NATIONAL STRATEGY
FOR IMPROVING ROAD SAFETY IN BULGARIA
FOR THE PERIOD 2011–20
TOGETHER WE CAN
SAVE THE LIVES OF
MILLIONS
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Bulgaria's national road safety improvement strategy for 2011–20 is a political framework document that sets out the guidelines for implementing a policy to improve conditions for road users and reduce the number of victims of road accidents.

This strategy document expresses the government's political commitment to Bulgaria's development as a European country, and is in keeping with its programme for 2009—13 and with the Bulgarian National Security Strategy 2011–20.

The strategic document is within the context of the development of European road safety policies and the United Nations Decade of Action for Road Safety 2011–20.

1. INTRODUCTION
Road accidents have huge social and economic costs. They are becoming an increasing burden on the Bulgarian health system, as they have a direct influence on mortality and illness rates among the population.

In the period 2000–10, 10 627 people lost their lives in road accidents in Bulgaria. 98 770 people received specialist medical attention after suffering severe trauma, and some were disabled for life.

During this period, there has been a downward trend in the number of severe road accidents and victims. The lowest number of fatalities was in 2010 (775), the lowest since 1966.

In spite of the huge fall in the number of victims in 2010, the number of fatalities — 102 per million population — is still very high and about 2.5 times higher than in many other European countries such as the UK, the Netherlands, Sweden, etc.

As a result of road accidents national economies suffer losses the equivalent of more than 2% of their GDP each year. In 2009, the cost of road accidents within the European Union totalled EUR 130 billion.

The majority of road accidents are avoidable and are the result of the behaviour of road users, the imbalance between the road infrastructure and the active and passive safety measures incorporated in it, the roadworthiness and active and passive safety features of vehicles, and the first aid and specialist medical care provided.

It is possible to reduce the human and economic costs of road accidents by changing these contributory factors to accident rates, which requires targeted action and appropriate investment.

2. SCOPE OF THE STRATEGY
In recent years there has been a persistent tendency to put all emphasis for the causes of accidents on errors and offences committed by road users, with the main focus being on increasing sanctions and deterrence as a means of increasing road user awareness.

Although these activities should not be dismissed as they have yielded positive results, it should be noted that traffic is the continuous interaction of three fundamental factors that determine road use and road safety — road user behaviour, infrastructure and vehicle safety and, a very important factor in diminishing the consequences, prompt first aid and specialised medical care.

Equal attention should be paid to improving each of these factors by drafting targets and programmes that need to be achieved.

A particularly topical issue is introducing a transport system that is error-tolerant, detects offences without fail and protects the human body from fatal injuries. Particularly important elements in this respect are instilling safe behaviour among road users, building and maintaining a low-conflict road infrastructure that sends road users clear messages and protects them from fatal errors, ensuring vehicles are roadworthy, active and passive safety, and providing timely medical assistance.

Achieving positive results in this respect requires, on the one hand, a new form of interaction between State institutions and the non-governmental and private sectors, and, on the other, a new mindset in managing road safety at national, regional and municipal level, and at enterprises, educational establishments and in the family.

In this respect, the national strategy focuses on social relations, facts and circumstances that have an adverse impact on road safety, while at the same time focusing on everything that is capable of counteracting severe accidents and the severity of the consequences.

3. PRINCIPLES OF ROAD SAFETY

The present policymaking strategy in road safety is based on the concept that most accidents are preventable and that reducing losses from road accidents is, above all, an expression of concern for the individual, the future and the nation's prosperity. Reducing road accidents entails coordinated action by institutions and a will to implement specific activities for the safe functioning of and the reduction of errors in the driver-vehicle-road system. The philosophy of the current strategy is therefore subject to the following principles:

3.1. Principle of human limitations
To err is human. The human body is subject to various limitations. We all make mistakes and must know our limits. Road safety means detecting, classifying and analysing human error, and putting in place approaches to eliminate them and mitigate the consequences.

3.2. The human body is vulnerable
The capacity of the human body to withstand physical impact is limited. Exceeding these limits results in injury or death. Safety means creating a road system where the forces obtained during a road accident are limited to the capacity of the human body to withstand them. This means that vehicles must protect passengers and other road users. Road infrastructure designers and users have to factor in these limitations. Consideration should also be given to the capacity of vulnerable road users, such as pedestrians, cyclists and motorcyclists, to withstand impact without serious consequences.

3.3. Road safety is a joint responsibility

Safety in the transport system is a function of responsible behaviour by road users, combined with the qualities and efforts of designers and road infrastructure engineers, vehicle safety, and the quality of emergency and specialised medical aid.

The safe use of the road system is the joint responsibility of its creators, organisers and users. Road safety policy should also be implemented through sectors such as energy, the environment, health care, science and education, new technologies, insurance, trade, etc.

Shared responsibility requires concrete action by State institutions, regional and municipal authorities, non-governmental organisations, the private sector and civil society.

3.4. The transport system is there to help people

The road system, being a vital necessity, is a real illustration of the fundamental laws of nature governing the movement of objects in space and time.

Safety of the transport system depends on successfully isolating the sources of kinetic energy in order to reduce the force of impacts and, where not possible, to achieve a controlled dissipation of the kinetic energy so that critical health and the vital boundaries of human vulnerability are not exceeded.

3.5. Increased use of public transport

Buses and trains are a safer means of transport than cars and motorcycles. Underground transit systems have no points of conflict with overground traffic. The fewer people using cars and motorcycles, the lower the number of accidents. More widespread use of alternative modes of transport will reduce congestion and harmful emissions, and contribute to sustainable development.

4. OBJECTIVE AND VISION

4.1. Vision for road safety

The vision for road safety in Bulgaria for the period 2011—20 is 'Road safety is everybody's right and responsibility'.

All citizens have a fundamental right to and are also responsible before others for ensuring road safety.
The State is responsible for making its citizens feel safe in public places and for ensuring their safety as road users.

**4.2. Strategy objective**

The objective of the strategy is by 2020 to reduce the consequences of road accidents compared with the indicators for 2010.

4.2.1. *Reduction in the number of road fatalities by 50%.*

*In 2020, they should not exceed 388.*

4.2.2. *Reduction in the number of severe injuries on the road by 20%.*

*In 2020, they should not exceed 6363.*

**4.3. Rate of reduction in victims according to strategy objectives**

Reduction in the number of average annual fatalities required to meet the objective of a 50% reduction by 2020

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Reduction in the number of average annual fatalities required to meet the objective of a 50% reduction by 2020
775  736  698  659  620  582  543  504  465  427  388
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**5. STRATEGIC DIRECTIONS FOR ENSURING ROAD SAFETY**

**5.1. Improving road safety management**

5.1.1. *Losses from road traffic accidents*

The approximate material costs per road death, without taking into account the intangible values of emotional loss, can be calculated by establishing the costs of: emergency medical assistance; subsequent medical care and treatment; temporary or permanent loss of employment; social costs of caring for disabled people; visits and initial legal proceedings; inquests into road accidents; the costs of criminal and civil legal cases; the costs of sentencing; loss and damage of vehicles; damage to the road
According to information of the United Nations Economic Commission for Europe and the European Road Safety Council, losses from road traffic accidents are equivalent to 2% of the gross domestic product.

In 2009, losses from road accidents in the European Union exceeded EUR 130 million.

5.1.2. Enhancing the role of institutions in tackling road safety issues

To achieve long-term results in reducing the numbers of road accident victims, institutions need to make specific commitments to ensure road safety. In this respect, every institution at central, regional, local, sector and other levels needs to have its own policy for achieving the targets of reducing the number of road accident victims by putting in place concrete action plans and programmes.

5.1.3. Dialogue with civil society on road safety matters

Civil society needs to be involved in the issue of road accident rates, and doing so involves setting up an active network of partners. This entails constructive dialogue, exchanging experience and participation in joint projects.

5.1.4. Involving non-governmental organisations in resolving road safety issues

Non-governmental organisations are a primary conduit for public engagement and a form of commitment. They play a decisive role in setting up a stable coalition of government and voluntary organisations capable of generating useful suggestions, projects, programmes and initiatives to improve road safety. Involving the non-governmental sector means improving coordination with leading government institutions if effective, intensive and beneficial exchange and communication is to be achieved.

5.1.5. Involving the health care community in resolving road safety issues.

In most countries of the European Union, the health sector plays an active, if not a leading, role in tackling road safety issues. At a global level, the UN has appointed the World Health Organisation as the chief coordinator for action to reduce the number of road accident victims.

The consequences of road accidents can be mitigated through policies aimed at improving emergency assistance and first aid, rehabilitation and subsequent social reintegration activities.

Every day, the health sector fights for the lives and the health of road accident victims. Associating the consequences of accidents with road user behaviour helps to put a brake on severe road accidents.

5.1.6. Active regional policy for resolving road safety issues

The actual implementation of national road safety policy is the responsibility of the regions. These are passed on and implemented by regional governments and
municipal administrations, whose priority is to improve the social and living environment in the interests of local communities and society as a whole. Road safety is an invariable, important, dynamic and characteristic factor of the everyday lives of citizens not just in crowded urban areas but also in populated areas away from cities. Through their administrations, regional and municipal authorities, which are the direct conduits for government policy, are in direct contact with citizens. The local authorities are best aware of the nature and idiosyncrasies of traffic in their area, which means that they are required to take an active and responsible position on the issues of road safety. This means that more effective and targeted coordination with local authorities is needed in order to improve the road situation. It also means increasing involvement in joint projects, providing financial support and guidance, and combining the efforts of local non-governmental organisations and citizens to reduce accident rates together.

