National Road Safety Strategy 2011-2020

(Summary of basic information from the document)

Content

Introduction [x]

The objective of the National Road Safety Strategy 2011 - 2020 is **to reduce** by 2020 **the number of fatalities in road traffic to the average of European countries** and further **to reduce by 40 % the number of seriously injured**. The achievement of this ambitious objective shall significantly reduce the consequences of traffic accidents as well as physical and mental suffering of direct participants thereto and their relatives. In addition to the purely human dimension, traffic accidents also carry an economic dimension; therefore a substantial reduction in road traffic accidents represents considerable savings for the whole society.

By adopting the National Road Safety Strategy for the years 2011 - 2020, the Czech Republic joined the countries where citizens have shown their will to fight against the new global epidemics – epidemics of serious consequences of traffic accidents. A major precondition for successfully achieving the objectives of the new Strategy is to have road traffic safety adopted by each and every one as their personal right and responsibility.

[x] This document represents a summary of the National Road Traffic Safety Strategy 2011 - 2020 intended for the large public. For those interested in detailed information, the full text of the strategy including annexes may be accessed on the website of the Ministry of Transport – www.ibesib.cz

1 Accident Rate in the Czech Republic in European Context

With 130 persons killed in road traffic per 1 million inhabitants in 2001, the Czech Republic ranked 15th out of the 27 EU countries – i.e. approximately in the middle – and constituted thus a boundary line between the member states at that time and the candidate countries. The mortality indicator then exceeded the EU average by 16 %. Despite the progress achieved in the past decade, with 86 killed in road traffic per 1 million inhabitants in 2009, the Czech Republic ranked 18th among the 27 EU countries and thus falls into the group with worse results. The mortality rate in the Czech Republic exceeds the EU average by 23 %. In the recent years, even its position among the countries that joined the EU in 2004 shifted downwards. How is it possible? During the years 2001 - 2009, the whole EU saw a reduction in the number of killed on roads in average by 36 %, while in the Czech Republic, the reduction in the number of killed was slightly lower over the same period, respectively by 32 %.

The basic overview of traffic accident rate development in the Czech Republic over the past decade and consequences thereof are given in the following table:

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
Traffic accidents total	190 718	195 851	196 484	199 262	187 965	182 736	160 376	74 815	75 522
Death within 30 days	1 431	1 447	1 382	1186	1 063	1 222	1 076	901	802
Death within 24 hours	1 314	1 319	1 215	1 127	956	1 123	992	832	753
Serious injuries	5 375	5 125	4 711	4 237	3 883	3 861	3 725	3 467	2 823
Slight injuries	29 013	30 312	29 543	27 974	24 231	25 382	24 776	23 777	21 610
Damage to property [in CZK billion]	8,891	9,334	9,687	9,771	*9,116	8,467	7,741	*4,981	4,9

**The minimum volume of damage when the accident must be reported to the Police of the Czech Republic changed in the years 2006 and 2009 – from 1 January 2001 to CZK 20,000, from 1 July 2006 to CZK 50,000 and from 1 January 2009 to CZK 100,000*

Table No 1: Total numbers of traffic accidents and consequences thereof in the Czech Republic in the years 2000 – 2009 *(Source: ŘSDP PP ČR)*

2 Economic Aspects of Accidents

In addition to social consequences, traffic accidents also bring about extremely high economic losses for the whole society. Expressing economic losses from traffic accidents based on quantification of direct costs (damages to property, but also health and administrative costs) as well as of indirect costs (given by the losses in production and social expenses) is performed in the Czech Republic since 1993. Aside from total losses, average costs are defined for one accident involving a fatal, serious or slight injury or damage to property only. These values are updated every year using the average year – on - year inflation rate set by the Czech Statistical Office. Costs for 2009 are given below:

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
Traffic accidents total	190 718	195 851	196 484	199 262	187 965	182 736	160 376	74 815	75 522
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Table No 2: Total economic losses from traffic accidents in the Czech Republic in 2009 *(Source: CDV)*

In 2002, direct and indirect costs of a fatal injury in consequence of a traffic accident amounted to CZK 8 million; in 2009 the respective figure reached CZK 10,6 million. For accidents involving a serious injury, the value increased from CZK 2,7 million in 2002 to CZK 3,6 million in 2009.

