this category of road user in recent years. In 2019, there was an increase of 25% in the number of killed motorcyclists, compared to 2018.

### **Drivers: young and high-risk drivers**

Drivers and passengers in passenger cars are the most vulnerable category of vehicle users in Poland. In 2019, 1,333 fatalities and 4,584 seriously injured victims were recorded in this group of road users, accounting for 45.8% and 43.1% of all fatalities and seriously injured victims respectively.

A key problem and risk group is young drivers in the 18-24 age range. The fatality risk rate for this age group, expressed in terms of fatalities per 1 million of the population, is 135.5 and is definitely the highest. In addition, it should be emphasised that young drivers are in the group with the highest risk of causing an accident. The rate of this risk, expressed in terms of accidents per 10,000 people, reached 17.4 in 2019, which means that it was the highest in relation to the other driving age groups.

In-depth analyses allow to identify a category of drivers that are especially prone to risky behaviours. For the purposes of this study, this group is referred to as "high-risk drivers". This is a relatively small group, in terms of all road users, of drivers who have the following repetitive behaviours in common:

- recklessness and making many mistakes on the road,
- a high number of dangerous behaviours resulting in temporary withdrawal of rights,
- driving despite temporary withdrawal or lack of the required licences,
- habitual speeding,

- driving after consumption of alcohol and/or drugs or other substances having a similar effect,
- “alcohol recidivism” behind the wheel,
- frequent involvement in road collisions and accidents,
- aggressive behaviour on the road.

The above group of “high-risk drivers” does not constitute the largest percentage in relation to all drivers on Polish roads. Unfortunately, the relatively small number translates into an inversely proportional extremely high risk and, consequently, the occurrence of the most serious road accidents. Targeted and effective supervision, education and information policy and systemic solutions with respect to this group of drivers may be an effective way to reduce the phenomenon. The latest technological solutions, such as AlcoLock or ISA (Intelligent Speed Adaptation) devices, can also be helpful.

Circumstances favouring a particularly high level of risk by the indicated groups of road users in Poland, in addition to those mentioned above, are also issues resulting from young age, including personal (motivations and values), social (lifestyle, media influence, acceptance of risk) and physiological (alcohol, drugs and other similarly acting agents) factors. The above factors have a decisive impact on a range of behaviours caused by incorrect assessment of situations and an inability to identify risks, resulting in high level of road danger.

## PRIORITIES AND DIRECTIONS OF ACTION

Based on the diagnosis of the state of road traffic safety in Poland, as well as the functional and organisational solutions adopted in national and foreign documents, two priorities were adopted for the *Safe Road User* pillar:

- Priority 1 - creating safe behaviours of road users
- Priority 2 - protection of road users

The Safe Road User pillar will aim to reduce the negative consequences of inappropriate road user behaviour. Key aspects will be the issues of safe speed, sobriety on the road, prevention of driving with distracted attention, use of seatbelts, child safety seats as well as safety devices.

### Priorities and directions of action under the *Safe Road User* pillar

PRIORITIES	ENGINEERING
Shaping safe behaviours of road users	<ul style="list-style-type: none"> <li>Implementation of traffic calming measures</li> <li>Speed zones in built-up areas</li> <li>Transforming the road and street network to achieve a hierarchical structure</li> </ul>
Protection of road users	<ul style="list-style-type: none"> <li>Implementation of roadside measures to protect road users</li> <li>Development and dissemination of road traffic calming measures</li> </ul>



It should be stressed that the achievement of this objective cannot be reduced to general awareness-raising and education of road users, which is far less important in a modern Safe System approach. Experience to date indicates that solutions and actions based on permanent compliance and enforcement systems, supported by targeted education with regard to the safety-critical behaviour of road users, will be crucial for effectiveness. Given the extremely high level of risk among all categories of so-called vulnerable road users, interventions for the promotion, development and wide-spread implementation of road (engineering) protection and traffic calming measures will be a particularly important additional direction of action.

DIRECTIONS OF ACTION	
SUPERVISION	EDUCATION
<p>Optimisation of the supervision system for behaviour related to:</p> <ul style="list-style-type: none"> <li>- excessive speed,</li> <li>- driving after consumption of alcohol, drugs and similarly acting substances,</li> <li>- driving while distracted especially by mobile devices,</li> <li>- non-use or incorrect use of seatbelts, child safety seats/devices in vehicles and protective helmets by moped riders and motorcyclists.</li> </ul> <p>Modification and optimisation of the penalisation system for speeding offences.</p>	<p>Development of a coherent traffic education system on the key road safety issues, namely:</p> <ul style="list-style-type: none"> <li>- excessive speed,</li> <li>- effects and consequences of driving under the influence of alcohol,</li> <li>- effects and consequences of driving while distracted,</li> <li>- effects and consequences of failing to use vehicle protection and safety equipment.</li> </ul> <p>Implementation of educational activities aimed at improving the safety of vulnerable road users with a particular focus on people aged 60+.</p>
	<p>Comprehensive promotional activities on road safety measures and traffic calming.</p>

## IMPLEMENTATION CIRCUMSTANCES

A prerequisite for effective interventions under the Safe Road User pillar will be the optimisation of existing legislative solutions with respect to the issues included in the adopted priorities. In addition, it will be extremely important for the success of the activities to provide support in the form of transfer of the latest knowledge in the field of solutions guaranteeing maximum effectiveness in relation to the expenditures incurred.

### Legislative activities

Legislative activities will refer to the adopted priorities and directions of action and provide for the introduction of optimal solutions:

- related to undesirable behaviour of road users, in particular those associated with speeding, driving under the influence of alcohol and other drugs, driving with distracted attention, non-use of seat belts and child-support devices in vehicles and safety devices,
- aimed at the unification of the traffic education system with particular attention to the issue of behaviour of road users, crucial from the point of view of road safety,
- aimed at optimising the system of training and examination of driver candidates, with particular attention to additional requirements for the group of so-called young drivers,
- oriented at introduction of optimal and effective preventive and re-educational solutions, dedicated to the group of the so-called high-risk drivers,
- targeted at increasing the protection of vulnerable road users, in particular cyclists, moped riders, motorcyclists, by penalising inappropriate behaviours.

### Knowledge transfer

Knowledge transfer will concern:

- effective and modern solutions for monitoring the state of road safety,
- effective and modern solutions for monitoring current trends in road users' behaviour and their impact on risk levels,
- effective and modern solutions for the selection of methods and measures taken to minimise road traffic hazards arising from inappropriate behaviour of road users,
- effective and modern methods for the evaluation of actions carried out,
- comprehensive and effective solutions in the area of traffic education with particular focus on actions aimed at shaping responsible attitudes of drivers and safe behaviour of vulnerable road users.

# SAFE ROAD

## **Increase road safety by implementing optimal infrastructure solutions and effective speed management**

Improving road safety depends on many factors. Among the most important, and fundamental to a modern and systemic approach, are the quality of road infrastructure and speed management solutions. The current, increasingly higher standards of vehicle construction and equipment provide drivers with an increased sense of security, thus reducing their awareness of the existing risks in road traffic. Such a situation, in combination with infrastructure solutions, which do not meet the criterion of “self-explanatory roads” and “roads which forgive mistakes”, results in the tendency of traffic participants to undertake risky behaviours, especially those connected with excessive speed. The measures to be taken as part of the implementation of the National Road Safety Programme 2021-2030 should lead to a situation where roads and their surroundings guarantee a high level of safety for all users, and the actual speed of vehicles travelling on them will be correlated with the safety standards in place.



## **OUR GOAL**

Inadequate road infrastructure solutions combined with excessively high or inappropriate speed are among the main causes of road accidents and their severe consequences. There is a close correlation between these two factors, the speed of moving vehicles usually increases with the development of the road network, and the development of the road network, from the point of view of the expectations of ordinary users, should ensure that vehicles can move faster. The consequence of such a state, in the absence of effective solutions limiting the impact of committed mistakes and reducing speed, is a high risk for both drivers and passengers of vehicles as well as vulnerable road users, especially pedestrians.