5.1.7. Alternative modes of transport
Encouraging the use of alternative modes of transport requires a framework policy at national and local level in order to bring about change. To this end, the quality of alternative modes of transport, including their safety, needs to be radically changed. The main aim of alternative transport is to reduce car use. This will require:
  o improving the quality of public transport and rail transport in terms of convenience, comfort, punctuality and communication;
  o stimulating local authorities to develop public transport;
  o reducing harmful emissions and congestion, and improving road safety;
  o setting up standards and prerequisites for ecological and transport effective infrastructure solutions;
  o adopting a system of environmental sanctions to reduce traffic emissions.
  o encouraging walking and cycling in the context of their health and road safety benefits.

5.1.8. Corporate social responsibility – involving the private sector and the market in road safety
Without involving the private sector, it will be impossible to achieve road safety. Private organisations have various mechanisms available to influence their employees and partners, and are also able themselves to become actively involved in improving road safety and by making capital investments. Involving the business sector in road safety means taking the following targeted measures:
  o improving interaction between government institutions and private sector organisations in resolving road safety issues;
  o organising public events to popularise public-private partnerships in road safety.

5.1.9. Safe driving during working hours
In the European Union, 6 out of 10 fatal accidents at work are the result of road accidents by drivers commuting to or from work or driving when on duty. To this end,
labour discipline when driving vehicles in working time and obeying the traffic rules must be scrutinised by applying various forms of influence:

- introducing a disciplinary mechanism to improve the mindset of public-sector drivers, and to improve personal and public road safety;
- private-sector support to increase the monitoring of the driving culture of their employees who drive as part of their job, by introducing mechanisms to influence it;
- studying and applying positive practice in this regard: UN instructions for road safety among their staff; the ban on mobile phone use while driving for members of the US State Administration; the results of the PRAISE project of the European Transport Safety Council; etc.

5.1.10. Extending the principle of state and voluntary involvement in resolving road safety issues

- enhancing the role of the State-Public Consultative Commission on Road Safety Issues (DOKKPBDP) in coordinating individual institutions and organisations in implementing the European Commission's road safety policy, and encouraging the adoption of proven, positive practices from European and other countries;
- enhancing the role of provincial road safety commissions in managing road safety management processes at provincial level;
- enhancing the role of municipal commissions in implementing road safety policies set out in national strategies;
- giving a greater role to school road safety commissions in protecting the lives and health of children, creating safer infrastructure around schools and improving parent awareness of and involvement in road safety, etc;
- administrative support for specialised road safety units.

5.1.11. Encouraging research and development in road safety matters, and studying and adopting positive European and world practice in road safety

5.1.12. Setting up an organisation and providing conditions for the implementation of the ISO 39001 international road safety management standard.

5.1.13. Improving funding for road safety

Here, approaches need to be sought both for targeted funding, and for implanting road safety in projects related to the underlying factors of the transport system (human – vehicle – road). It has been proven that 1 financial unit invested in road safety brings benefits of 5 to 10 financial units.

5.2. Improving the education and skills of road users

Road users are the primary link in the road safety chain and give rise to the greatest likelihood of errors. Whatever measures are implemented, how effective road safety policy is depends on the behaviour of road users. To this end, education, training and ensuring observance of traffic regulations are paramount and must be provided at all stages of people's lives.
Road users must be constantly informed of road safety issues through social and school programmes, work seminars and media campaigns. The aim of protecting people from road accidents can be achieved by constantly influencing people’s awareness. This can be initiated by government and non-governmental organisations, state enterprises and municipalities, businesses, schools, kindergartens, etc., while national road safety policy should encourage and support activities constantly to raise public awareness of the importance of the issue.

5.2.1. In the family
- drawing up a complex of means and mechanisms for improving road safety awareness in families.
- classifying the dangers to the life and health of children on the road, and using various ways and means of making the dangers the object of daily learning in the family.
- parents providing a personal example in educating children about road safety.

Support for creative events — writing stories, poems and songs with a road-safety related theme for children.

5.2.2. In kindergartens
- developing ways and means of conducting a uniform policy for educating children in kindergartens.
- spreading positive experiences from road safety education for children attending kindergarten.
- organising and running road safety competitions, contests, quizzes, etc for families with children of pre-school age.

5.2.3. In primary school
- devising and implementing a child training policy to shape awareness and skills with regard to the dangers of the road to human health and life;
- setting up a system for the step-by-step verification of awareness and skills, and issuing road safety certificates for pedestrians and cyclists;
- training children in extra-curricular events – a National Road Safety Quiz, the National Practical Cycling Complex, Children Teach Children, School Patrols, Safe Routes to School, etc.

5.2.4. In secondary education:
- studying the dangers of driving mopeds, motorcycles and cars;
- driver safety training, depending on pupil age;
- providing conditions for training pupils towards taking their driving licences.

5.2.5. In the driver training system
- devising a strategy to improve the study and training system for driving
licence applicants based on best European practice and EU directives;
  o improving the system of training programmes for driving licence applicants
    with the gradual acquisition of a full driving licence;
  o improving and objectifying the process of theoretical and practical driving
    tests. Wider skills and knowledge are necessary on risk assessment and avoidance,
    contributing towards a less aggressive, more economical and more environmentally-
    friendly driving style;
    o providing conditions for driving lessons for persons with restricted abilities;
    o creating a system to improve the skills and knowledge of drivers who have
      just passed their test;
  o creating a system of criteria to assess the quality of driver training;
  o Improving the system for training driving instructors.

5.2.6. Lifelong training
  o establishing an organisation and legal basis for lifelong driver training;
  o encouraging the upgrading of driving skills in complex conditions and
    critical situations;
  o support for the construction of training grounds for driving under complex
    conditions and in critical situations;
  o improving the training system for drivers who have been banned or had
    points on their licences;
  o introducing a driver training system over a particular period of time;
  o setting up a system to improve driver knowledge and skills for the over-
    65s;
  o improving the driver re-testing system.

5.2.7. Campaigns
  o campaigns to improve road user knowledge and responsibility.
  o encouraging public-private partnership-based coalitions for topic-based
    road safety campaigns.

5.2.8. The media
  o a targeted media policy to reflect the dangers of the road, increasing the
    knowledge of road users and the responsibility of individual institutions
    and organisations for road safety;
  o summarising and spreading positive practices in conveying the dangers of
    the road, and explaining the causes of severe road accidents resulting in
    injuries and fatalities;
  o encouraging specialised programmes and series in the electronic and print
    media.

5.2.9. Cultural institutions
  o setting up an organisation to encourage the publication of literary, musical
    and other productions to improve the driving culture and influence
people's mentality with regard to road safety.

5.2.10. Enhancing insurance factors for road users
- organising a system of bonuses and penalties based on driver behaviour assessment and for setting car insurance premiums and mandatory civil liability insurance.

5.3. Improving enforcement
The effectiveness of road safety policy depends largely on the degree to which traffic regulations are enforced. Traffic regulation enforcement is a key factor in creating the conditions for a significant reduction in fatalities and injuries, particularly when it is well publicised.

Excessive speed, driving under the influence of alcohol and the failure to use seat belts and motorcycle helmets are regarded as the three main factors for road deaths.

Measures to increase traffic regulation enforcement include:
- improving the enforcement strategies and tactics at particular places and times in relation to accident rates, and potentially dangerous sections of road and times;
- establishing a national system of enforcement systems and surveillance technologies that automatically record infringements;
- the prompt adaptation and introduction of best European traffic regulation enforcement practice;
- changes to driving licences to allow penalties to be recorded on it;
- increasing road user discipline and responsibility by setting up a single database of infringements by drivers, pedestrians, passengers and other road users;
- establishing a system for ensuring trans-border control to exchange information on road safety;
- drafting a strategy and tactics to provide equipment and legislative backing for action to reduce drug driving;
- popularise the 'You drink – we drive' scheme;
- improving the system of monitoring driver tiredness;
- improving the system of enforcing observance of speed limits within and outside built-up areas;
- improving enforcement of the use of safety equipment: seat belts; motorcycle helmets; and child restraint systems;
- improving the system and legislation to reduce driver distraction by limiting mobile phone use, smoking, eating, drinking and other activities that distract drivers;
- increasing the effectiveness of campaigns aimed to encourage observance of traffic regulations. Encouraging the broad participation of the media and non-governmental organisations;
encouraging the use of new technologies that provide real-time information on speed limits, fitting vehicles with speed limiters, alcohol interlock systems, etc.;

- improving the enforcement system and legislation to reduce cases of non-registered vehicles being driven or unlicensed drivers driving.

- increasing the effectiveness of controls with regard to vehicle roadworthiness and vehicle equipment;

- targeted action to reduce the number of vehicles being driven without third party liability insurance;

- improving the system and increasing the effectiveness of the points system;

- improving the system and extending the use of driver re-testing;

- improving coordination among and increasing the effectiveness of interaction between the structures of the supervisory bodies of different institutions.

5.4. For a safer infrastructure

Road infrastructure is one of the main elements of the transport system, providing mobility as well as affecting road safety. The road system should provide optimal conditions for all road users and send them clear and plain messages protecting them from errors, and minimise any injuries if errors are committed.

When the road infrastructure is planned, designed, built, repaired and maintained, the relevant requirements of EU directives and regulations should be complied with, as should current technical standards and norms, with consideration given to proven best practice from other countries around the world. In order to achieve more effective results in improving road infrastructure characteristics to enhance road safety, targeted research is necessary, along with prioritising measures at sections of the road network with high accident rates, and constant monitoring to ensure that those sections are detected, marked and made safe as soon as possible. This requires consistent policies to ensure the sustainable development of the road infrastructure in such a way that greater road safety is guaranteed, and action needs to be taken to secure the necessary funding.