The above given data are based on a purely monetary expression of the losses caused by the accidents. However in the majority of European countries, a broader approach to evaluating of these losses takes the lead that involves also the human aspects – pain, suffering, mental harm etc. The "Willingness to Pay" method is applied which is based on assessing how much the inhabitants of a given country are willing to pay for preventing the risk of death or serious health consequences. It is the expression of the citizens´

will on what priority should be given to measures for increasing their safety in road traffic. The value attributed to accidents with fatal consequences significantly varies across European countries; it is interesting to note that in countries with high levels of road traffic safety (e.g. Norway, Great Britain or Sweden) the specific figures are several times higher compared to countries with lower safety levels (Greece, Poland etc.).

For the purpose of a homogenous assessment of safety measures efficiency, recommended values for individual EU member states have been prepared using a single methodology. The mutual comparability of individual countries reflecting their economic level is based on taking into account their purchase price parity. The real volume of losses for the whole society caused by road traffic accidents in 2009 in the Czech Republic is the following:

	Number	Unit costs based on international recommendations (CZK in thousands)	Total volume of losses (CZK billion)
Fatal injuries	901	24 232,0	21,8
Serious injuries	3 467	3 255,2	11,3
Minor injuries	23 777	236,6	5,6
Damage to property	-	-	16,0
Total			**54,7**

Table No 3: Total real volume of losses for the whole society from traffic accidents in the Czech Republic in 2009 (Source: CDV)

The comparison with original values given in Table No 2 shows that the volume of losses related to fatal injuries changed considerably and that the calculated value decreases with the reduction in seriousness of consequences. This clearly shows that the value of human life is not sufficiently appreciated in the Czech Republic. An objective international comparison demonstrates that the total real volume of losses for the whole society from traffic accidents in the Czech Republic amounted to almost CZK 55 billion in 2009.

3 Strategic Objective of the National Road Safety Strategy 2011 - 2020

The strategic objective of the National Road Safety Strategy 2011 - 2020 is **to reduce by 2020 the number of persons killed in road traffic to the average level of European countries and in parallel to reduce by 40 % the number of seriously injured.**

The basic indicator for comparing with Europe shall be the number of killed per 1 million of inhabitants. The reduction in the number of seriously injured shall be related to the year 2009. The strategic objective reflects the European objective set by European Commission, i.e. to reduce the number of victims of traffic accidents in the EU by half over the period 2011 - 2020, and also the ambition of the Czech Republic to move during this decade at least to the European average level in tragic consequences of accidents. According to the European objective declared, the number of killed should drop by half, i.e. from the current number of approx. 70 persons killed per 1 million of inhabitants to approx. 35 persons in 2020. Currently Sweden, the Netherlands and Great Britain are attempting to reach these levels. The Czech Republic will thus need **to reduce the number of persons killed in accidents by 5,5 % on average** every year, which means in total reducing the number of persons killed by approx 60 % compared to 2009, i.e. to 360 persons. **Fulfilment of this objective shall save the lives of more than 3000 of our fellow citizens over this decade.**

4 Main Starting Points

When drafting the National Road Safety Strategy 2011 - 2020, the common European objective has been taken into account together with specific initial national conditions, needs and circumstances under which the necessary measures shall be implemented. The main starting points were the following:

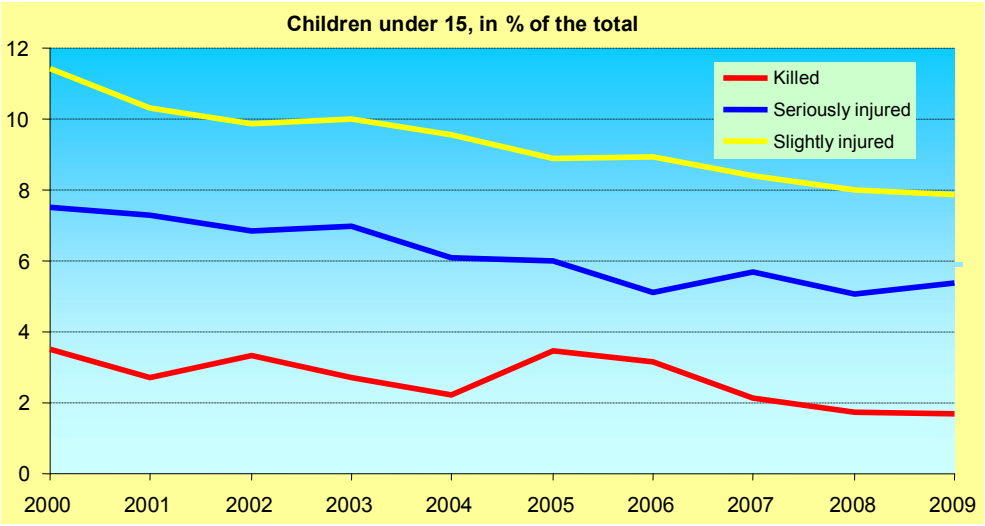
- Evaluation of the 2004 - 2010 National Road Safety Strategy;
- Survey among entities in the Czech Republic that have their activities related to safety of road traffic;
- Analysis of experience from European countries that have achieved a radical drop in serious accidents rates;
- EU road safety policy for the period till 2020.

5 Priority Problematic Areas

The specification of priority problematic areas was done based on analysis of accident rates development in the previous decade. Its purpose is to enable targeting of attention on the most risk-prone groups of road traffic participants as well as dangerous behaviour modes. Based on the assessment of the previous National Road Safety Strategy for the years 2004 - 2010, on the comparison of direct and indirect road safety indicators with European countries and based on expected trends and change of conditions in transport, the following were identified as priority areas of the new strategy:

5.1 Children

Children are not among the most risk-prone participants of road traffic, but from the long term point of view it is important to concentrate due attention on this group. The share of children killed in road traffic from the total number of traffic accident victims in the Czech Republic has been decreasing over the past decade, this due to constant care and attention spent on prevention of child injury rate in transport.



Graph No 1: Share of traffic accident consequences of children under 15 from the total consequences (Source: ŘSDP PP ČR, CDV)

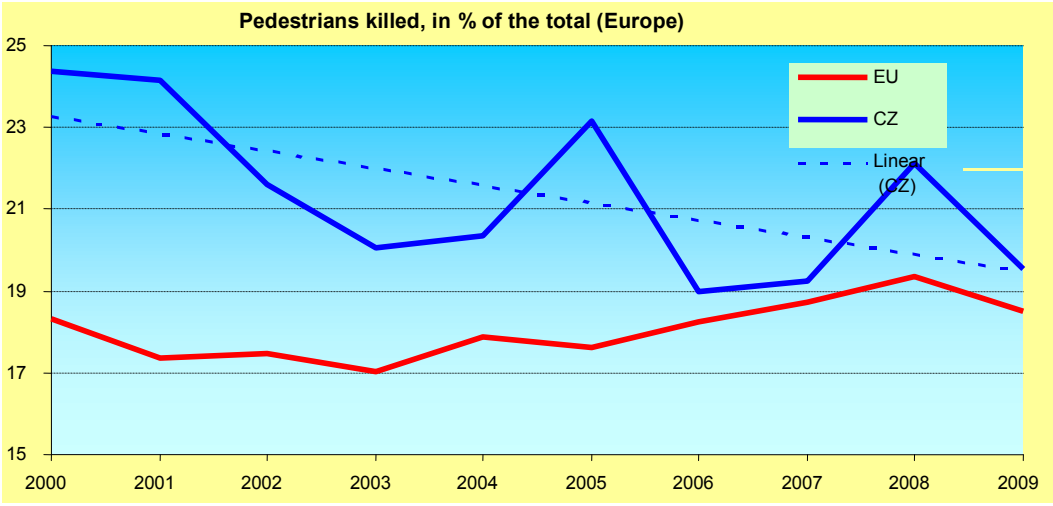
Children will grow into future drivers; their preventive education thus has the potential of significantly influencing the behaviour of one entire generation of inhabitants. The principle that it is not possible to accept even a single child being killed or seriously injured in relation to a traffic accident shall be in force permanently.