This chapter addresses the priority issues from the point of view of the Safe System approach. The risk factors and circumstances accompanying road accidents in Poland confirm the crucial importance of measures whose programming and effective implementation will condition a lasting improvement in the safety of all traffic participants on Polish roads.

## FACTS AND FIGURES

### Accident locations

The characteristics of accidents and their consequences, given where they occurred, were in 2019 as follows:

- in built-up areas there were 21,359 accidents (70.5% of the total) with 1,177 fatalities (40.5%) and 24,229 injured (68.3%),
- in undeveloped areas there were 8,929 accidents (29.5% of the total) with 1,732 fatalities (59.5%) and 11,248 injured (31.7%),

**Table 5.3**

Road accident locations in 2019 in Poland and their consequences (source: Police Headquarters).

AREA	ACCIDENTS		FATALITIES		INJURED	
	TOTAL	%	TOTAL	%	TOTAL	%
built-up	21359	70.5	1177	40.5	24229	68.3
undeveloped	8929	29.5	1732	59.5	11248	31.7
TOTAL	30288	100	2909	100	35477	100

- the highest number of accidents, 16,698, occurred on the straight section of the road with 1,810 fatalities and 19,095 injured,
- the second most dangerous place is the junction with a priority road, where 8,688 accidents took place, resulting in 470 fatalities and 10,461 injured,
- the highest number of accidents, 24,378 (80.5%), were recorded on two-way, single carriageway roads with 2,540 (87.3%) fatalities and 28,406 (80.1%) injured.

## Main causes of accidents

The number of accidents in relation to the most frequent places of occurrence, considering the main causes, in 2019 was as follows:

On straight sections

- as a result of failing to adapt speed to traffic conditions - 3,202 accidents,
- as a result of failing to give way - 2,136 accidents,
- as a result of failing to give way to a pedestrian at a pedestrian crossing - 1,767 accidents,

At intersections with priority crossing:

- as a result of failing to give way - 4,511 accidents,
- as a result of failing to give way to a pedestrian at a pedestrian crossing - 960 accidents,
- as a result of not adapting speed to traffic conditions - 624 accidents,

On two-way single carriageway roads:

- as a result of failing to give way - 5,954 accidents,
- as a result of not adapting speed to traffic conditions - 5,278 accidents,
- as a result of failing to give way to a pedestrian at a pedestrian crossing - 2,231 accidents,

On roads with two one-way carriageways:

- as a result of failing to give way - 998 accidents,
- as a result of not adapting speed to traffic conditions - 621 accidents,
- as a result of failing to give way to a pedestrian at a pedestrian crossing - 514 accidents,

## TYPES OF ACCIDENTS

The characteristics of accidents, with a view to the type of event, in 2019 were as follows:

- the highest number of accidents were classified in the category "collisions of vehicles while moving" - 16,421 (54.2%), resulting in 1,352 fatalities (46.5%) and 20,938 injured (59%),
- the second most common type of accident was "hitting a pedestrian" - 6,721 (22%), resulting in 780 fatalities (26.8%) and 6,276 injured (17.7%).

IN 2019, IN POLAND,

THE HIGHEST  
NUMBER OF PEOPLE,  
**1,819,**  
WERE KILLED ON A  
STRAIGHT SECTION  
OF THE ROADS

THE MAIN CAUSE OF  
THESE ACCIDENTS  
WAS A FAILURE TO  
ADAPT SPEED TO  
TRAFFIC CONDITIONS

VEHICLE CRASHES  
CAUSED  
**1,352**  
FATALITIES

HITS OF  
PEDESTRIANS  
CAUSED  
**780**  
FATALITIES

# 53

**FATALITIES/1000 KM,  
THIS IS THE RISK RATE OF  
DEATH ON EXPRESSWAYS**

# 18

**FATALITIES/100  
ACCIDENTS, THIS IS  
THE ACCIDENT  
SEVERITY INDEX FOR  
EXPRESSWAYS**

**THE MOST SERIOUS  
CONSEQUENCES ARE  
CHARACTERISED BY  
'COLLISIONS WITH A  
TREE', WITH**

**26 FATALITIES PER  
100 ACCIDENTS IN THIS  
CATEGORY**

## Risk and accident severity

The risk and accident severity for 2019 is as follows:

- the highest number of accidents occurred on county roads - 10,237, with 874 fatalities as a consequence,
- the highest fatality rate was recorded on national roads, where 6,939 accidents resulted in 991 fatalities,
- the highest accident risk rate was recorded on national roads, with 358 accidents/1000 km,
- the highest fatality risk rate was recorded on expressways, with 53 fatalities/1000 km,
- the highest accident severity index was recorded on expressways with 18 fatalities/100 accidents, which is twice higher than on county roads (9) and nearly four times higher than on municipality roads (5),
- the highest accident severity index was recorded in the category "collision with a tree" with almost 26 fatalities/100 accidents, which means that it was more than twice higher than in the category "hitting the pedestrian".

## RISK FACTORS

Safety of the transport system starts at the planning stage. Managing mobility, intermodality and the development of the modal structure of transport is the initial potential for safety of transport.

In the case of transport and traffic, both road design solutions and the speed at which we travel on the road are of decisive importance in terms of the risk of accidents and their consequences. Omitting the above criteria at the planning and design stage is the primary cause of unfavourable phenomena from the point of view of road safety. The most significant problems and risk factors occurring on Polish roads include:

- low level of integration of public transport resulting in the current, still small share of travel using public means of transport in relation to individual transport,
- multifunctionality of roads and streets resulting in a mixed structure of vehicles characterised by different weights and speeds in one place and at one time,
- errors in road accessibility planning and traffic space zoning resulting in an increase in the level of danger to vulnerable road users, in particular pedestrians,
- failure to take into account or low level of use of basic principles of design traffic safety measures with regard to road geometry, visibility and traffic organisation,
- failure to meet the criteria of a self-explanatory and forgiving road, as a result of inadequate use or lack of use of design road safety measures,
- attempts to remedy poor planning and design solutions with complex traffic organisation and, as a result, "road re-labelling."

Much of this phenomenon is due to road and street design guidelines that are unclearly formulated or not adapted to changing circumstances and needs. Bearing in mind the criterion of road traffic safety as a key condition for the functioning of road infrastructure, efforts should be made to reduce the negative effects of planning and design errors by transformation of the existing road network. Actions should lead to the removal of the most common deficiencies resulting in the greatest threat to road safety. Key issues among them are:

- still low share of roads meeting the highest technical standards (highways and expressways),
- insufficient number of bypasses in towns and cities,
- lack of widespread use of comprehensive solutions for the safety of vulnerable road users,
- insufficient use of traffic calming measures,
- inadequate road geometry solutions, e.g. cross-section, plan and profile, junctions and intersections,
- deviations in the actual road standard from the nominal solutions specified in the technical conditions,
- inadequate use of design methods for safe road surroundings, resulting in road environment that does not meet technical and safety standards, e.g. the presence of pillars and trees,
- a low level of use of intelligent transport systems (ITS) for traffic management.

## PRIORITIES AND DIRECTIONS OF ACTION

Based on the diagnosis of the state of road traffic safety in Poland, as well as the functional and organisational solutions adopted in national and foreign documents, two priorities were adopted for the Safe Road pillar:

- **Priority 1 - reduction of road accident severity,**
- **Priority 2 - development of modern road traffic safety management systems.**

The Safe Road pillar measures will aim to reduce the negative consequences in the form of road accidents and their victims resulting from deficiencies in road infrastructure.

A key task will be to reduce the accident severity on Polish roads. For this purpose, comprehensive solutions need to be implemented to accurately analyse and identify high-risk roads and streets, and then select and implement interventions with the greatest potential for reducing road safety risks. Given the key assumptions of the Safe System, in the context of infrastructure measures, an incredibly detailed assessment of the road infrastructure needs to be carried out in terms of solutions that minimise the risk of occurrence and have a possibility to forgive user errors. In view of the above, systematic monitoring of road user behaviour will be an important activity.