5.4.1. General areas
5.4.1.1. outside built-up areas:

- priority improvements to safety on road infrastructure which is part of the trans-European road network by implementing procedures associated with the safety impact assessments carried out in accordance with Regulation No RD-02-20-14 of 29 September 2011 on the scope and nature of assessing road safety impact and safety audits, the conditions and methods of carrying these out and the acquisition and award of the professional qualification of 'Road Safety Auditor'.

- periodic inspections of the national road network;
enhancing legislation to guarantee that highly-effective road safety designs are implemented depending on the class and designation of the road;

carrying out analyses on the necessity to determine new road classifications depending on their designation and traffic load;

drawing together good European practice in road infrastructure safety, studying the options and rationale for integrating them into legislation and the technical system, and undertaking follow-up action to this regard;

analysing roads of the national road network in order to classify them in terms of safety;

analysing recorded serious road accidents from the aspect of the influence of the road infrastructure on the accident, so that measures can be taken to prevent them from recurring;

devising short-term and long-term measures to secure roadside areas by ensuring 'obstacle-free zones' at the roadside to reduce run-off road accidents, head-on collisions, accidents at bends and at junctions, etc;

action to involve specialised secondary and high educational institutions, research institutes, and non-governmental and industry organisations in improving road safety, including road infrastructure safety, and in a sustainable policy by the municipal authorities with regard to making the municipal road network safer;

encouraging the construction of a national cycle network and integrating it into the European cycle network;

analysing and preparing a programme for safety at level crossings in and outside built-up areas.

5.4.1.2. within built-up areas:

drafting new and updating existing regulations on the quality of road networks and the design thereof, including elements in built-up areas, from a road safety aspect;

drafting legislation, strategic documents and investment plans for traffic calming zones, 30 km/h zones, school zones, pedestrian zones and residential zones;

drafting guidelines and implementing measures to reduce pedestrian casualties in built-up areas;

restricting the capacity for transit vehicles using the national road network to drive at high speeds through urbanised areas (with priority for areas where this type of road is crossed by other road types).

building underground, at-grade and multi-storey car parks to free the road from stopped and parked vehicles to ease congestion and ease traffic flows.

5.4.2. Reducing road accidents

5.4.2.1. run-off road accidents:

When a vehicle leaves the carriageway, the consequences are often costly. More than 30% of all road victims in 2010 were due to vehicles running off the road and
overturning or striking fixed obstacles. To reduce the number of road accidents of this type resulting in fatalities or severe injuries, efforts are needed to optimise the road infrastructure so as to reduce the risk of vehicles overturning or colliding with fixed obstacles.

Statistically, vehicles are three times more likely to leave the carriageway at night than in daylight. Reduced visibility increases the risk of accidents, which can be compensated by better carriageway and lane markings. We therefore recommend:

- devising a programme to increase driver awareness of the road situation;
- implementing safety standards when planning roadside areas and methods to ensure that compliance with the requirements is effectively supervised;
- using road installations and suitable marking to calm traffic in danger zones (e.g. rumble strips at the edge of the carriageway, etc);
- strengthening verges and extending obstacle-free zones;
- selecting suitable speed limits that guarantee vehicle stability;
- conducting programmes to improve road maintenance;
- improving in selection, installation and maintenance practices with regard to protective installations;
- using environmentally friendly methods of securing or removing dangerous trees and other fixed obstacles to free the roadside, in accordance with the recommendations of experts and international practice in this respect;
- developing and applying guidelines to improve safety measures beside ditches and slopes to reduce the number of vehicles overturning.

5.4.2.2. at bends

In 2010, 180 people were killed and 1675 injured in accidents occurring at bends (curves). Outside built-up areas, every fourth fatality was the result of an accident on a bend. As well as working constantly to improve driver awareness of the dangers of bends and to develop their ability to take bends properly, taking into account the physical processes that take place there, efforts are also needed to enhance safety by improving the following aspects of the road infrastructure:

- improving visibility at bends;
- improving signage to give drivers advance warning of the type of bend;
- proper upkeep of road markings at dangerous bends;
- drawing up specific reconstruction or new-build projects, and including them in the investment plans for the development and maintenance of individual road networks for the purpose of improving road layout by reducing or removing individual bends, and other activities in this respect;
- installing warning signs at bends where serious accidents have been a frequent occurrence;
o measures to separate opposing vehicle flows at bends where large numbers of serious accidents have been recorded;
o encouraging the construction of rumble strips;
o organising ongoing monitoring of accident rates at bends;
o regular summarising and rapid application of good European practice in making bends safe.

5.4.2.3. at junctions
In 2010, 80 people were killed and 1883 injured at junctions. The number of fatalities and injuries resulting from accidents at junctions can be significantly reduced through speed reduction measures at junction approaches, protective installations for individual road users, etc. Road accidents at junctions can also be reduced by:
o turning existing junctions into roundabouts to reduce the number of conflict points, vehicle approach and crossing speeds, etc.;
o securing independent road safety supervision and technical inspections when new roads are being built or existing ones refurbished or reconstructed;
o raising the carriageway at specific junctions, especially in built-up areas, to reduce crossing speeds;
o building secure traffic islands to protect pedestrians when crossing the road;
o mechanical warnings to drivers that they are approaching a junction where they have to give way;
o studying and implementing traffic calming measures.

5.4.2.4. head-on collisions
Head-on collisions are among the most serious road accidents and have a very high fatality rate. They are frequently the result of incorrect overtaking decisions by drivers, although entering the oncoming lane because of distraction, tiredness or loss of control due to a technical fault with the vehicle are also factors. The problem of high speeds on busy roads with one lane in each direction is particularly severe. There are a variety of measures that need to be put in place to reduce the dangers of head-on collisions on these roads, such as:
o separating elements that prevent vehicles from entering the oncoming lane;
o an third overtaking lane (a priority measure where there is an uphill slope);
o separating oncoming traffic through a wider marked separation strip;
o restricting opportunities for entering oncoming lanes at bends, gradients, etc.

5.4.3. Increasing safety at places and sections with high accident concentrations:
o managing road infrastructure safety through measures to eliminate black spots at points and sections with a high concentration of accidents;
o inspections of road infrastructure for the preventive detection and reduction of the risk of accidents by applying effective measures and good practices;
o organising the fulfilment of the requirements arising from Directive 2008/96/EC with regard to detecting, securing and eliminating places with high accident concentrations;
o participating in EU projects, including projects to classify the road network by accident rates;
o timely specific signage and road markings at places where serious road accidents with a high relative share of fatalities and injuries have occurred;
o putting in place signage and markings for dangerous roadside sections (with ditches, trees, billboards, etc.) when their removal is not possible or not imminent;
o increasing visibility at bends by installing mirrors, etc;
o categorising, publicising and implementing good practice and modern solutions for protecting high accident concentration sections, thereby ensuring the safety of all road users.

5.5. For safer vehicles

Vehicle condition and passive and active safety elements have a significant impact on the number of road accidents and their consequences. Improving vehicle safety can help reduce the number of fatalities and injuries on roads. There has been steady progress in the safety design of new vehicles, with better protection for passengers, efficient braking, improved lighting, new stability control and speed warning systems, safety belt systems, airbags, etc.

In 2010, the total number of vehicles in Bulgaria was 3,284,916. Of these just 8.4% were less than 5 years old, 9.5% were 5–10 years old, 24.3% were 10–15 years old, 30.5% 15–20 years old and 27.3% were over 20 years old. Every second vehicle on the road in Bulgaria is over 15 years old. Cars make up 79.22% of the total, goods vehicles 11.1%, motorcycles and mopeds 3.7%, and buses 0.7%. There is no data on the number of bicycles and carts present on the roads.

There is an extremely wide variety of goods vehicles on the road. The number of motorcycles registered has increased in recent years.

The risk of serious road accidents is significantly higher for older vehicles. Studies of serious road accidents resulting in instantaneous death in the first half of 2011 shows that about 60% of the vehicles involved were more than 20 years old.

Increasing the safety of vehicles is a key factor in achieving national strategy targets to improve road safety. A study indicates that if all vehicles were replaced with the latest model vehicles with high levels of passive and active protection, the number of road fatalities would immediately be reduced by 30%.
5.5.1. A policy of upgrading vehicles with an emphasis on safer vehicles
   - confirming a national renewal policy by replacing existing vehicles with vehicles with higher levels of active and passive safety, especially those purchased with State funds;
   - encouraging and supporting individuals to buy new, safer vehicles with more active and passive safety systems. Encouraging the purchase of vehicles with safer designs and with a high safety classification in the EuroNCAP system.
   - encouraging the installation of more safety systems, such as seat belt reminders, side air bags, improved pedestrian protection, electronic stability control systems, anti-drowsy systems, etc;
   - gradually introducing restrictions on the registration of vehicles without certain safety systems. Gradually introducing mandatory requirements for all new vehicles to have electronic stability systems when registered, starting with passenger carriage and goods vehicles, and for all new cars by 2014;
   - introducing strict rules on the fitting of extras, such as bull bars, roll bars, etc, that pose a danger to other road users.