The respective measures and activities should lead in the target year 2020 to the reduction in the number of:

- **Children killed by 7**
- **Seriously injured children by 708**

5.2 Pedestrians

This is the most represented group of the so called vulnerable road users. Compared to 2001, 50 % less pedestrians were killed in 2009; still the absolute number of victims among pedestrians must be considered as disproportionately high. When compared to European development, the Czech Republic reports above – the - average share of pedestrians from the total number of road users killed. It is therefore necessary to pay extra attention to measures targeted on this group even in this decade.



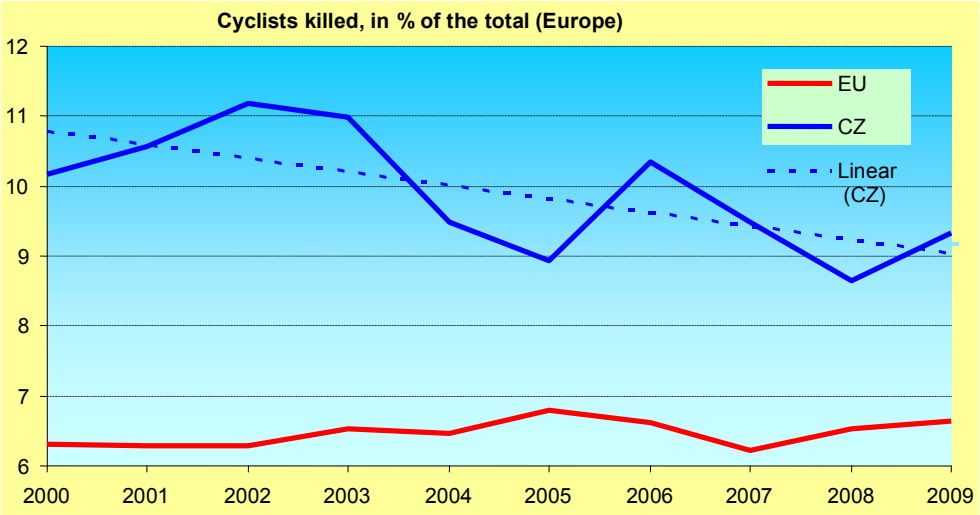
Graph No 2: Share of fatal traffic accident consequences of pedestrians from the total consequences (Source: IRTAD – OECD, CDV)

The respective measures and activities should lead in the target year 2020 to the reduction in the number of:

- **Pedestrians killed by 80**
- **Seriously injured pedestrians by 240**

5.3 Cyclists

Inhabitants of cities and municipalities shall further be supported in using bicycles for transport, this among other by helping to reduce the risk of being killed or injured in consequence of collision with motor-powered vehicles. In 2002, 53 % of fatal injuries of cyclists occurred on roads outside of municipalities, in 2009 the share dropped to 44 % which means that majority of cyclists were killed on roads within municipalities. It is necessary to support the implementation of traffic safety measures helping to achieve solidary and problem-free movement of all road users, especially in cities. Although the absolute number of cyclists killed shows a decreasing trend, their share in the total number of killed is still rather high, especially when compared with European average:



Graph No 3: Share of fatal consequences of traffic accidents of cyclists from total consequences (Source: IRTAD – OECD, CDV)