The development of modern road safety management systems is aimed at eliminating the hazards occurring during the use of the road infrastructure. This should be achieved by preparing tools and procedures to implement the individual elements of the road safety system. The most important of these include independent procedures for traffic safety audits and road inspections, a commonly used classification of roads and streets in terms of traffic safety, and the development of comprehensive ITS (Intelligent Transport Systems) solutions in the traffic and road infrastructure safety management system.

It should be pointed out that the interventions in the Safe Road pillar will cover not only the physical aspect of roads and streets, but also a range of activities with a supervisory and educational dimension that will condition the universality, effectiveness and proper public perception of the solutions applied. Examples of such activities will be the training of personnel carrying out the audit and classification process, the implementation of ITS measures with regard to road infrastructure safety supervision, as well as the development and implementation of modern assistive technologies, e.g. unmanned aerial vehicles or elements of the Intelligent Speed Adaptation (ISA) system.

## **IMPLEMENTATION CIRCUMSTANCES**

A prerequisite for effective interventions under the Safe Road User pillar will be the optimisation of existing legislative solutions with respect to the issues included in the adopted priorities. In addition, it will be extremely important for the success of the activities to provide support in the form of transfer of the latest knowledge in the field of solutions guaranteeing maximum effectiveness in relation to the expenditures incurred.



### Legislative activities

Legislative activities will refer to the adopted priorities and directions of action and provide for the introduction of optimal solutions:

- with regard to the legal circumstances concerning the planning of road infrastructure and the preparation of land development plans, in the context of current traffic safety criteria and requirements,
- in the area of legal circumstances concerning the construction and reconstruction of roads and traffic management, in the context of current traffic safety criteria and requirements,
- with regard to the legal circumstances concerning the audit, standardisation, methods of classifying and rating roads from the point of view of traffic safety,
- in the area of legal circumstances concerning the process of training personnel responsible for road traffic safety management with respect to the latest knowledge on systemic solutions aimed at reducing road accident severity in Poland,
- in terms of the legal circumstances necessary for optimisation of the speed management process in terms of construction and maintenance of the necessary infrastructure and supervision activities.

### Knowledge transfer

Knowledge transfer will concern:

- the most effective solutions for typical and atypical infrastructural measures to improve road safety,
- research on the effectiveness of the influence of different elements of the road infrastructure on traffic safety together with the development of models for forecasting such influence,
- research and solutions for auditing, rating and classifying roads in terms of road safety assessment,
- research in the areas related to key road traffic safety problems, in the context of existing road infrastructure solutions, including the safety of vulnerable road traffic participants, the high risk for drivers and vehicle passengers, and the severity of accidents related to the unforgiving road surroundings and the high speed of vehicles,
- research on the impact of intelligent transport systems on road traffic safety, together with recommendations and an assessment of the effectiveness of selected solutions under national circumstances.

**Priorities and directions  
of action under  
the SAFE ROAD pillar**

PRIORITIES	ENGINEERING
<p><b>Reducing road accident severity</b></p>	<p>Identification of high-risk roads, including preparation of a safety rating based on risk maps.</p> <p>Analysis and verification of the road environment for safe and mistake forgiving solutions.</p> <p>Monitoring the behaviour of road users.</p> <p>Selection and implementation of infrastructure measures and interventions with the greatest potential to reduce traffic danger, including:</p> <ul style="list-style-type: none"> <li>- traffic calming measures,</li> <li>- measures reducing accidents caused by vehicle collisions,</li> <li>- measures reducing accidents involving pedestrians and cyclists,</li> <li>- measures reducing the severity of accidents related to the so-called unforgiving road surroundings.</li> </ul>
<p><b>Development of modern road traffic safety management systems</b></p>	<p>Dissemination and implementation of independent traffic safety audit procedures and optimisation of road-testing methods.</p> <p>Development of comprehensive ITS solutions in the traffic and road infrastructure safety management system.</p>
<p><b>Improvement of the speed management system</b></p>	<p>Harmonisation of rules for the application of speed limits.</p> <p>Use of ITS solutions in speed management.</p> <p>Implementation of modern support technologies, e.g. unmanned aerial vehicles and elements of intelligent speed adaptation infrastructure.</p>

DIRECTIONS OF ACTION	
SUPERVISION	EDUCATION
Implementation of ITS solutions for road infrastructure safety surveillance system.	Regular training of road safety personnel in the most modern and effective methods of road safety improvement and solutions based on the Safe System principles.
Widespread implementation of independent audit and road safety reviews of the entire road network in Poland.	Optimisation of the training system for personnel carrying out classification of road sections and road safety audits, as well as those performing inspections of the condition of roads and road engineering structures.
Expansion of the automatic speed monitoring system. Arrangement of the competences of the institutions responsible for monitoring speed.	Create and disseminate guidelines, principles and good practices for road design with speed as a key element of road safety. Run consistent information campaigns on: <ul style="list-style-type: none"> <li>- speed as a key circumstance for the risk and severity of road accidents,</li> <li>- targets and objectives of complex speed supervision solutions, including automatic systems (speed cameras, sectional speed measurements, etc.).</li> </ul>

# SAFE VEHICLE



## **OUR GOAL** High level of safety of all vehicles on the road

Vehicle safety solutions are especially important. They not only reduce the probability of an accident, but also protect drivers, passengers and other road users by minimising the consequences. One of the objectives of the National Road Safety Programme 2021-2030 is to improve the current level of safety of vehicles travelling on Polish roads, as well as to create circumstances conducive to a gradual change in the structure of the vehicle fleet towards modern cars and those meeting the highest standards and norms in terms of assistance and protection systems. An important task will be to create public demand for vehicles providing modern and effective safety solutions, which, combined with systemic measures to monitor their technical condition, will translate into improved traffic safety on Polish roads.

The safety of road users is the result of many factors. In addition to the quality of the road infrastructure and the behaviour of road users, the technical state of the vehicle and a number of vehicle protective technologies in terms of active and passive safety have an impact on the final risk level.

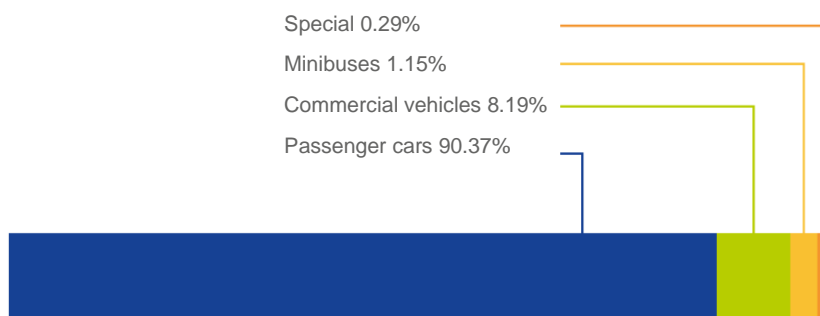
This chapter points to an especially important aspect of the problem of road danger, namely vehicle safety. While the technical condition of a vehicle or its sudden failure is not the main cause of road events, it plays an especially important complementary role, the so-called triadic system approach defining the accident phenomenon as the result of a combination of three elements: human behaviour, appropriate road solutions, and high vehicle safety standards.

An indispensable component of the *National Road Safety Programme 2021-2030* will be actions aimed at raising the minimum safety standards for all vehicles travelling on Polish roads. Given the structure of the vehicle fleet, particular emphasis should be placed on ensuring the safety of second-hand cars, in particular passenger ones, whose age, technological solutions or inappropriate technical condition are not conducive to the protection of drivers and passengers, as well as pedestrians or cyclists.

## FACTS AND FIGURES

### Lots of vehicles with low safety standards

For many years, a large increase in the number of registered vehicles has been observed on Polish roads. In addition to new vehicles, a significant percentage are second-hand vehicles, in particular passenger cars, very often privately imported. According to the latest data from the Automotive Market Research Institute SAMAR from 2019, used car imports to Poland amounted to 1,009,184 units. The age of a statistical vehicle was 11 years and 11 months, and passenger cars accounted for 92% of all imports.



The number and structure of vehicles on Polish roads has not changed significantly over the past decade. The total number of vehicles estimated in 2019 was around 31.4 million, of which 23.9 million were passenger cars. The average age of a car in Poland was around 15 years. This situation means that the fleet of vehicles on the country's roads is not one of the youngest, and often raises many concerns in terms of technical condition, which, as a result, does not contribute to improving the safety of all road users.