5.5.2. Improving and maintaining the roadworthiness of vehicles through comprehensive and improved testing
   - improving the quality and scope of periodic roadworthiness tests and increasing the liability of test stations and the persons carrying out the tests;
   - improving the quality of pre-trip inspections and increasing employer liability with regard to the roadworthiness of their vehicles;
   - improving the system of, and extending the scope of, roadside roadworthiness checks to reduce the number of vehicles on the road that are not roadworthy or do not have certain equipment fitted;
   - improving the roadworthiness criteria for road vehicles according to weather and seasonal specifics with regard to equipment and visibility;
   - improving and extending the scope of checks of speed limiter operations, digital tachometers and blind spots in passenger service and goods vehicles, etc;
   - encouraging independent, ongoing and follow-up monitoring of roadworthiness tests.

5.5.3. Creating conditions for the timely adoption of good practice and international standards
   - creating conditions and criteria to introduce alcohol ignition interlocks for passenger service and goods vehicles;
   - introducing systems to automatically notify emergency medical services of serious road accidents;
o organising the prompt adoption and implementation of European vehicle safety directives and international standards;
o developing standards for motorcycle and moped crash helmets;
o improving standards for vehicle fire extinguishers and first aid kits;
o developing standards for motorcycle clothing with safety elements.

5.5.4. Increasing the safety of two-wheeled vehicles, non-motorised vehicles, and agricultural and forestry vehicles
  o developing equipment and visibility standards for these vehicles.

5.5.5. Enhancing and maintaining the roadworthiness of vehicles through high quality repairs and servicing
  o improving the quality of vehicle repairs and servicing, and increasing the liability of service stations and persons who service vehicles;
  o creating conditions and criteria to improve the quality of vehicle repairs and servicing;
  o establishing supervision of completed repair works.

5.6. Encouraging the use of modern road safety technologies
  Intelligent transport systems have a significant potential to improve road safety, as they provide updated information on the traffic situation, helping drivers and reducing the likelihood of errors, reducing the detection time for severe road accidents, etc. Intelligent transport systems provide the opportunity for the more effective use of the existing road infrastructure, help the environment, reduce congestion and increase road safety. When they are designed and constructed, the necessary continuity and compatibility should be factored in.
  o organising and creating conditions to meet the requirements of the European Intelligent Transport Systems (ITS) directive;
  o establishing an organisation to study and apply good practice in the use of ITS over the long term;
  o drawing up various forms of cooperation between government, industry, scientific institutions and NGOs on the application of ITS;
  o stimulating the entry into the market of vehicles with systems which assist road safety;
  o establishing the prerequisites and conditions to implement systems providing reliable communications between vehicles and the road infrastructure;
  o creating long-term conditions to implement public transport, pedestrian and cycle management systems.

5.7. Improving ambulance services to mitigate the consequences of road accidents
  When a major road accident occurs, good quality first aid and specialised medical assistance are extremely important in saving lives and mitigating the
consequences of the injuries of victims. With this regard, the response times of medical and other services to such situations need improving so that emergency assistance and longer-term rehabilitation of accident victims can be provided. In this respect, proper attention should be paid to:

5.7.1. Improving the notification system for road accidents where there are victims
   - setting up the relevant organisation to improve the effectiveness and speed of rescue operations after severe accidents by introducing the European eCall on-board system for making emergency calls from vehicles;
   - improving driver knowledge of what to do when people are injured in serious road accidents;
   - launching campaigns to increase peoples' knowledge and responsibility on the potential of rapid communication in the event of serious road accidents, such as saving the 112 emergency number and the numbers of family members on their mobile devices.

5.7.2. Improving the system of providing first aid
   - increasing the intensity and practical orientation of driving lessons;
   - improving the qualifications of members of the various services that are first to arrive at the scene of an accident – traffic police, the fire service, road rescue, roadside services, etc.;
   - creating conditions to improve the qualifications of passenger service and goods vehicle drivers;
   - providing conditions for ongoing first-aid training for drivers;
   - drafting norms and standards for different types of equipment (first aid kits) depending on the type of vehicle.

5.7.3. Optimising arrival times for specialised medical teams
   - drafting standards to ensure that specialist medical services arrive at the scene of accidents in good time;
   - designing different transport schemes, such as schemes including air transport;
   - increasing administrative capacities through the use of various forms of public-private partnership.

5.7.4. Improving the system of providing hospital care for injuries and assessing the quality of care

5.7.5. Improving the system of providing post-trauma care for road accident victims
   - providing rehabilitation at an early stage and support for patients with injuries, as well as support for persons with relatives who have died as a
result of the road accident, to reduce both the physical and the mental trauma resulting from accidents;
  o encouraging the establishment of reliable insurance systems for road users to fund the rehabilitation of road accident victims;
  o supporting detailed investigations into road accidents, and adopting effective legal measures in the event of fatalities and injuries arising from road accidents to provide fair settlement and justice for relatives of road accident victims;
  o encouraging and stimulating employers to hire people disabled as a result of road accidents.

5.7.6. Extending research and applying good global practices
  o encouraging research and papers on improving the system of measures associated with injuries incurred from road accidents;
  o increasing public awareness of the types of injuries and the consequences for road accident victims, and the responsibilities of road users.

6. KEY FACTORS

6.1. Curtailing the effect of excessive speed

Speeding is the main and most common cause of loss of vehicle control, of increased braking distances and the severity of physical injuries with accidents. In most cases, drivers failed to meet their fundamental obligation under Article 20(2) of the Road Traffic Act (ZDvP) 'to control the vehicle being driven at all times', because of inappropriate speed or speeding. Choosing the right speed for the conditions guarantees good driving. Drivers are prone to forget that the human body is not very resistant to mechanical impact, is highly vulnerable and has a low tolerance threshold. The chances of surviving an accident fall as speed rises, depending on the type of collision. For a vehicle hitting a pedestrian, this speed is 30 km/h; for a vehicle hitting a cyclist it is 30 km/h; for a vehicle hitting a tree it is 40 km/h; for two vehicles in a side-swipe collision it is 50 km/h; and for a head-on collision it is 70 km/h.

Reducing speeds by just 5% can result in a 20% reduction in the number of fatalities and a 10% reduction in the number injuries. The greatest reduction in the number of fatalities in France was achieved when the average speed was reduced by 10 km/h.

To achieve safer speeds on the roads in Bulgaria, a systematic approach is required to influence all elements that make up road traffic.

6.1.1. Increasing road user awareness of the effects of speeds on road safety
  o creating an organisation to conduct national information campaigns for driving at safe speeds, and special elements to be taken into account on motorways and in built-up areas;
  o increasing driver knowledge and ability on stopping and driving around bends;
o increasing road user awareness of the damage caused to the human body in accidents at different speeds;
  o organising a national dialogue to explain the benefits of reducing speed for road safety, and of other environmental and economic benefits related to reduced emissions, fuel consumption and noise.
  o initiating discussions with insurers to encourage the fitting of intelligent speed controls, stability controls and other systems, by offering reduced insurance premiums, particularly for young drivers;
  o introducing information systems to record vehicle speeds.

6.1.2. Optimising speed limits on roads
  o updating speed limits on the road network depending on the designation of particular road sections;
  o updating speed limits on roads with poor surfaces and elements that require lower speeds, as well as at high accident concentration sections;
  o investigating the possibility of introducing differentiated speed limits for new drivers in poor weather, in darkness, when carrying passengers, etc.

6.1.3. Quicker introduction of infrastructure elements that ensure speed limit observance
  o stimulating and supporting local and municipal authorities to increase the number and range of lower speed limits in areas with greater pedestrian and cycle traffic;
  o improving the regulatory system to speed up the introduction of road infrastructure elements and solutions that reduce vehicle speeds, such as roundabouts, uneven road surfaces, protruding kerbs, raised crossings, raised pedestrian crossings, 30 km/h zones, etc.;
  o using various means to influence drivers through road markings and signage.

6.1.4. Increasing the efficiency of speed limit enforcement
  o drafting a general plan for setting up an integrated national system of equipment and systems to enforce speed limits on the national road network, municipal roads and in built-up areas;
  o increasing the use of 'average speed' enforcement;
  o improving the organisation, tactics and strategy of enforcing speed limits by using automatic and manual methods of recording infringements, and overt and covert recording systems in order to increase the detection rate of infringements;
  o improving legislation on speed limit enforcement, reducing administrative times and reducing penalty collection times;
  o providing the organisation and conditions for using public-private partnerships to build speed limit enforcement systems;
- improving speed limit enforcement systems on public transport and goods vehicles (including checks of speed limiters, digital tachographs, etc.) and harmonising legislation to aid cross-border enforcement;

6.2. Reducing the number drivers under the influence of alcohol, drugs and other intoxicating substances

Alcohol is one of the main factors for road accidents with particularly serious consequences. Numerous studies have shown that the risk of an accident involving victims increases rapidly with the driver's blood alcohol level.

Studies in Sweden have shown that when the blood alcohol limit was reduced from 0.05 to 0.02 g/000, the number of road accidents with fatalities fell by 10%. A zero limit is definitely preferable as it leaves drivers no discretion to decide their level of alcohol consumption.