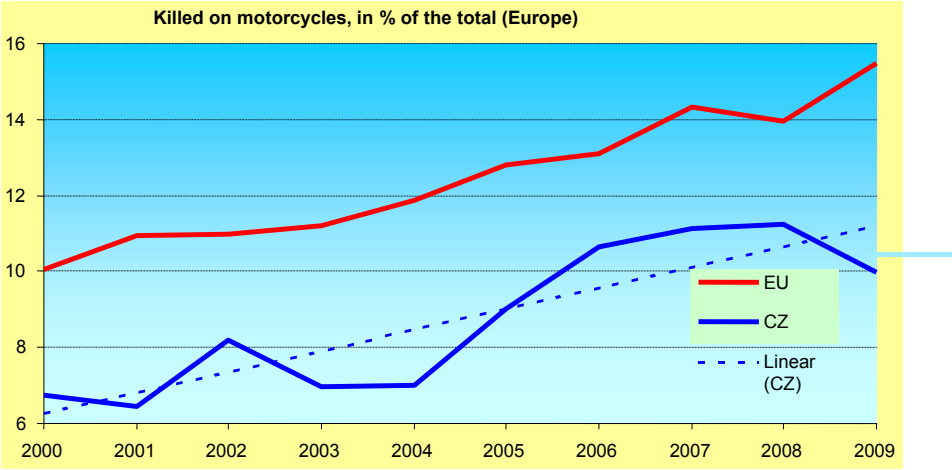
Raising the safety level for cyclists in road traffic represents a clear challenge for the coming decade.

The respective measures and activities should lead in the target year 2020 to the reduction in the number of:

- **Cyclists killed by 35**
- **Seriously injured cyclists by 150**

5.4 *Motorcyclists*

Out of all participants in road traffic, motorcyclists are facing the highest risk of fatal injury and at the same time represent a major risk for the others. The highest number of motorcyclists killed can be found in the age group 25 - 34 years, with the traditional inappropriate speed of driving as the main cause of tragic accidents. As the number of motorcycles sold is growing and there is only limited progress in equipment thereof with passive safety technologies, it can be expected that the traffic - related issues of this group will persist. The development trend in fatal accidents of motorcyclists in the Czech Republic is similar to other European countries.



Graph No 4: Share of fatal consequences of traffic accidents of motorcyclists from total consequences (Source: IRTAD – OECD, CDV)

Motorcyclists represent only 0,5 % of the total distance covered in road traffic, but amount to almost 10 % of the total number of road traffic participants killed. It is therefore necessary to pay due attention to measures aimed at this group of road users.

The respective measures and activities should lead in the target year 2020 to the reduction in the number of:

- **Motorcyclists killed by 45**
- **Seriously injured motorcyclists by 180**

5.5 *Young and novice drivers*

Young drivers and novices are subject to an increased risk of taking part in a traffic accident, be it due to their enhanced acceptance of risk or lack of experience in road traffic. The demographic development shows that the number and share of young drivers

will decrease; this however does not mean that attempting to influence their life values and behaviour in traffic should lose its importance. Over the past decade, there has been a reduction in the share of young drivers from the total number of killed, nevertheless persons under 20 years of age still represent an issue.

Driver´s age	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2009/ 2000
under 17 years	842	680	585	636	572	563	507	510	480	369	0,44
18 - 20 years	10 892	9 302	8 956	9 661	10113	9 923	9 263	9 910	9 160	4 144	0,38
21 - 24 years	25 382	22 193	20 685	20 217	19 381	19 039	17 428	17 818	15 473	6 662	0,26
under 24 years total	37 116	32 175	30 226	30 514	30 066	29 525	27 198	28 238	25 113	11 175	0,30
in % of the total											
under 17 years	0,4	0,4	0,3	0,4	0,3	0,3	0,3	0,3	0,3	0,5	1,26
18 - 20 years	5,6	5,5	5,1	5,4	5,6	5,4	5,3	5,9	6,2	6,2	1,10
21 - 24 years	13,1	13,0	11,8	11,2	10,7	10,3	10,0	10,6	10,5	9,9	0,76
under 24 years total	19,2	18,9	17,3	16,9	16,7	16,0	15,6	16,8	17,0	16,6	0,87

Table No 4: Accidents caused by motorised vehicles drivers divided based on driver´s age
(Source: ŘSDP PP ČR, CDV)

Compared with European average, the share of young drivers in the total number of traffic accidents victims in the Czech Republic is lower, which is undoubtedly due to a whole range of preventive and awareness-raising events organised by the Ministry of Transport. The comparison of novice drivers, with short experience in driving, is no longer so bright, as the Czech Republic ranks near the European average. This stresses the need to carry out substantial changes in the area of driver licence preparation and testing of new drivers as well as the need to introduce efficient supportive measures for beginners.