### AVERAGE AGE OF IMPORTED CARS

**15 YEARS.**  
THIS IS THE AVERAGE AGE OF A CAR IN POLAND

**NUMBER OF USED CARS IMPORTED IN 2019 EXCEEDED**

**1 MILLION**

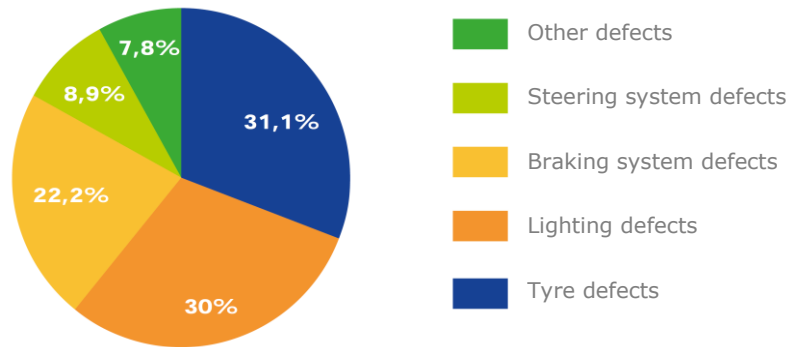
**Figure 5.12**

Import structure 2019. Vehicle type (source: SAMAR Institute).

### Accidents due to technical failure of the vehicle

Official national statistics show accidents where the direct cause was defined as "vehicle technical failure." In 2019, 38 such accidents were recorded. They resulted in six fatalities and 40 injured. In addition, during the inspection of vehicles performed at the scene of road events, there were 90 defects identified that had no direct link to the occurrence of the accident or road collision. Most of these related to deficiencies in lighting and vehicle tyres.

**Figure 5.13**  
Types of technical defects found in vehicles involved in road accidents in 2019 (source: Police Headquarters).



TECHNICAL DEFECTS	NUMBER
Tyre defects	28
Lighting defects	27
Braking system defects	20
Steering system defects	8
Other defects	7
<b>TOTAL</b>	<b>90</b>

The above data could indicate that the influence of factors related to the technical condition of the vehicle on the level of road safety is relatively small. However, it should be strongly emphasised that the actual cause-and-effect sequence can only be defined after detailed and in-depth analyses of each specific event. Furthermore, the statistics from the available databases indicate 792 accidents whose cause was defined as "undetermined." It is significant that in these accidents as many as 219 people were killed and another 807 injured. This situation, together with the current knowledge of the actual impact of the technical condition of a vehicle and its equipment on safety, implies the need to implement solutions that have a direct and indirect impact on the quality and standard of vehicles, and to promote and carry out systematic research in this area.

## RISK FACTORS

The analysis of the structure of vehicles travelling on Polish roads, as well as data on road events in which the involvement of circumstances related to vehicle malfunction was indicated, makes it possible to define problems and risk factors in relation to the Safe Vehicle pillar. The most important of these include:

### **Current mobility patterns and the high popularity of passenger cars as a means of transport**

The mode of transport enjoying the greatest popularity in Poland is individual car transport. This situation is indirectly a result of the large supply of cheap second-hand cars. This state is also influenced by the level and availability of public transport solutions, which in recent years, especially in non-urban areas, has been in recession. The result of this situation is that a significant proportion of the population travels using individual vehicles, very often of lower quality and to a large extent on local roads also with lower safety standards.

### **Age and technical condition of vehicles**

In accordance with the legislation in force, the technical condition of vehicles on the road is subject to periodic checks at authorised Vehicle Testing Stations (VTS). Taking into account the average age of vehicles on the road and the resulting technical condition, often deteriorating due to negligence or physical wear and tear of individual elements, it should be assumed that the level of impact of the above factors on road traffic safety in Poland may be extremely high.

### **Low percentage of vehicles equipped with the latest safety features**

Technological development is translating into improvements in a number of systems and components that have a direct impact on the safety of road users. New vehicles are equipped with a number of solutions whose operation reduces the risk of a road event (ABS, ESP, lane assistant, emergency braking systems, etc.) or minimises its effects (body structure, airbags, improved seat belt and child safety seats). In the case of Poland, we are unfortunately dealing with a large percentage of vehicles older than 10 years. This means that, in most cases, they do not have the latest safety features used in new or several-year-old vehicles. This situation, combined with their poor technical condition, translates into an increased risk for both drivers and passengers as well as other road users.

## PRIORITIES AND DIRECTIONS OF ACTION

Based on the diagnosis of functional and organisational solutions adopted in national and foreign documents, the latest trends and technological solutions in the area of vehicle safety, two priorities were adopted for the Safe Vehicle pillar:

- **Priority 1 - increasing the safety level of all vehicles,**
- **Priority 2 - improving the control of the technical condition of vehicles.**

The aim of the Safe Vehicle pillar measures will be to reduce the negative consequences caused by deficiencies in the safety and technical condition of vehicles.

A key task will be to ensure minimum safety standards for all vehicles on Polish roads, both new and second-hand. In the case of the latter, the adaptation process is more complicated, but in some areas possible. An example would be AlcoLock devices fitted in vehicles to reduce the problem of accidents caused under the influence of alcohol. It will also be important to pay particular attention to high-risk categories of vehicle drivers and passengers.

### Priorities and directions of action under the Safe Vehicle pillar

PRIORITIES	ENGINEERING
<p><b>Increasing the safety level of all vehicles</b></p>	<p>Defining minimum safety standards for all vehicles (new and second-hand), in terms of equipping them with active and passive safety systems.</p>
<p><b>Improving technical inspections of vehicles</b></p>	<p>Introducing modern technical solutions to improve the process of checking the technical condition of vehicles.</p> <p>Optimisation of technical, approval and operational requirements for the necessary safety equipment installed in vehicles.</p>



An example would be motorbikes up to 125 cc, for which additional measures should be taken to increase the technical requirements that reduce the risk of accidents, e.g. by making it mandatory to fit an ABS system to prevent the blocking of the wheels during braking.

In the long term, there should be cooperation with the automotive industry to speed up the elimination of vehicles with lower safety levels from the roads. The basic measure of vehicle safety levels should be clearly defined forms of classification and assessment based on independent tests determining the effectiveness of the protective measures applied, e.g. Euro NCAP. Solutions in this area should go hand in hand with expectations regarding pollutant emissions and the broader understood negative impact of vehicles on the environment.

The improvement of vehicle safety should be supported by the simultaneous optimisation of the inspection process. Due to the adopted form of performing inspection tasks, based on the existence of independent operators, it is necessary to optimise the initial requirements for carrying out the activity and to increase the supervision conducted from the level of local authorities.

DIRECTIONS OF ACTION	
SUPERVISION	EDUCATION
Intensification of supervision of mandatory vehicle equipment and the correct use of protective devices and systems.	Comprehensive education and promotional activities on modern vehicle safety/protection equipment solutions and the benefits coming from their correct use.
<p>Improvement of the process of supervising the activities of Vehicle Testing Stations.</p> <p>Intensification and optimisation of the activities of the Police and the Road Transport Inspection in the field of vehicle technical condition control.</p>	<p>Periodic and additional training courses (on the latest vehicle technologies and equipment as well as their impact on road traffic safety) for diagnosticians and employees of the Police and the Road Transport Inspection.</p> <p>Comprehensive educational and promotional activities with regard to the technical condition of vehicles and its impact on the safety and comfort of travelling.</p>

It is also important to improve the work of the services (Police, Road Transport Inspection) by equipping them with modern control tools and equipment, adequate to the changing circumstances, allowing to increase the effectiveness of their activities.

Comprehensive information activities demonstrating the benefits of modern vehicle safety solutions and the protection of vehicle users will also be an essential element for the effectiveness of actions in the area of the Safe Vehicle pillar. The information and education campaign should point to the direct link between the most desirable products of the automotive market and modern safety solutions. Simply put, a modern and desirable car or motorbike should at the same time mean the safest one.