To date there has been a failure to generate public intolerance towards drink driving. There has almost been no case of a serious accident in which a drunk driver was driving alone. This also means that the number of passengers dying in cars driven by drunk drivers is higher than the number of drivers who die. To reduce the number of road accidents with severe consequences due to drink driving, concrete measures must be taken to:

- organise national campaigns and initiatives to increase public awareness of the dangers of drink driving and the consequences of accidents caused by drink drivers;
- improving legislation to tackle drink driving to make it more effective, and to apply the principle of joint responsibility to the person providing the vehicle, those driven in it and those who serve alcohol;
- activating and providing equipment to tackle drink driving in order to increase detection levels of such infringements or criminal offences;
- organising widespread general public debate about the need to reduce blood alcohol limits, particularly in the case of newly-qualified drivers, and public transport and goods vehicle drivers;
- setting up an organisation to determine when vehicles should be mandatorily fitted with alcohol ignition interlocks;
- setting up an organisation for the timely study and adoption in Bulgaria of good practice in European countries with regard to drink driving;
- providing conditions to give greater publicity to cases where drunk drivers have caused accidents;
- drafting an overall legislative base to tackle drug driving;
- drafting a programme to supply a pilot system for driver blood drug detection;
- raising awareness of medications that should not be taken before driving.

6.3. Increasing the use of safety belts, crash helmets and child restraint systems
The use of safety equipment has a direct influence on the severity of injuries from road accidents to passengers in cars or on motorcycles. Studies by car manufacturers show that safety belts reduce the number of serious injuries by 30% and fatalities by 50%. Children who are not restrained are in seven times greater danger in accidents than if they use safety belts and child seats. In 2010, checks on safety belt use found that 54.7% of car drivers, 51.4% of front seat passengers and 7.5% of rear seat passengers use safety belts. These figures are significantly higher compared with safety belt use in 2001, but are significantly lower than many other European countries, where safety belt use is in excess of 95%. In 2010, 3071 of the drivers and passengers in cars and on motorcycles involved in accidents had not used safety systems, and 239 of them died.

To increase the use of safety systems, the following needs to be done:

- major campaigns to increase public awareness by seeking broad public support through the non-governmental and private sectors;
- systematically monitoring safety belt, crash helmet and child restraint system use by region, and a system of measures to increase use;
- open checks involving public organisations and the media on the use of safety equipment by vehicle drivers and passengers;
- public discussions on the traumas caused from a failure to use safety belts, crash helmets and child seats;
- encouraging the purchase of vehicles fully equipped with safety features for various types of impact (side protection airbags), safety belt reminder signals, etc.;
- campaigns that highlight the need to use crash helmets on two-wheeled vehicles, and to increase their visibility in darkness.

6.4. Reducing driver distraction while driving

Driving requires constant attention to the road, road signs, markings, other traffic, on-board instruments, etc. by the driver. Distractions, both within the vehicle and around it, have increased greatly in recent years. Modern vehicles come fitted with satellite navigation systems, complex sound systems, climate control and various audible and visual signals for problems with the vehicle, all of which compete for the driver's attention. Even though it is very difficult to determine what effect all of these distractions have on serious road accidents, they are acknowledged as a fundamental and potentially growing problem. There are no specific statistics available on the number of road accidents with victims caused by driver distraction. Studies in the USA show that in 2008 6000 people died while receiving or making mobile phone calls. UN instructions indicate that other distractions include smoking, eating and drinking while driving.

Mobile phone use leads to a significant increase in the risk of accidents, regardless of whether the device is handheld or used hands-free. The risks are higher for new drivers. In 2010, enforcement bodies found 22 694 instances of drivers using mobile phones while driving. There is evidence to support a blanket ban on the use of mobile phones while driving.
The damage resulting from driver distraction can be minimised by providing opportunities for:

- information and monitoring campaigns to increase road user awareness of the dangers of distracted driving;
- encouraging the installation of onboard equipment that helps drivers avert the harmful consequences of distraction;
- active enforcement of mobile phone use while driving;
- roadside signage should increasingly be directed at drivers, and the number of billboards should gradually be reduced.

6.5. Reducing the effect of fatigue in severe road accidents.

It is difficult to fathom the effect driver fatigue has on severe road accidents, but it is acknowledged as a major problem that is on the increase. Fatigue can cause accidents both on long and short trips. There is evidence to show that sleep deprivation can have the same dangerous consequences as alcohol consumption. Drivers who have not slept for 17 to 19 hours perform worse when driving than those with a blood alcohol level of 0.05%. After 21 hours of sleep deprivation, driver performance is approximately equivalent to driving with a blood alcohol level of 0.15%. Most often, fatigue turns into drowsy driving. At high speed, dropping off behind the wheel can be fatal. There are various approaches on reducing the effect of fatigue on severe road accidents:

- increasing road user awareness of the effects of fatigue on driving ability
- the widespread use of proven infrastructure and technological solutions: rumble strips; electronic anti-sleep alarms; lane departure warning systems; etc;
- increasing sanctions on professional drivers who do not observe the rest requirements;
- increasing enforcement of driving and rest schedules among professional drivers.

6.6. Reducing aggressive driving

Aggressive driving is an expression of an irresponsible, thoughtless and inconsiderate attitude towards road rules, the laws of physics and consideration towards other road users, as well as to the driver's own life, health and freedom. Reducing aggression on the road requires, above all, a systematic approach towards both increasing the sense of responsibility of individual road users, and of generating public intolerance towards road rule infringement. Effective legislation targeting people who regularly commit infringements, and the prompt and irrevocable enforcement of penalties are a further preventive measure. To this end:

- the role of the family, school and institutions in instilling a culture of safe road use should be enhanced;
o legislation should be improved to counteract systematic infringements more effectively;
o systems to name and shame regular and gross violations of road rules and those who cause severe road traffic incidents should be developed;
o a system of measures, including infrastructure measures, to protect citizens from the consequences of aggressive driving should be developed;
o good European practice in influencing aggressive behaviour on the roads should be studied and promptly adapted;
o research and public debate should be carried out on the psychology and motives for aggressive behaviour on the roads.

7. TARGET GROUPS

The classification of target groups prioritises them depending on their level of vulnerability, the frequency in which they are involved in accidents resulting in injuries and fatalities, and the need for specific prevention.

7.1. Pedestrians

The risk of a pedestrian being killed in an accident per kilometre travelled is 9 times higher than that of a vehicle occupant. Pedestrians and cyclists are the most vulnerable group of road users. At a European level efforts are focused on vehicle design standards incorporating high quality, passive safety features, and on building an infrastructure aimed at reducing the frequency and severity of accidents involving pedestrians.

In 2010, 174 pedestrians were killed and 2030 were seriously injured on the roads in Bulgaria. Most of the serious accidents were recorded in large urban centres. Over 50% of the victims were over the age of 65. A large proportion of accidents involving pedestrians took place during the hours of darkness. There is a large concentration of accidents involving pedestrians at pedestrian crossings and around bus stops.

The relative share of pedestrians dying in road accidents in Bulgaria is among the highest in the European Union, and the main factors are the confusing nature of road infrastructure in built-up areas, poor separation of vehicle and pedestrian flows, lack of pedestrian awareness and discipline, unsuitable driving speeds, etc. To limit and reduce the number of pedestrians involved in accidents, measures are needed to:
o improve legislation to protect pedestrians, and ensure equal conditions for road use and free pavements from vehicles;
o organise national campaigns to protect pedestrian health and life, creating respect for pedestrians, the elderly and children, and improve pedestrian-driver contact;
o improve enforcement of traffic regulations for pedestrians and publicising infringements that endanger pedestrian life and health;
o increase sanctions for drivers who infringe rules at pedestrian crossings, bus stops, as well as for pedestrians in breach of traffic regulations;
o increase pedestrian visibility during the hours of darkness;
o enhance the initiative of municipalities to create better and safer conditions for pedestrians in built-up areas; establish 30 km/h zones, school zones, pedestrian zones, raised footways and pedestrian crossings, artificial irregular surfaces, extended pavements, etc;
  o implement road building product standards to incorporate a high level of pedestrian safety;
  o devise a system of measures to build a suitable transport system that provides mobility for people with disabilities;
  o remove metal accessories and bars that have been added to the front of vehicles;
  o introduce safer standards for infrastructure modelling in places where pedestrians cross the road;
  o encourage municipal councils in large urban areas to draft comprehensive programmes to protect the life and health of pedestrians.

7.2. Cyclists

As an alternative mode of transport, cycling will continue to develop as a low-cost, environmentally-friendly means of transport that increases physical exercise and health, reduces congestion, etc. The risk of a cyclist being killed in an accident is 7 times greater than for the occupants of a vehicle. Safe conditions for cyclists can be provided by:
  o providing legislative conditions for separating bicycles from other vehicle flows, making cycling an integral part of transport and traffic planning in urban areas;
  o supporting municipal authorities in designing and building cycleways, cycle lanes and cycle zones;
  o creating the preconditions for cycle training for children as a part of general road safety training for children;
  o stimulating and extending the involvement of children in practical cycling competitions;
  o conducting campaigns to increase the use of cycle helmets, particularly among the under-14s;
  o increasing cycle and cyclist visibility during the hours of darkness;
  o supporting the establishment of a national cycle network on Bulgaria's roads as part of the European cycling network.

7.3. Motorcycle and moped riders

Motorcyclists are another vulnerable group of road users. They often have specific problems controlling their vehicles and a high level of vulnerability in the event of an accident. Motorcyclists often fail to take proper consideration of various rules, such as driving at a speed that gives them an adequate visible stopping distance, driving at the right edge of the road, noise abatement requirements, etc. Moped riders are similar to motorcyclists, although they are physically more vulnerable due to the
lower permissible driving age. Reducing the number of injuries and fatalities among motorcyclists and moped riders will require:

- organising campaigns for safe driving under different driving conditions and publicising the consequences of accidents involving motorcycles and mopeds;
- drafting standards for motorcycle safety clothing and crash helmets;
- changing legislation on speed limit enforcement and registration plate visibility. Increasing the length and coverage of training for a motorcycle licence and improving the motorcycle test;
- setting up device systems that automatically record infringements committed by motorcyclists;
- adapting and improving road infrastructure safety by adding motorcycle protection systems to be installed together with the system of barriers that prevent cars from leaving the road;
- increasing police enforcement against traffic regulation infringements, unroadworthy motorcycles and equipment, and motorcycle noise levels.
- improving regulations on speed limits and zones for motorcyclists, mopeds, ATVs, motorised machines, etc.