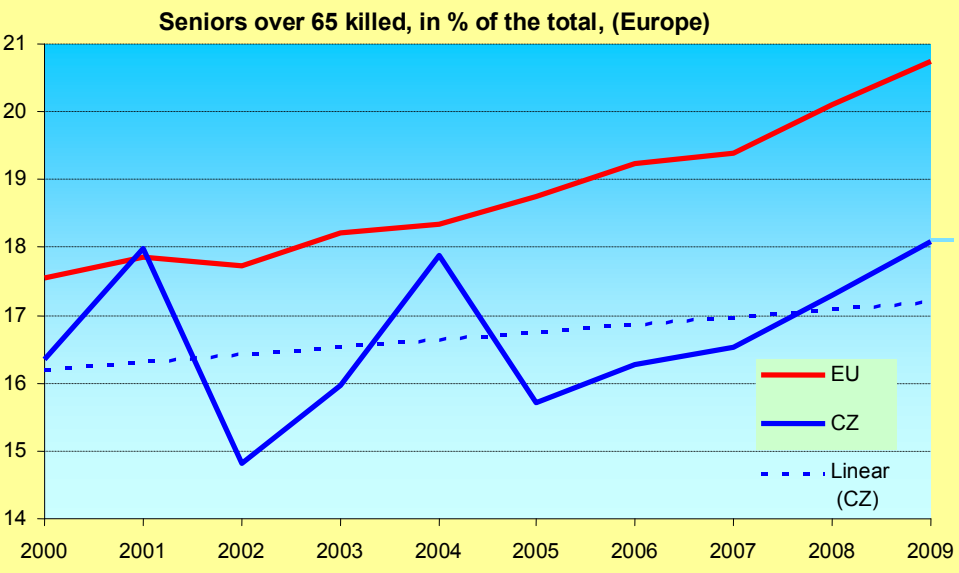
The respective measures and activities should lead in the target year 2020 to the reduction in the number of:

- **Persons killed by 70**
- **Seriously injured persons by 150**

5.6 Aging population

Aging of the population is one of the current demographic phenomena. The share of inhabitants over 65 years of age shall increase from the current 15 % to 20 % in 2020. In parallel, senior citizens will be more active, thus requiring more mobility. Nevertheless better quality healthcare cannot fully compensate for the higher vulnerability of older persons together with reduced abilities to quickly analyse and react to increasingly complicated situations in road traffic. Attention must be given mostly to older pedestrians. In 2010, 44 % of pedestrians killed were over 64, while the share of seniors killed from the total number of traffic accidents victims in that year amounted to 19 %.

The following graph shows that safety of senior citizens in road traffic is becoming a growingly serious issue all over Europe:



Graph No 5: The share of seniors over 65 killed from the total number of drivers killed
(Source: IRTAD – OECD, CDV)

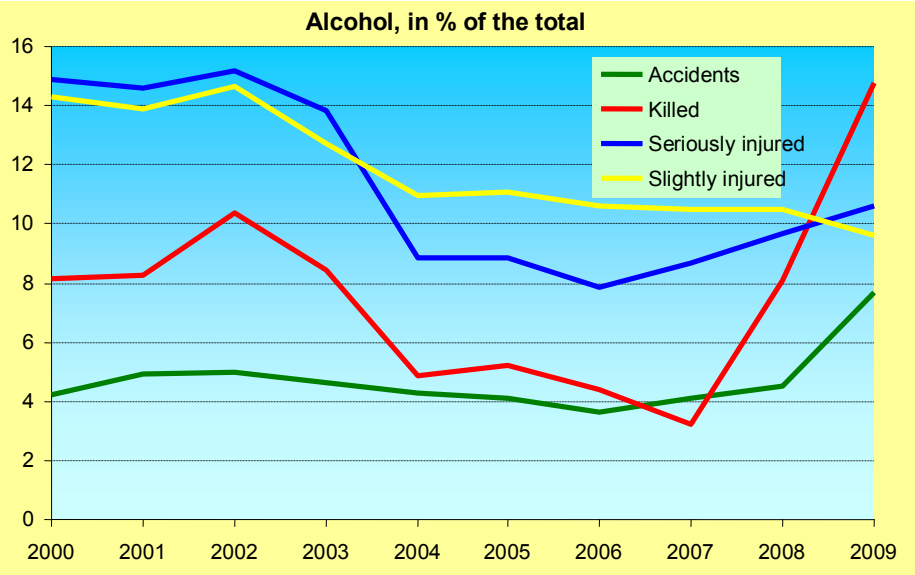
Even though the issue of aging population will hit the Czech Republic more significantly only in 2030, it is necessary to undergo preparation for the new situation already during this decade.