## **IMPLEMENTATION CIRCUMSTANCES**

A prerequisite for effective interventions under the Safe Vehicle pillar will be the optimisation of existing legislative solutions with respect to the issues included in the adopted priorities. In addition, it will be extremely important for the success of the activities to provide support in the form of transfer of the latest knowledge in the field of solutions guaranteeing maximum effectiveness in relation to the expenditures incurred.

### **Legislative activities**

Legislative activities will refer to the adopted priorities and directions of action and provide for the introduction of optimal solutions:

- in terms of legal requirements for the mandatory minimum fitting of all vehicles with passive and active safety systems,
- as regards the legal conditions for compulsory training in the correct use of passive and active safety systems constituting the minimum mandatory equipment of vehicles,
- in the area of legal circumstances, favouring in economic terms the purchase or replacement of older generation vehicles with new ones, equipped with modern safety systems,
- as regards legal circumstances concerning the improvement of the process of supervision over the activity of Vehicle Testing Stations,
- regarding the legal circumstances concerning the continuous training process of personnel responsible for the supervision and control of the technical condition of vehicles, in terms of the latest technologies and equipment of vehicles and their impact on road safety (employees of Vehicle Testing Stations, Police officers and the Road Transport Inspection).

## Knowledge transfer

Knowledge transfer will concern:

- research on the impact of individual components of vehicle equipment on the level of road safety,
- international best practices regarding the minimum fitting of vehicles with safety systems and the rules for their implementation,
- in-depth research on the actual impact of the technical condition of vehicles on the risk and severity of road accidents,
- intelligent transport systems and their role in the interaction between vehicle equipment and road infrastructure.

# Rescue services and post-crash response



## **OUR GOAL** Fast and effective Rescue Service and Post-Crash Response

Available data on road accidents and their consequences indicate that approximately 50% of deaths occur within minutes after the event or on the way to hospital, before reaching it. Effective care after a road accident, including efficient transport of the injured person to a medical facility, is a prerequisite for survival and a significant reduction in the subsequent consequences of the event. One of the objectives of the National Road Safety Programme 2021-2030 is to improve Rescue Service and Post-Crash Response activities to the extent that, in a situation of danger to health and life resulting from a road accident, the highest possible standard of rescue action will be guaranteed, in the shortest possible time.

Emergency medical services and the post-crash care process are the key elements of the road safety system. In a situation where an accident occurs due to inappropriate behaviour of a traffic participant, vehicle failure or faulty solutions in the area of road infrastructure, effective and immediate rescue procedures should minimise its consequences. An extremely important aspect is the coordination of actions at the level of all relevant services, starting from the units of the National Rescue and Firefighting System, through the Police, and ending with the units of the State Medical Rescue Service.

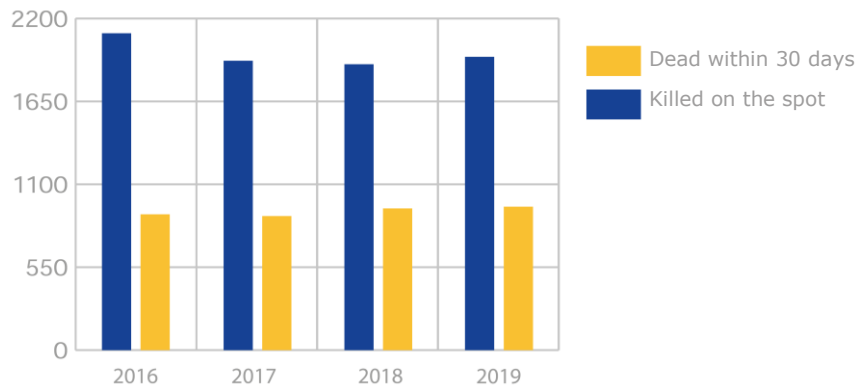
This chapter is a synthesis of the directions of actions adopted in relation to the indicated priorities, which were considered crucial for the efficient and effective functioning of the Emergency Rescue Service and Post-Crash Response system in Poland. In this context, works aimed at the improvement and development of the medical rescue system, modernisation of equipment and retrofitting of road accident rescue services, as well as the development of a system supporting road accident victims in the process of rehabilitation and return to social and professional activity were considered to be the most important.

## FACTS AND FIGURES

### High severity of accidents

The basic problem and at the same time a challenge for the Emergency Rescue Service and Post-Crash Response system in Poland is the extremely high severity of road events. The structure of accident fatalities, in terms of their type, is dominated by pedestrians and victims of vehicle collisions. It is characteristic that the highest accident severity accompanies the category of "collision with a tree", where, with less than 4.9% of the accident rate, as many as 13% of fatalities occur. The above situation confirms the extremely high proportion of speed as a factor determining the final consequences of accidents.

In 2019, 2909 people died in accidents in Poland and 10,633 were seriously injured. Despite a significant 36% reduction in fatalities between 2009 and 2019, the accident severity on Polish roads is still high. A consequence of such a state is the high number of victims killed at the scene and victims who died within 30 days of the accident. Multiannual statistics show that the average percentage of victims killed immediately on the spot is 70% and of victims who died within 30 days of the accident remains at 30%.

**Figure 5.14**

Number of v  
immediately  
and victims  
30 days of th  
(source: Poli

### The crucial importance of time

The results of recent studies prove that critical to reducing the consequences of a road accident is that qualified medical personnel will provide assistance as quickly as possible. Reducing the time from when an accident occurs to the arrival of rescue medical services from 25 to 15 minutes has the potential to reduce the number of fatalities by one-third.

According to the available studies and research, the so-called golden hour principle plays a key role, according to which the sequence of rescue operations aimed at keeping the injured person alive and transferring him/her to the hospital should not exceed 60 minutes. The importance of the first 10 minutes during which first aid should be administered to the injured person by personnel qualified in this field, is also stressed.

Highly qualified rescue teams are especially important. It is estimated that systematic and specialised training can reduce the time necessary to free victims trapped in vehicles following an accident by 40-50%.

### Modern technological solutions

In the context of the critical importance of the time needed for the rescue team to reach accident victims and subsequently provide professional assistance, the important role of modern automatic accident notification systems is pointed out in line with the latest European Union policy in the area of road accident safety.

The European Commission based on data collected during more than two years of implementation of the pan-European in-vehicle accident notification system eCall is monitoring its effects so far and analysing the possibility of extending it to other categories of vehicles (excluding passenger cars and commercial vehicles up to 3.5 tonnes). According to estimates, mandatory automatic notification could reduce rescue service response times by 50% in urban areas and by 40% in non-urban areas. According to initial assumptions, the introduction and dissemination of eCall will reduce fatalities by 4% and seriously injured victims by 6%, thereby reducing the number of fatalities on European roads by 2,500 per year.

In view of the above, interventions implemented under the Rescue Service and Post-Crash Response pillar, in addition to those already in place and aimed at integrating national rescue systems, should include support for the development of the latest technological solutions to optimise the activities of all services, shorten the time required to reach accident victims and, consequently, improve safety on Polish roads.

### Support for accident victims

Losses from road accidents and collisions in 2018 amounted to 2.7% of GDP, including the costs of the accidents themselves at 2.1% of GDP. In the case of Poland, this means an economic dimension of losses of nearly PLN 45 billion. The estimated cost of one fatality is almost PLN 2.4 million and a seriously injured victim PLN 3.3 million.

Research by the European Federation of Road Traffic Victims (FEVR) and the European Transport Safety Council (ETSC) clearly indicates that the consequences of road events are long-term and require appropriate policies, including the planning of long-term strategic actions to reduce the social costs of accidents.

The general conclusions of the studies conducted in Poland confirm that the key problems in the context of assisting accident victims are the low level of availability of information on compensation procedures, the lack of systemic state assistance (support only from the families of the injured), and the worsening psychological consequences after an accident. The conclusion of the research so far shows that there are major deficiencies in systemic solutions to support accident victims, particularly in administrative, health and legal aspects. With this in mind, the optimisation of post-accident trauma treatment processes and the development of systemic care for road accident victims should be pursued.