7.4. Traffic in an urban environment

More than 2/3 of injuries and 40% of fatalities from traffic accidents occurred in built-up areas. In 2010, 312 people were killed and 5081 injured as a result of road accidents in built-up areas. The high accident rate in built-up areas reflects a number of failures in traffic organisation, road repair levels, speeding and a lack of regular enforcement. In large urban areas, the conflict between pedestrians and vehicles is particularly acute. The conditions for equal and safe participation by all road users — pedestrians, cyclists, disabled people, etc. — have not been created. There are a number of failings in traffic organisation and management here. In many places, there are no updated transport and general traffic plans. Traffic calming systems and measures that have proved to improve road safety in many European built-up areas are missing. Measures to this end include:

- updating transport and general traffic plans in built-up areas to include elements ensuring equal and safe participation for all road users, ensuring the safety of vulnerable road users and giving priority to public transport, reducing congestion, reducing speed limits and implementing positive practices;
- supporting the initiatives of municipal authorities to implement plans in this respect;
- drafting specific plans to reduce pedestrian accident rates in major urban centres;
- securing zones around schools, places with a high level of mixed traffic, public transport stops, footways, junctions and other high-risk areas.

7.5. Newly qualified drivers
There is a significantly higher risk of young drivers aged between 18 and 24 becoming involved in a serious road accident. The risk is up to four times higher compared to drivers aged from 30 to 59.

There are a number of factors that contribute towards the high proportion of newly qualified drivers becoming involved in accidents and their dangerous behaviour on the road. These are related primarily to lack of experience and youth: they have not matured mentally and physically; have a tendency to take risks; to show off; to use alcohol and drugs and get tired; lack routine and automatic responses; have a reduced capacity to register and avoid dangerous situations; over-estimate their own capabilities; underestimate situations, etc.

Higher accident and mortality rates with young drivers is not a uniquely Bulgarian phenomenon. The problem exists in many countries throughout the world and various measures have been taken to resolve it:

- driving lesson programmes that focus more on the dangers of driving, accidents and ways of avoiding them;
- improving the system of giving driving lessons based on best European and global practices: training from an earlier age; the gradual award of a full driving licence; driving only when accompanied by a licence holder; involving parents; etc;
- encouraging the construction of special training grounds for driving under complex conditions and in critical situations;
- improving the legislative base to increase the requirements for new drivers and make them more responsible: a smaller number of licence points at the beginning; zero tolerance with regard to the alcohol limit; lower speed limits for beginners; restrictions on night-time driving and carrying passengers; limiting the power of vehicles that can be driven; marking the vehicle; etc;
- safe driving information campaigns for young people and increasing the involvement of the family and relevant institutions;
- improving the system of assessing the quality of the services provided by various institutions responsible for training and testing the skills and knowledge of young drivers.

7.6. Elderly drivers

Road safety is vitally important among all age groups. However, elderly drivers undergo physical changes that may influence their ability to drive safely. The lens of the eye loses its ability to refocus quickly, peripheral vision diminishes, the retina becomes less sensitive to light, etc. The time the brain requires to process information lengthens, which significantly increases response times in the event of danger. Elderly people have a far lower physical capacity to withstand impact, with the result that even with relatively mild accidents their injuries can be fatal. To improve road safety for elderly road users, the emphasis needs to be on the following:

- information campaigns to increase road user awareness of the changes in their capabilities that occur after a certain age. Assessing their influence on road safety and raising awareness of the need to change their driving style;
analysing serious accidents caused by over-65s and the regular transmission of information to the media;
- encouraging elderly drivers to use vehicles with electronic safety systems suitable for their age group.

7.7. Unlicensed drivers
There has been a gradual increase in the number of serious road accidents caused by unlicensed drivers in recent years. Children, youths and adults who do not hold licences drive vehicles as a matter of course, with or without the knowledge of the owners of the vehicles or their parents. In some places, driving by unlicensed drivers is accepted without criticism, and is often approved of. Every tenth road fatality is the fault of an unlicensed driver. This requires both greater public intolerance of unlicensed driving, and an improvement of legal enforcement measures and awareness of the dangers that threaten people's life and health, oriented towards:
- enhancing legislation to counteract all factors contributing towards such offences more effectively;
- developing new enforcement strategies and tactics to detect such offences;
- organising campaigns to publicise the dangers and consequences of serious road accidents in order to raise public responsibility and intolerance.

7.8. Passengers
Almost one third of road accident victims are vehicle passengers. Very often they are victims of irrational behaviour by drivers, who may be friends or relatives, who are unlicensed, intoxicated, tired or break the traffic regulations, etc. Passengers failing to use seat belts plays a major role in aggravating the consequences of road accidents. To improve road safety in Bulgaria, the following actions are necessary:
- organising campaigns to publicise the dangers and consequences of serious road accidents in order to raise public responsibility and intolerance.
- heightening driver awareness of passenger safety when driving;
- improving legislation and enforcement to increase passenger use of safety systems (seat belts, crash helmets and child seats) and their responsibility based on the principle of shared responsibility.

7.9. Children
The main responsibility for the large number of child victims of road accidents lies with parents, teachers, road users, government institutions, those responsible for traffic control, municipal authorities, etc. There are three main areas where changes in the number of child victims can be sought: training and instilling safe road use habits; transporting children in proper restraint systems and establishing a safe infrastructure that makes allowances for their particular age group; and adult road users setting a personal example. To reduce the number of child road accident victims, a series of measures is required both locally and nationally.

7.9.1. General
o improving the system for training children at kindergartens and schools to instil a new culture of road safety;
o forming an organisation to involve the cultural and scientific community, non-governmental organisations and the private sector in creating aids, works of art and music, computer games, etc., to train children in road safety;
o developing programmes aimed at preventing fatalities and injuries from road accidents among children. Expanding the use of public-private partnerships in ensuring child safety;
o improving road infrastructure around pre-school establishments, schools and areas with high levels of child road use;
o explaining the benefits of child visibility by wearing clothing with reflective elements and bright coloured clothing;
o organising national road safety competitions, contests, quizzes, etc for children;
o annual campaigns on protecting the life and health of children on the road;
o training programmes for parents and drivers, which include making them aware of the age characteristics of children (i.e. what they can and cannot do as cyclists, skateboarders, motorcyclists, etc.);
o supporting involvement in international training projects to protect children against injury on the road;
o encouraging the creation of educational films, educational literature and aids, computer games, etc., on road safety;
o national schoolchildren's quizzes and competitions;
o national children's competitions for drawings and essays on road safety;
o improving legislation and increasing enforcement to protect the life and health of children on the road;
o periodically informing the public on why and how each accident with child fatalities occurred.

7.9.2. Improving safety among child pedestrians
o designing, promoting and distributing topic-related training programmes for parents and drivers about the potential behaviour and reactions of child pedestrians. Conferences on aspects of safety issues for child pedestrians;
o encouraging structures in education, non-governmental organisations, municipalities and other institutions to design safe routes to and from school for every child;
o creating behavioural indicators to help determine when children are ready to cross the road themselves;
o classifying and popularising good practice in protecting children against accidents;
o wider application of the 'school crossing patrols' movement;
o designing, implementing and assessing 'children teach children' programmes;
o designing systems to monitor local risk factors to investigate the causes of injuries to child pedestrians, and to set out potential changes in environment and
behaviour that could prevent such injuries;
  o studies to determine levels of child injuries and to determine the risk factors involved. Determining and verifying indirect indicators that could be used to forecast road accidents with child victims.

7.9.3. Child safety in vehicles
  o national and local campaigns to increase awareness among the public, parents, teachers, family members and others on child safety in cars, the possible risks of not using child safety, dangers when getting into and out of cars, leaving children in cars, etc;
  o improving enforcement of the safe carriage of children in road vehicles.

7.9.4. Safe cycling
  o information campaigns to publicise the benefits of helmets and protective clothing among child cyclists, skateboarders, motorcyclists, moped riders, etc;
  o training children in road safety from the driver's viewpoint from the earliest possible age;
  o improving the road infrastructure to improve conditions for cycling, rollerblading and skateboarding;
  o increasing cooperation with the municipal authorities to provide safe places for skateboarding and rollerblading, and the construction of safe cycle lanes;
  o improving the visibility of bicycles and child cyclists in traffic;
  o broadening the scope of national competitions in practical cycling, cycling skills, road regulation, technical knowledge and providing first aid to road victims.

7.10. Drivers of passenger service and goods vehicles
  Professional drivers are on the roads on a daily basis and are largely responsible for setting the tone of road use with their discipline and skills. Some of the worst road accidents with the largest number of victims were because of infringements by and the involvement of passenger service and goods vehicles. Accidents with vehicles transporting dangerous goods are of a particular great danger to the public. The difficult job of professional drivers demands a high level of skills and knowledge, ethics and discipline in terms of observing the traffic regulations and work/rest schedules. This is where further efforts are required to reduce errors and infringements by professional drivers.
  o improving continuous training for drivers of passenger service and goods vehicles;
  o establishing a system of increased requirements for discipline by drivers of passenger service and goods vehicles;
  o improving first aid skills;
  o improving the system of technical and departmental investigations of severe accidents in which professional drivers are at fault, adopting the principles and methods used for other modes of transport to road transport;
enhancing the role of employers, and increasing professional skills and discipline among drivers of passenger service and public goods vehicles;
expanding the role of industry organisations in limiting and reducing road accidents caused by professional drivers;
analysing serious road accidents involving passenger service and goods vehicles and disseminating the findings.