The respective measures and activities should lead in the target year 2020 to the reduction in the number of:

- **Persons killed by 25**
- **Seriously injured persons by 50**

5.7 *Alcohol and other addictive substances impaired driving*

In the recent years, an increase of tragic consequences of traffic accidents caused under the influence of alcohol can be observed. It is also alarming to note that in 69 % of drivers at fault under the influence of alcohol in 2010, the blood alcohol level tests showed results of 1 ‰ or more.



Graph No 6: Share of traffic accident consequences caused by drunk driving from the total accidents consequences (Source: ŘSDP PP ČR, CDV)

Drunk driving shall rightfully receive intense attention during this decade as well. It must be noted that the limited possibility of controls and enforcement of the respective legal measure represents a crucial issue.

The respective measures and activities should lead in the target year 2020 to the reduction in the number of:

- **Persons killed by 40**
- **Seriously injured persons 150**

5.8 *Inappropriate speeding*

Inappropriate speed of driving is responsible for at least 40 % of traffic accidents victims, also significantly contributing to the occurrence of almost all accidents in road traffic, whereas even very small changes in the speed of vehicles lead to significant differences in the severity of accidents. Speedy driving where secure distance from the car ahead

is not respected represents a secondary problem. The basic overview of consequences of traffic accidents caused by speeding is given below:

Speed	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2009/ 2000
Accidents	28 073	29 892	26 275	27 499	29 890	31 066	25 892	25 185	23 353	15 521	0,55
Killed	530	512	556	496	461	481	420	495	434	370	0,70
Seriously injured	1 745	1 877	1 833	1754	1 699	1 576	1 317	1 328	1 286	1 151	0,66
Slightly injured	6 932	8 059	7 616	8 406	8 477	8 158	6 715	7 244	7 362	6 887	0,99
In % of total											
Accidents	13,3	16,1	13,8	14,0	15,2	15,6	13,8	13,8	14,6	20,7	1,56
Killed	39,7	42,0	42,3	37,6	37,9	42,7	43,9	44,1	43,8	44,5	1,12
Seriously injured	31,6	34,2	33,4	33,4	34,8	35,9	33,0	33,5	33,8	32,6	1,03
Slightly injured	25,6	28,5	26,3	27,7	28,7	29,2	27,7	28,5	29,7	29,0	1,13

Table No 5: Numbers and consequences of accidents caused by speeding
(Source: ŘSDP PP ČR, CDV)

Speeding is the biggest killer on the road. Measures leading to a significant reduction in the number of victims thereof shall therefore be implemented also during this decade.

The respective measures and activities should lead in the target year 2020 to the reduction in the number of:

- **Persons killed by 140**
- **Seriously injured persons by 310**

5.9 Aggressive driving

It is possible to characterise aggressive driving as behaviour not respecting other participants of the road traffic. Aggressiveness in traffic is not dangerous just because of the immediate risk to others it represents, but mostly for the psychological impact thereof on other road users. Inconsiderate driving together with individualism and corruption spreading through the society are becoming a social norm, but in fact aggressive driving does not really save time for the speeding driver, on the contrary it limits the others, contributes to their stress and occurrence of collision situations while being a burden for the environment. It is difficult to express the direct impact of aggressive driving on the accident rate as it has various forms– for example dangerous overtaking, not giving way, limiting other drivers, not respecting

the safe distance. Nevertheless the price to be paid for aggressive driving cannot be avoided – for example in 2009, 144 persons died in consequence of accidents caused by wrong overtaking and not giving way and 7,965 more persons were injured. It is therefore clearly necessary to concentrate the attention on preventive measures against aggressive behaviour on roads and on efficient repressive measures in the coming decade.