## RISK FACTORS

The analysis of the issues related to the Rescue Service and Post-Crash Response system, as well as the areas identified as requiring intervention, allows the definition of key problems and risk factors in relation to this pillar. The most important of these include:

### Limited capacity of the National Rescue System

The effectiveness of Rescue Service and Post-Crash Response activities depends, among other things, on the full use of existing organisational and financial solutions. In this context, particular attention should be paid to the potential of Volunteer Fire Department units, whose capacity to effectively support system activities has significantly increased in recent years. The widest possible inclusion of the above-mentioned organisation in the structures of the National Fire-fighting and Rescue System, once the necessary standards have been met, will result in an increase in the effectiveness of the entire rescue system, especially as regards the critical element which is the time of reaching the injured victims of road accidents.

**LOSSES ARISING FROM ACCIDENTS IN POLAND IN 2018 AMOUNT TO**

**PLN 45 BILLION**

**THE UNIT COST OF A SEVERELY INJURED VICTIM IS ABOUT**

**PLN 3.3 MILLION**

A significant threat to the National Rescue System may be exceptional circumstances that place an above-normal burden on the broader understood healthcare service. Such circumstances may include, for example, the phenomenon of an epidemic or accidents or disasters of a mass character. Experience shows that in such a situation the effectiveness of the services operating in the area of road rescue may be significantly reduced, which in effect may significantly reduce the level of road safety.

### **Insufficient level of coordination**

The measures programmed in the perspective of the National Road Safety Programme 2013-2020 have led to many positive changes regarding the issue of optimising the cooperation between rescue services. One of the most important measures was the introduction of the single European emergency number 112, which now operates throughout the country on the basis of 17 emergency call centres. Thanks to this solution, there has been a significant increase in the level of coordination between medical rescue services, the State Fire Service and the Police, i.e. the main services responsible for the involvement of the relevant units in an emergency situation, including a road accident.

Despite the above changes, an insufficient level of coordination is still observed, in particular due to separate organisational structures, separate communication systems or differences in the standards of equipment used. The consequence of such a state may be an increase in the response time of the services, resulting in a lower standard and longer intervention time causing a delay in reaching victims of accident .

### **Lack of a uniform database of road accident victims**

One of the key factors for an effective and long-term road safety prevention policy is access to a reliable database on road accidents and their consequences. In line with best practice and the solutions adopted in the most advanced countries in the field of road hazard reduction, the integration of data collected from police systems with data from the health system should be pursued. The target model, due to the most important role of information on the actual consequences of accidents, should be a solution that bases the programming of preventive measures primarily on data from the health system. In the case of Polish circumstances, it is particularly important to develop an intermediate model, optimising the process of supplementing information from the police SEWiK system with hospital data, which will result in a change in the perception of road accidents from the level of perpetrators to victims. Such a model will allow better identification and understanding of key road safety problems and, consequently, more effective prevention activities.



## PRIORITIES AND DIRECTIONS OF ACTION

Based on the diagnosis of functional and organisational solutions adopted in national and foreign documents, the latest trends and technological solutions in the field of rescue and assistance to accident victims, two priorities were adopted for the Rescue Service and Post-Crash Response pillar:

- **Priority 1 - integration and development of the National Rescue System,**
- **Priority 2 - unified system of assistance to road accident victims.**

The aim of the measures under the Emergency and Post-Crash Care pillar will be to reduce the negative consequences of road events, in particular to provide fast and effective post-crash assistance, and further to minimise the long-term social impact of road accidents.

A key task will be the further integration of the National Rescue System based on the operation of the National Medical Rescue and the National Firefighting and Rescue System (NFRS). The most important interventions in the area of NFRS will support the retrofitting of rescue equipment, the development of its potential by including Volunteer Fire Department units in the system, as well as the continuous training of personnel in modern and effective techniques used in the process of helping accident victims. The most important tasks planned in the area of State Medical Rescue will include further development of the medical rescue system, including support for the existing and construction of new hospital emergency wards, development of the Medical Air Rescue, as well as actions optimising the concentration of medical dispatching centres. An additional element will be the modernisation of equipment and retrofitting of road rescue services, in particular the replacement of ambulances. Work should also be carried out in this area, aimed at creating a unified database of the health consequences of road accidents, allowing subsequent integration with data from the police Accident and Collision Register System.

Parallel to the process of improving rescue procedures, measures should be introduced to implement a unified system of assistance to victims of road accident . The existing solutions in this area are very dispersed and do not provide an appropriate level of support to the victims in the context of administrative, health or legal assistance. Under the perspective of the National Road Safety Programme 2021-2030, comprehensive and coherent solutions should be implemented, consisting in the development of system assumptions, including organisational and financial elements aimed at comprehensive assistance to the most seriously injured victims of road accidents . The added value of such a solution will also be the creation of a reliable database of the actual and long-term consequences of accidents, which will allow the prevention measures taken to be optimised.

## IMPLEMENTATION CIRCUMSTANCES

A prerequisite for effective interventions under the Rescue Service and Post-Crash Response pillar will be the optimisation of existing legislative solutions with respect to the issues included in the adopted priorities. In addition, it will be extremely important for the success of the activities to provide support in the form of transfer of the latest knowledge in the field of solutions guaranteeing maximum effectiveness in relation to the expenditures incurred.

### Legislative activities

Legislative activities will refer to the adopted priorities and directions of action and provide for the introduction of optimal solutions:

- in terms of legal circumstances enabling integration and development of the National Rescue System,
- in terms of legal circumstances enabling the implementation of a unified system of assistance to victims of road accident, with particular emphasis on organisational and financial aspects.

### Priorities and directions of action under Rescue Services and post-crash response

PRIORITIES	ENGINEERING
<p><b>Integration and development of the National Rescue System,</b></p>	<p>Development of the emergency medical system:</p> <ul style="list-style-type: none"> <li>- support and expansion of hospital emergency departments (HEDs),</li> <li>- support and expansion of Medical Air Rescue (MAR),</li> <li>- optimisation of the concentration of medical dispatching centres.</li> </ul> <p>Development of the NFRS potential through broad inclusion of Volunteer Fire Department (VFD) units into the system.</p> <p>Modernisation of equipment and retrofitting of road rescue services and NFRS (taking into account the most endangered road sections).</p> <p>Technological support for autonomous automatic accident notification solutions.</p> <p>Creation of a database on the actual health consequences of accidents.</p>
<p><b>Unified system of assistance to victims of road accidents.</b></p>	<p>Development of system assumptions, and implementation of a unified system of assistance to accident victims, with elements of administrative, health and legal assistance, including the construction of specialised post-accident trauma treatment centres.</p>

- in terms of legal circumstances aimed at integrating databases on road accidents and the health consequences of their victims.

**Knowledge transfer**

Knowledge transfer will concern:

- research on uniform and integrated rescue systems and the most effective solutions for road safety,
- research on the most effective methods of selecting emergency response capacities according to the type of risks and their location,
- best practice and research on integrated road accident databases, with particular emphasis on the importance of data from the health system.

DIRECTIONS OF ACTION	
SUPERVISION	EDUCATION
Optimisation of activities overseeing the proper use of the forces and resources of the emergency medical system and the NFRS.	<p>Comprehensive first aid education and promotional activities.</p> <p>Optimisation of the first aid training system for driver candidates, based on the standardisation of services provided by VFDs.</p>
Optimisation of activities overseeing the process of assistance to accident victims, including compensation and rehabilitation measures.	Comprehensive education and information activities on possible support for road accident victims.

# HOW WE WILL IMPLEMENT AND MEASURE PROGRESS



## SUMMARY

The main objective of the National Road Safety Programme 2021-2030 is to significantly improve road users' safety within 10 years. This will be possible provided that measures covering all areas of the road safety system will be effectively and systematically implemented. The management of the programme implementation should be strictly defined and structured. The key elements of this process include unambiguous identification of a coordinating institution responsible for all actions, defining implementation tools and monitoring principles, as well as specifying an unambiguous model for financing the interventions carried out. Without meeting the above criteria, the success of any strategic programme aimed at minimising complex phenomena and problems, which road safety issues undoubtedly are, will be unlikely.