8. IMPROVING LEGISLATION AND IMPROVING THE NATIONAL SYSTEM FOR GATHERING, RECORDING AND ANALYSING DATA ON ROAD USER BEHAVIOUR

If the individual objectives of constantly reducing the number of road accident victims are to be successfully achieved, an adequate legislative basis updated to meet the changes that have arisen in road use, the requirements of European Union road safety directives and which helps the adoption of positive practices that have shown their effectiveness in other countries is required. This involves:

- ensuring that European road directives are promptly transposed into national law;
- changing primary and secondary legislation to provide conditions for implementing positive practice that has proven effectiveness in other countries;
- improving legislation to tackle the causes and preconditions for serious road accidents more effectively;
- improving the system of recording and analysing statistical data on accidents and road user behaviour;
- improving the system of recording and analysing trauma and disability rates among road accident victims.

9. FUNDING

Funding plays a key role in achieving the aims of road safety policy. In the World Bank Report of June 2009, recommendation No 4 outlines the framework of the mechanism for funding the activities of the leading national structure for improving road safety. According to world financial experts, funding and the high calibre of road safety professionals is the key moving force for progress in reducing road accident casualties. Laying the foundations for a stable state-funding mechanism for various road safety activities and initiatives is indispensable. This can be achieved by:

- organising the most efficient implementation of funding by financing road safety projects by the Bulgarian Road Safety Fund and the Guarantee Fund;
- making funding for road safety systems and elements an integral part of road infrastructure planning;
- funding educational activities at schools and pre-schools as part of the overall funding of training programmes;
o funding individual projects through public-private partnerships;
o setting up an organisation for funding applications for national and international road safety programmes through European programmes;
o studying the possibilities of securing alternative sources of funding for road safety.

10. MONITORING
o national strategy implementation through short, medium and long-term programmes organised by central, regional, municipal and local institutions;
o devising implementation strategies and programmes for the fulfilment of a National Strategy on a functional principle by field of activity;
o consolidating the practice of tracking the progress in implementing strategy measures and their impact on road safety;
o organising annual performance assessments on national strategy tasks and their impact on road safety;
o organising assessments on the contributions of individual institutions to meeting strategy objectives and reducing the number of road victims;
o organising public discussions on fulfilling the strategy and its effects on the road safety situation;
o interim assessments of strategy objective fulfilment and the results thereof in 2014;
o setting up and maintaining a website on fulfilment of the national strategy and assessment of the situation on the country's roads.

11. CONCLUSION
The current strategy is an expression of the political will of the State and the public sector to reduce the number of victims of road accidents. This framework is a good basis for concrete measures to be taken by interested parties involved at national, regional, municipal and local level. The final results will depend on the readiness of individual institutions, organisations and civil society to support the changes needed to improve road safety.
12. ROAD SAFETY SITUATION

12.1. Historical perspective of road accidents

In fulfilling objective of reducing the number of victims of road accidents set out in the National Strategy for 2007—10, the number of fatalities has fallen by 31.8%, the bulk of which was achieved in the last two years.

12.2. Number of road accident fatalities by decade
Total and average annual road accident fatalities by decade 1951 to 2010

12.3. Number of road fatalities in European countries per million inhabitants

Fatalities per million inhabitants in some countries, 2010
### 12.4. Road accidents in 2010 — base for the Decade of Action for Road Safety 2011—20

In 2010, 775 citizens were killed and 8,080 were injured on the roads in Bulgaria. This is the equivalent of 15 deaths a week, with another 155 seriously injured people in hospitals.

#### 12.4.1. Accident victims by age

**12.4.1.1 Under-17s**

<table>
<thead>
<tr>
<th>Age</th>
<th>Fatalities</th>
<th>Injured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 6</td>
<td>6</td>
<td>164</td>
</tr>
<tr>
<td>From 6—9</td>
<td>3</td>
<td>246</td>
</tr>
<tr>
<td>From 10—14</td>
<td>9</td>
<td>319</td>
</tr>
<tr>
<td>From 15—17</td>
<td>20</td>
<td>320</td>
</tr>
</tbody>
</table>

**12.4.1.2.18–24 year olds**

<table>
<thead>
<tr>
<th>Age</th>
<th>Fatalities</th>
<th>Injured</th>
</tr>
</thead>
<tbody>
<tr>
<td>18–24</td>
<td>113</td>
<td>1,277</td>
</tr>
</tbody>
</table>

Over 95% of road victims between the ages of 18 and 24 were involved in accidents as drivers or passengers.

**12.4.1.3 Road users from 25—64 years old**

<table>
<thead>
<tr>
<th>Age</th>
<th>Fatalities</th>
<th>Injured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drivers</td>
<td>281</td>
<td>2,211</td>
</tr>
<tr>
<td>Passengers</td>
<td>124</td>
<td>1,517</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>58</td>
<td>846</td>
</tr>
</tbody>
</table>

**12.4.1.4 Over-65s**

<table>
<thead>
<tr>
<th>Age</th>
<th>Fatalities</th>
<th>Injured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drivers</td>
<td>30</td>
<td>210</td>
</tr>
<tr>
<td>Passengers</td>
<td>27</td>
<td>246</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>98</td>
<td>594</td>
</tr>
</tbody>
</table>

**12.4.1.5 Accident victims by gender,**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Fatalities</th>
<th>Injured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>578</td>
<td>4,981</td>
</tr>
<tr>
<td>Drivers</td>
<td>336</td>
<td>2,802</td>
</tr>
<tr>
<td>Passengers</td>
<td>140</td>
<td>1,297</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>102</td>
<td>884</td>
</tr>
<tr>
<td>Females</td>
<td>197</td>
<td>3,094</td>
</tr>
<tr>
<td>Drivers</td>
<td>25</td>
<td>415</td>
</tr>
<tr>
<td>Passengers</td>
<td>100</td>
<td>1,533</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>72</td>
<td>1,145</td>
</tr>
</tbody>
</table>

The number of females involved in accidents as passengers and pedestrians is higher than the number of males. Over 94% of all women who died as passengers and 83.3% of those injured were travelling in cars.
12.4.2. Victims by road user type

12.4.2.1 Drivers.
fatalities – 361, injured – 3218, of which:
cars - 256 fatalities - 1847 injured
goods vehicles - 29 fatalities - 190 injured
motorcycles - 38 fatalities - 443 injured
mopeds - 6 fatalities - 150 injured
cyclists - 27 fatalities - 395 injured
carts - 4 fatalities - 56 injured

12.4.2.2 Passengers
fatalities – 240, injured – 2832, of which:
in cars - 219 fatalities - 2388 injured
in buses - 3 fatalities - 151 injured
in goods vehicles - 8 fatalities - 111 injured
on motorcycles - 4 fatalities - 60 injured

12.4.2.3. Pedestrians
fatalities – 173, injured – 2020, of which:
under 18 - 9 fatalities - 421 injured
from 18—24 - 5 fatalities - 158 injured
from 25—64 - 58 fatalities - 848 injured
over 64 - 98 fatalities - 594 injured.

Car drivers were responsible for hitting the largest number of pedestrians, killing 107 and injuring 1 479; lorry drivers were responsible for 27 deaths and 161 injured; bus drivers for 9 deaths and 35 injured; and motorcycle and moped riders for 6 deaths and 43 injured.

139 (80.33%) pedestrians died and 1365 (67.6%) were injured from collisions with vehicles at intersections. 82 (47.4%) pedestrians died and 82 (47.4%) were injured during the hours of darkness.

Fatalities resulting from pedestrians being run over in the hours of darkness and between intersections are significantly higher.

12.4.3. Main types of accident
Over 97% of road deaths come under three main accident types — collisions between vehicles, single-vehicle accidents and running over road users who are not vehicle occupants.

12.4.3.1 Single-vehicle accidents
fatalities – 293, injured – 2412, of which:
overturning - 102 fatalities - 960 injured
hitting a tree - 103 fatalities - 532 injured
hitting a post - 23 fatalities - 232 injured
hitting a fence - 28 fatalities - 245 injured
hitting street furniture - 11 fatalities - 76 injured.

These accidents are primarily the result of losing control of a vehicle due to lack of driver ability. In many cases, the loss of control was due to fatigue, drowsiness or falling asleep, distraction, a loss of orientation in the darkness due to a lack of markings or signs, etc.

130 (48.1%) persons died and 82 (47.4%) were injured during the hours of darkness in single-vehicle accidents.

12.4.3.2 Collisions between vehicles,
fatalities – 262, injured – 2900, of which:
head-on collisions - 164 fatalities - 1091 injured
side-swipe collisions - 78 fatalities - 1348 injured
failure to keep distance - 20 fatalities - 383 injured
hitting a stopped or parked vehicle - 14 fatalities - 221 injured.

The main causes of head-on collisions are dangerous overtaking, entering the opposing lane due to distraction, and loss of control over the vehicle, including on bends. The consequences of accidents due to hitting stationary vehicles on roads outside built-up areas in the hours of darkness are particularly severe.