The respective measures and activities should lead in the target year 2020 to the reduction in the number of:

- **Persons killed by 60**
- **Seriously injured persons by 100**

Thorough implementation of the respective measures and activities from priority areas of the new National Road Safety Strategy for the years 2011 - 2020 should contribute to the reduction of the number of persons killed in road traffic by 60 %, i.e. by 500 in the target year 2020 when compared to 2009.

Fulfilment of this objective shall save the lives of more than 3 000 of our fellow citizens during this decade.

Priority Area	Expected reduction in the number of persons killed	Expected reduction in the number of seriously injured persons
Children	7	70
Pedestrians	78	240
Cyclists	35	150
Motorcyclists	45	180
Young and novice drivers	70	150
Aging population	25	50
Alcohol and other intoxicating substances	40	150
Inappropriate speed	140	310
Aggressive driving	60	100
Total	**500**	**1 400**

Table No 6: Expected reduction in the number of killed and seriously injured persons in the target year 2020 compared to 2009

Success in meeting the objectives of the new Strategy shall mean not only many human lives saved, but also a significant reduction of the financial losses for the whole society. It must be stressed that experience from abroad clearly shows that financial resources invested into suitably selected traffic safety measures report high rates of return. This aspect is even more pertinent in a period when efficient safety measures are required and the efficiency of financial resources spent is assessed very carefully.

6 Action Programme

The Action Programme represents an indivisible part of the National Road Traffic Safety Strategy 2011-2020. It contains the Corrective Measures to Create a Safe Traffic System on Roads divided into three basic components:

- **Safe roads;**
- **Safe transport vehicles;**
- **Safe behaviour.**

7 Responsibility for Achieving the Strategy Objectives

Numerous stakeholders with various levels of competence and responsibility, different thematic and territorial powers, legal status and financial or HR means will contribute to implementation of the Strategy. In order to fulfil successfully the objectives of the new Strategy, it shall be necessary to involve efficiently not just the central government bodies, regional and local administration bodies, professional organisations (car driving schools, transporters, transport companies etc.), businesses and private entities, NGOs, civic associations, but first and foremost all road users. Thorough respecting of road traffic and safety rules such as wearing of safety helmets for motorcyclists and cyclists, safety belts for drivers and passengers in cars, securing children using appropriate retention systems, wearing reflexive materials on clothes in poorer visibility conditions by pedestrians and cyclists, respecting the maximum speed in and outside of municipalities shall be the expression of the ever valid motto

Safety on roads – right and responsibility of each and every one of us

8 Long-term Vision

Each traffic accident resulting in a lost life or serious injury must be seen as a systemic failure of the entire society, not as an individual error, as it is traditionally the case. From the mid-term perspective, it is of course necessary to set specific objectives to reduce the numbers of killed or seriously injured, to define corresponding activities and measures that will help in the fulfilment thereof. Nevertheless only a situation when everyone will come back home from their journey to their loved ones safe and sound can be seen as the ultimate ideal. This might be an ambitious dream that may never come true entirely – nevertheless it must be fully accepted by the whole society, individual citizens and social organizations, political representatives and commercial entities, in short by everyone.

The principle **"Safety on roads – right and responsibility of each and every one of us"** must become an integral part of each one of us, entities responsible for road safety as well as individual citizens. Only then we can claim to be moving forward together ... moving together towards the longed for zero.

CDV	Transport Research Centre *(Centrum dopravního výzkumu)*
IRTAD - OECD	International Road and Traffic Accident Database - OECD
ŘSDP PP ČR	Traffic Police Service Directorate of the Czech Republic Police Presidium