# PRINCIPLES OF PROGRAMME IMPLEMENTATION

## Chapter 6

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A prerequisite for achieving the goals adopted in the National Road Safety Programme 2021-2030 will be systematic management and final, quantifiable effects of implementation. According to the assumptions of the Road Safety Management System pillar, the management unit in the transitional model should be the Secretariat of the National Road Safety Council. The most important tasks of the National Lead Institution equipped with the necessary legal, organisational and financial tools to manage the key processes in the area of the so-called institutional management will include:

- comprehensive coordination of the work undertaken within the framework of the National Road Safety Programme 2021-2030,
- setting out directions for action and identifying areas requiring legal and organisational intervention,
- preparation of implementation tools, including Execution Programmes containing the current priorities and dedicated set of indicators for the degree of implementation,
- keeping a complete and integrated road safety database as a key element of the wider Road Safety Information System,
- monitoring the state of road safety,
- monitoring the degree of implementation of the National Road Safety Programme 2021-2030,
- optimisation of the road safety research and knowledge transfer system and provision of an expert base,
- Optimisation of funding mechanisms for the Road Safety Management System,
- conducting and coordinating comprehensive communication activities on road safety issues,
- cooperation with key national partners representing governmental and self-governmental administration, including regional institutions and units coordinating road safety measures, scientific and research centres and NGOs,
- cooperation with key partners at the international level, including representation of the Polish road safety policy on the international arena.

## Implementation tools

### Implementation programmes

The main tool for implementing the National Road Safety Programme 2021-2030 will be the Implementation Programmes. In line with current practice, this document will be an annual or biannual action plan, prepared taking into account all the pillars and targeting the priorities adopted for the period. The adopted plan will identify the institutions/entities responsible for their implementation, as well as the timeframe and a set of indicators showing the degree of implementation of the task and its estimated impact on improving road safety. With the above assumptions in mind, the Implementation Programme should include:

- information on the adopted short-term priorities of the Implementation Programme,
- information on the tasks assigned in accordance with the pillars of the National Road Safety Programme 2021-2030 and taking into account the defined priorities and directions of activities,
- information on the leaders of individual tasks,
- information on the deadlines for the completion of individual tasks,
- indicators to assess the degree of task implementation and its impact on road safety,
- information on the sources of their financing.

### Sectoral programmes

The implementation of the National Road Safety Programme 2021-2030 will be additionally supported by measures programmed in other strategic documents aimed at improving road traffic safety in the broad sense, also in the context of universally understood transport and public health policy. A special role will be played by internal programmes developed within ministries and institutions of government administration, including the General Directorate for National Roads and Motorways, Police Headquarters, National Headquarters of the State Fire Service, General Inspectorate of Road Transport, Military Police. Due to the permanent cooperation of the above-mentioned units within the National Road Safety Council, it is important that the actions planned in the prepared programmes are complementary to the national strategy. This will allow for a synergy effect, strengthen cooperation and have a positive impact on the final effect of the work undertaken.

### Voivodeship programmes

The experience of successive years of implementing road traffic safety programmes clearly shows the especially important role and significance of voivodeship programmes. In view of the structure of the country's territorial division as well as the functions and tasks assigned to self-government administration, full cooperation between the National Lead Institution and entities responsible for managing the area of road safety at a regional level should be sought. Voivodeship road traffic safety programmes should relate to the national programme, while taking into account the circumstanc-

es arising from the provisions of the relevant development strategies or regional operational programmes. The preparation of the voivodship road safety programme should be preceded by the development of mechanisms of permanent cooperation between the National Lead Institution and the authorised coordinating unit at the regional level. It is particularly important to develop funding mechanisms for regional systemic actions, including monitoring of the state of road safety, staff training and a coherent traffic policy.

### **Local programmes**

Due to the diversity of road traffic safety problems in Poland, proper programming of measures and their subsequent effective implementation at the local level is especially important. The characteristics of road accidents and the structure of victims in urban areas are different from events occurring in non-urban areas. In both cases, the prerequisite for improving safety is, primarily, a proper diagnosis and then the planning of a long-term strategy aimed at eliminating the key problems in a given area. Ad hoc measures will not bring long-lasting and positive change. Therefore, efforts should be made to promote systemic solutions at the local level, identifying effective intervention models, funding mechanisms and the broad dimension of the benefits of comprehensive prevention solutions.

### **Monitoring principles**

Systematic monitoring of the National Road Safety Programme 2021-2030 is an essential element for the effectiveness of long-term actions and the achievement of the set goals. Based on the circumstances of the EU Road Safety Policy, including the document entitled EU road safety policy framework 2021-2030 – Next steps towards “Vision Zero”, the basis for monitoring will be the performance indicators, in terms of the consequences of road events and the level of risk, as well as the performance indicators adopted for the individual pillars of the programme and the priorities assigned to them.

### **Key performance indicators of the National Road Safety Programme 2021-2030**

- number of fatalities
- number of seriously injured victims
- number of injured victims
- number of accidents
- number of fatalities/1 million inhabitants
- number of accidents/1 million inhabitants
- number of fatalities/100 accidents
- number of accidents/100 km of road

### **Key performance indicators of the National Road Safety Programme 2021-2030**

- speed - percentage of vehicles observing the speed limit,
- seat belts - percentage of vehicle occupants correctly using seat belts or child restraint systems,
- protective equipment - percentage of motorcyclists, moped riders and cyclists wearing a protective helmet,
- alcohol - the percentage of drivers driving without exceeding the legal limit for blood alcohol concentration,
- distraction - percentage of drivers not using handheld mobile devices,
- vehicle safety - percentage of vehicles meeting the specified minimum safety standards in terms of being equipped with active and passive vehicle safety systems (alternatively - percentage of vehicles not exceeding a certain age),
- infrastructure - percentage of distance travelled on roads with a safety rating above an agreed threshold /alternatively, percentage of distance travelled on roads that have either segregated traffic in opposite directions (barriers or lane) or a speed limit to an agreed maximum value),
- post-accident care - the time in minutes and seconds from the emergency notification after the accident to the arrival of the emergency services at the accident scene.

Detailed values for the National Road Safety Programme 2021-2030 performance indicators, which are also the core material for its monitoring, are collected in the summary table at the end of this chapter.

### **Basic monitoring tools**

Comprehensive monitoring tools will be summary documents describing the progress of the programme and the level of results achieved. In view of the long-term perspective, two types of documents have been assumed:

- annual reports - containing a complete summary of information on the state of road safety and the activities and results achieved with regard to the goals and objectives of the National Road Safety Programme 2021-2030,
- triennial progress reports - containing a complete compilation of information on the results achieved with regard to the goals and objectives of the National Road Safety Programme 2021-2030 and evaluation of the planned priorities and directions of the programme's activities in terms of validity and effectiveness.

It is advisable that the above reporting model should also apply to comprehensive road safety programmes implemented at regional and local level.



## Funding

Ensuring an appropriate, for the scale of the problem, funding mechanism for the National Road Safety Programme 2021-2030 is a necessary condition for its success. The experience to date with the implementation of successive road traffic safety programmes in Poland indicates that the key obstacle to effective implementation and achievement of the set objectives was the lack of definition and sanctioning of long-term sources and mechanisms for financing activities, in particular management activities implemented by the National and Regional Lead Institutions for Road Traffic Safety.

As a result of the undertaken optimisation of legal circumstances, sources and mechanisms of financing systemic actions in the area of road safety should be clearly indicated, both at the national and regional level. The postulate in this respect constitutes one of the most important areas of intervention and directions of actions assigned to the Road Safety Management System pillar. Without the optimisation of the mentioned issue, the implementation of the tasks planned within the National Road Safety Programme 2021-2030 will only constitute a juxtaposition of a series of actions of the partners involved, without the actual implementation of the institutional management function on the part of the national and regional lead institutions.