12.4.3.3 Hitting pedestrians
fatalities – 173, injured – 2021,
fatalities in built-up areas – 128, injured – 1881, of which:
in towns - 103 fatalities - 1733 injured
in villages - 25 fatalities - 148 injured
outside built-up areas - 45 fatalities - 140 injured

The proportion of pedestrians killed, 22.32% of the total number of road victims, is among the highest in the European Union.

12.4.3.4 Hitting cyclists
fatalities – 26, injured – 388.

12.4.3.5 Hitting carts
fatalities – 3, injured – 113.
Over 54% of accidents of this type occurred during the hours of darkness.

12.4.3.6. Vehicles hit by trains

12.4.3.7. Passengers falling
fatalities – 3, injured – 104.

12.4.4. Driver behaviour
12.4.4.1. Excessive speeding
Every second person killed due to driver error was a victim of inappropriate speed or speeding by the driver. Over 79% of people killed due to excessive speed or speeding were car drivers. Excessive speed and speeding caused the deaths of 76 pedestrians, while 202 people died as a result of hitting a tree, a post, overturning and other types of single-vehicle accidents. 80 died due to vehicle collisions.

12.4.4.2 Overtaking and entering the opposing lane
Of the fatalities, 70 (69.3%) were due to a head-on collisions between vehicles, 18 died from oblique collisions and 5 died from side-swipe collisions.

12.4.4.3 Failure to give way to another vehicle,
fatalities – 58, injured – 1171, of which:
- at intersections: 25 fatalities, 495 injured
- changing lanes: 13 fatalities, 107 injured
- turning: 7 fatalities, 333 injured
- passing: 5 fatalities, 66 injured.

12.4.4.3.3 Failure to give way to pedestrians
fatalities – 28, injured – 236

12.4.4.5 Driving under the influence of alcohol
fatalities – 25, injured – 313
Over 63% of these accidents were recorded during the hours of darkness. 15 of the fatalities were passengers, 6 were drivers, 3 were pedestrians and 1 was a road worker.

12.4.5. Fault of the drivers of:
cars - 517 fatalities, 6103 injured
goods vehicles - 82 fatalities, 610 injured
buses - 13 fatalities, 126 injured
motorcycles - 35 fatalities, 323 injured
mopeds - 6 fatalities, 102 injured
bicycles - 4 fatalities, 136 injured
company vehicles - 133 fatalities, 1352 injured.

12.4.6. Accident sites
12.4.6.1. Built-up areas,
fatalities – 312, injured – 5081
12.4.6.1.1. In towns:
fatalities – 217, injured – 4292, of which:
hitting pedestrians - 103 fatalities, 1733 injured
collisions between vehicles - 45 fatalities, 1360 injured
single-vehicle accidents - 47 fatalities, - 558 injured
hitting cyclists - 10 fatalities, - 277 injured.

12.4.6.1.2. In villages:
fatalities – 95, injured – 776, of which:
hitting pedestrians - 25 fatalities, - 149 injured
collisions between vehicles - 17 fatalities, - 215 injured
single-vehicle accidents - 39 fatalities, - 275 injured
hitting cyclists - 4 fatalities, - 46 injured.

12.4.6.2 Outside built-up areas,
fatalities – 463, injured – 2999.

12.4.6.2.1. On motorways

12.4.6.2.2. On Class I roads,
fatalities – 190, injured – 949, of which:
collisions between vehicles - 106 fatalities - 474 injured
single-vehicle accidents - 54 fatalities - 382 injured
hitting pedestrians - 22 fatalities - 41 injured.

12.4.6.2.3. On Class II roads,
fatalities – 96, injured – 774, of which:
collisions between vehicles - 46 fatalities - 405 injured
single-vehicle accidents - 30 fatalities - 283 injured
hitting pedestrians - 14 fatalities - 21 injured.

12.4.6.2.4 On Class III roads,
fatalities – 95, injured – 732, of which:
collisions between vehicles - 26 fatalities - 303 injured
single-vehicle accidents - 62 fatalities - 369 injured
hitting pedestrians - 11 fatalities - 26 injured.

12.4.6.2.5 On municipal roads,
fatalities – 46, injured – 369, of which:
collisions between vehicles - 19 fatalities - 174 injured
single-vehicle accidents - 35 fatalities - 297 injured
hitting pedestrians - 4 fatalities - 20 injured.

12.4.6.3. At bends,
fatalities – 180, injured – 1530, of which:
collisions between vehicles - 76 fatalities - 618 injured
single-vehicle accidents - 80 fatalities - 696 injured.
Over 23% of the total number of fatalities were due to accidents on bends.

12.4.7. Accidents, fatalities and injured by time

12.4.7.1 Days of the week

<table>
<thead>
<tr>
<th>Day</th>
<th>Fatalities</th>
<th>Injured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>114</td>
<td>1158</td>
</tr>
<tr>
<td>Tuesday</td>
<td>88</td>
<td>1071</td>
</tr>
<tr>
<td>Wednesday</td>
<td>96</td>
<td>1128</td>
</tr>
<tr>
<td>Thursday</td>
<td>95</td>
<td>1158</td>
</tr>
<tr>
<td>Friday</td>
<td>105</td>
<td>1242</td>
</tr>
<tr>
<td>Saturday</td>
<td>109</td>
<td>1218</td>
</tr>
<tr>
<td>Sunday</td>
<td>168</td>
<td>1105</td>
</tr>
</tbody>
</table>

12.4.7.2. By time of day

Number of fatalities in 2010 by time of day
12.4.7.3. By month
Number of road accident victims in 2010 by month

Fatalities in single-vehicle accidents in 2020 broken down by month

Fatalities in vehicle-vehicle collisions in 2010, broken down by month

12.4.7.4. In the hours of darkness
fatalities – 296, injuries – 2640
Pedestrians, cyclists and animal-drawn carts are most at risk during the hours of darkness. For particular types of accidents the number of fatalities is higher in darkness. Examples include overturning after leaving the carriageway – 41 (51.4%), hitting a tree – 52 (50.5%) and hitting a post – 13 (56%). Over 72% of victims in collisions with carts were during the hours of darkness. The consequences for pedestrians are much more serious – 605 (28%), of which 82 (47.4%) died.

12.4.7.5. During fog, snow, rain and torrential rain
fatalities – 119, injuries – 1136, of which:
- fog - 13 fatalities, - 110 injured
- rain - 71 fatalities, - 727 injured
- snowfall - 35 fatalities, - 299 injured.
The largest number of fatalities in these conditions occurred with head-on collisions (46 dead and 263 injured), followed by pedestrians (22 dead and 220 injured).

12.5 The overview of the statistics on road accidents and road accident victims allows the following conclusions to be drawn:
1. The largest number of road accidents and road accident victims are the result of excessive and inappropriate speeds – 380 dead and 3100 injured. Every second person killed in accidents for which the driver was to blame was due to inappropriate speed or speeding.
2. Bad overtaking and entering the oncoming lane brings victims every day – 101 dead and 640 injured.
3. Failure to give way also had serious consequences, killing 38 and injuring 1171.
4. Fatalities are high among the 18–24 year olds, with 113 deaths and 1277 injuries.
5. Loss of control of a vehicle and accidents where no other road user was involved were the cause of 293 deaths and 2412 injuries.
6. The most serious consequences were head-on collisions between vehicles, resulting in 164 deaths and 1091 injuries.
7. There is a persistently high level of accidents involving pedestrians, with 173 deaths and 2020 injuries.
8. 240 passengers were killed and 2832 injured in various types of road accidents.
   220 people (91.6%) died as passengers in cars.
   The number of females involved in accidents as passengers and pedestrians is higher than the number of males.
9. The use of safety belts by the occupants of vehicles involved in road accidents is comparatively low.
   Of drivers and passengers who died in vehicles involved in accidents, over 60% were not secured, while over 53% of those injured were not wearing safety belts.
A total of 347 dead and 2890 injured vehicle occupants were not wearing safety belts.

10. 133 deaths and 1352 injuries were the fault of drivers of company vehicles.

11. There is a persistently high accident rate on the Class A road network. 190 people died and 1139 were injured on Class A roads, which are part of the European road network. This means that every fourth road accident fatality occurred on the Class A road network.

12. The proportion of severe road accidents at and near bends is exceptionally high. 180 deaths and 1530 injuries were caused as a result of accidents on these parts of the road network.

13. 296 people were killed and 2640 were injured due to road accidents in the hours of darkness, at dusk and in artificial light.

14. 119 people died and 1255 were injured in serious accidents during fog, snow or rain.

15. 4452 (67.3%) of road accidents were recorded in built-up areas, resulting in 312 (40.25%) deaths and 5081 (62.8%) injuries.

217 people died and 4292 were injured in towns. 95 died and 776 were injured in villages.

These statistics are far from exhaustive, but they show the complexity of road accidents and the wide range of factors that need to be analysed to determine the best and most effective measures to significantly reduce the number of road accident victims. They also show that three main types of accidents predominate: run-off accidents; collisions at crossings; and head-on collisions.

Much of the effort to improve road safety during the previous period targeted people committing road traffic offences. Data analysis shows that a large proportion of accidents are the result of drivers or other road users, a lack of safety features in road infrastructures, vehicle safety levels and the efforts taken to save and give medical assistance to victims of road accidents. In order to resolve the problems of preserving the life and health of road users successfully, the range of institutions in the State sector, non-governmental organisations, the private sector and civil society needs to be constantly expanded to adopt the principle of joint responsibility. The final target of zero road accident fatalities by 2050 is recorded in the White Paper on road safety.

Success in reducing the number of road accident victims is indisputably contained in the message for the Decade of Action for Road Safety 2011–20:

Together we can all save the lives of millions.