### **Primary sources of funding for the National Road Safety Programme 2021-2030**

- the State budget earmarked for the financing of systemic measures, including the effective functioning of the National Lead Institution for Road Safety (in the target option - Secretariat of the National Road Safety Council) in the transitional option,
- the State budget earmarked for co-financing of systemic measures aimed at the functioning of regional leading institutions for road safety (Secretariats of the Voivodeship Road Safety Councils),
- sectoral budgets (Police, State Fire Service, General Directorate for National Roads and Motorways, General Inspectorate of Road Transport, funds from the health care system, etc.),
- EU programmes and financial instruments, funds from the European Economic Area and other international financial institutions,
- programmes, funds and resources of state institutions, including ministries, the National Centre for Research and Development, the Justice Fund, the Environmental Protection Fund, the National Health Fund, etc.,
- investors and business partners.

## First implementation steps

Effective implementation of the National Road Safety Programme 2021-2030 will require a number of decisions and preparatory actions, followed by the implementation of comprehensive solutions in many areas. Given the scale of the road accident problem in Poland, as well as the unfavourable position of our country compared to European leaders with the lowest risk levels, unanimous support for the planned measures expressed by politicians and decision-makers at the highest level will be crucial for the success of the programme.

### Summary of key monitoring indicators for the National Road Safety Programme 2021 - 2030

PROGRAMME PILLARS	
<b>Final indicators for the whole programme</b>	
<b>All pillars</b>	Number of victims (victims/year)
	Demographic casualty rate (victims/1 million inhabitant/year)
	Motorisation casualty rate (victims/1 million vehicles/year <sup>8</sup> )
	Victim concentration rate (victims/1 billion km/year <sup>9</sup> )
<b>Final indicators for each pillar</b>	
<b>Safe Road User</b>	Number of pedestrians as victims of road accidents (victims/year)
	Number of cyclists as victims of road accidents (victims/year)
	Number of moped riders and motorcyclists as victims of road accidents (victims/year)
	Number of victims in accidents caused by traffic participants under the influence of alcohol (victims/year)
<b>Safe roads</b>	Number of victims in frontal collisions (victims/year)
	Number of victims of side and rear-end collisions (victims/year)
	Number of victims in crashes resulting in a vehicle falling off the road <sup>10</sup> (victims/year)
	Number of victims at junctions and intersections (victims/year)
	Number of victims on horizontal curves - bend, curve (victims/year)
	Number of victims at night (victims/year)
<b>Safe speed</b>	Number of victims of road accidents caused by failure to adapt speed to traffic conditions (victims/year)
<b>Safe vehicle</b>	Number of victims in accidents caused by technical failure of vehicles (victims/year)

With the above in mind, the implementation of the National Road Safety Programme 2021-2030, should be preceded by a resolution of the National Road Safety Council to adopt the programme as a key and strategic document defining the directions of the State's policy in the area of actions dedicated to improving road safety.

	Fatalities		Seriously injured	
	2019	2030	2019	2030
	2909	1455 (-50%)	10633	5317 (-50%)
	75.7	37.9	276.8	138.4
	94.4	47.2	345.2	172.6
	12.2	6.1	44.6	22.3
	793	397	2474	1237
	258	129	1371	686
	382	191	1516	758
	265	133	884	442
	585	293	1494	747
—	767	384	3975	1988
	473	237	994	497
	486	243	2981	1491
	518	259	1385	693
	1024	512	2579	1290
	770	385	2428	1214
	6	3	13	7

<sup>8</sup> Based on: Statistics Poland, Transport – activity results (tables: motor vehicles and mopeds).

<sup>9</sup> Based on: Statistics Poland, Transport – activity results (tables: road traffic on the territory of Poland by vehicle type and road category).

<sup>10</sup> Tree, pole, barrier (without overturning).

## REFERENCES

- Stockholm Declaration. The Third Global Ministerial Conference on Road Safety, United Nations, Stockholm, 2020.
- Council conclusions on road safety endorse the Valletta declaration on improving road safety, Council of the European Union, Valletta, 2017.
- Europe on the move - sustainable mobility for Europe: safe, connected and green, European Commission, Brussels, 2018.
- EU Road Safety Policy Framework 2021-2030 – Recommendations on next steps towards 'Vision Zero', European Commission, Brussels, 2019.
- Sustainable Transport Development Strategy until 2030, Ministry of Infrastructure, Warsaw, 2019.
- Strategy for Responsible Development for the period up to 2020 (including the perspective up to 2030), Council of Ministers, Warsaw, 2017.
- Efficient State Strategy 2020, Council of Ministers, Warsaw, 2013.
- National Road Safety Programme 2013-2020, Secretariat of the National Road Safety Council, Warsaw, 2013.
- Implementation Programmes for the National Road Safety Programme 2013-2020, Secretariat of the National Road Safety Council, Warsaw, 2013-2020.
- Report on the institutional structure of road traffic safety management in Poland, World Bank, Warsaw, 2015.
- Report on Road Safety Information Systems Development for Poland. Diagnosis and High-Level Action Plan, World Bank, Warsaw, 2015. Report on road traffic safety financing for Poland, World Bank, Warsaw, 2015.
- Report on the institutional structure of road traffic safety management in Poland, World Bank, Warsaw, 2015.
- Safety of pedestrians and cyclists on public roads. Information on the results of the audit, Supreme Audit Office, Warsaw, 2016.
- Strategy for Better Road Safety in Poland, Polish Chamber of Insurance, Warsaw, 2017.
- Legal expertise. The current legal situation in the EU Member States, excluding Poland, with regard to the functioning of the leading institutions responsible for the coordination of activities in road traffic safety matters, Kancelaria Łazor i Wspólnicy S.K.A, Olsztyn, 2014.
- Final report from mid-term evaluation study of the National Road Safety Programme 2013-2020, Ministry of Infrastructure and Construction, Warsaw, 2017.
- Valuation of the costs of road accidents and road collisions on the road network in Poland at the end of 2018, distinguishing the average socio-economic costs of accidents on the trans-European transport network, Siedlce University of Natural Sciences and Humanities, Warsaw, 2019.
- Use of mobile phones by vehicle drivers in Poland in 2015, Secretariat of the National Road Safety Council, Warsaw, 2015.
- Use of protective helmets by road users in Poland in 2015, Secretariat of the National Road Safety Council, Warsaw, 2015.
- Use of child safety devices in Poland in 2015, Secretariat of the National Road Safety Council, Warsaw, 2015.

- Use of seatbelts in Poland in 2015, Secretariat of the National Road Safety Council, Warsaw, 2015.
- Study of pedestrian behaviour and pedestrian-driver relations September-December 2018, Secretariat of the National Road Safety Council, Warsaw, 2019.
- National Road Safety Council, [www.krbrd.gov.pl](http://www.krbrd.gov.pl).
- Polish Road Safety Observatory, [www.obserwatoriumbrd.pl](http://www.obserwatoriumbrd.pl).
- Police Headquarters, [www.policja.pl](http://www.policja.pl).
- Statistics Poland, [www.gus.pl](http://www.gus.pl).
- European Transport Safety Council, [www.etsc.eu](http://www.etsc.eu).
- Mobility & Transport - Road Safety - European Union, [www.ec.europa.eu/road\\_safety/](http://www.ec.europa.eu/road_safety/).
- United Nations, Road Safety [www.who.int/roadsafety/en/](http://www.who.int/roadsafety/en/).





The National Road Safety Programme 2021-2030 is a strategic document outlining the directions of the state's policy in terms of actions aimed at reducing the risk to life and health in road traffic. The main assumptions of the programme take into account the most important European and national circumstances, including current development strategies and key documents relating to transport safety policy.

The National Road Safety Programme 2021-2030 has been prepared based on experiences coming from previous prevention programmes, taking into account the latest trends and most effective solutions, with a clearly defined vision and principles of implementation. The reduction of the number of fatalities and seriously injured victims by 50% by 2030, according to long-term assumptions, should only be an intermediate target on the way to the complete elimination of the most seriously injured victims of road accidents on Polish roads. This programme should serve as a guideline for all institutions and organisations, regardless of differences in their views, setting out the directions and methods of action, as a result of which the safety of road users will be significantly improved, and the resulting high quality of life will bring Poland closer to the group of countries perceived as exemplary.

The data used for this study came from the Police Headquarters, Statistics Poland, as well as from the data and knowledge base of the Secretariat of the National Road Safety Council and the Polish Road Safety Observatory. Data from the European Transport Safety Council was a source of information on road safety in the EU countries.

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