EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT

Road Safety Performance National Peer Review: Lithuania





Road Safety Performance

National Peer Review: Lithuania



EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT (ECMT)

The European Conference of Ministers of Transport (ECMT) is an inter-governmental organization established by a Protocol signed in Brussels on 17 October 1953. It comprises the Ministers of Transport of 43 full Member countries: Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, FRY Macedonia, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and the United Kingdom. There are seven Associate member countries (Australia, Canada, Japan, Korea, Mexico, New Zealand and the United States) and one Observer country (Morocco).

The ECMT is a forum in which Ministers responsible for transport, and more specifically the inland transport sector, can co-operate on policy. Within this forum, Ministers can openly discuss current problems and agree upon joint approaches aimed at improving the utilization and at ensuring the rational development of European transport systems of international importance.

At present, ECMT has a dual role. On one hand it helps to create an integrated transport system throughout the enlarged Europe that is economically efficient and meets environmental and safety standards. In order to achieve this, it is important for ECMT to help build a bridge between the European Union and the rest of the European continent at a political level.

On the other hand, ECMT's mission is also to develop reflections on long-term trends in the transport sector and to study the implications for the sector of increased globalisation. The activities in this regard have recently been reinforced by the setting up of a New Joint OECD/ECMT Transport Research Centre.

* *

Further information about the ECMT is available on Internet At the following address: http://www.oecd.org/cem/

© ECMT 2004 – *ECMT Publications are distributed by:* OECD Publication Service, 2, rue André-Pascal, 75775 PARIS CEDEX 16, France

TABLE OF CONTENTS

Introduction	5
PART I - BACKGROUND INFORMATION	7
1.1. General	9
1.2. Transport sector	13
1.3. Trends in road safety: statistics and analysis	16
1.4. Regulatory and legislative framework	26
PART II - ROAD SAFETY MANAGEMENT STRUCTURE IN LITHUANIA	37
2.1. Road safety organisational framework in Lithuania	39
2.2. Scientific research on traffic safety	50
2.3. Road network	52
2.4. Vehicle inspection and state technical inspection requirements	57
2.5. Drivers' training.	61
2.6. Conclusions – Problems in the Road Safety organisational structure in Lithuania	63
PART III - ACTIONS REQUIRED	65
3.1. Policy instruments to be implemented	69
3.2. Specific actions on road network	78
3.3. Strategic schedule for action	80
SYNTHESIS OF RECOMMENDATIONS	87
Annex 1 A brief description of Vision Zero	91
Annex 2 List of persons visited by experts	93
Annex 3 Acronyms and bodies	97

INTRODUCTION

The purpose of this publication is to attempt to provide an overall description and assessment of Lithuania's work to improve public road safety. The publication also aims at proposing changes that are considered necessary in order to improve road safety in Lithuania.

The term "peer review" has not been rigorously defined. However, over the years, the expression has assumed a specific meaning in the practice of international organisations. Peer review can be described as the systematic examination and assessment of the performance of a State by other States, with the ultimate goal of helping the reviewed State improve its policy making, adopt best practices, and comply with established standards and principles.¹

Peer review can be used in a broad range of areas. In each of the fields covered, peer review, directly or indirectly can serve the following purposes: policy dialogue, transparency, capacity building, compliance...

This procedure is extensively used within OECD, at the request of the country being reviewed. These reviews, carried out by experts from Member countries and the Secretariat, can be an effective way for countries to openly examine their policies and practices through detailed comments, discussions, and insight on what they are doing. Apart from providing an open appraisal of their policies, it can help the ministries involved to obtain the resources and implement the policies that can make a difference.

Lithuania is the first country to undertake this type of review in the safety field, firstly because the Baltic countries have shown relatively high accident rates and secondly because the Baltic Ministers had the opportunity to meet in December 2000, which confirmed their concern with improving the situation.

In recent years, the flows of transit traffic across Lithuania have increased due to expanding economic relations with the European countries. The number of vehicles is also increasing very fast. The growth of traffic volume is also a reason to pay more attention to traffic safety.

Road structures do not meet the needs of increased traffic flows as they did in 1980-1990, when road and street planning took traffic flows into consideration. It was assumed that in 2005, there would be 180 cars for 1 000 inhabitants. In fact, after Lithuania gained its independence, the number of cars grew very fast, especially in the cities. According to 2002 data, there were then 396 vehicles per 1 000 inhabitants, 319 of which were cars.

The rapid growth in the number of cars and the increase in traffic volume make it more and more difficult to ensure safe traffic on Lithuanian roads and streets. One can hardly imagine today's civilisation without transport, so it is the duty of public and governmental institutions to ensure traffic safety through strengthened road safety policies and measures.

The description and assessment of Lithuania's road safety policy has been based on the following sources of information:

- 1. Country report. PHARE Multi-country road safety project. April 1999².
- 2. Final report. PHARE project. October 2000³.
- 3. Progress report by a Finnish expert. February 2002^4 .
- 4. A report on road safety in Lithuania, compiled especially for this project by a Lithuanian working group of experts. June 2002⁵.
- 5. Mission reports of experts in Lithuania where they met representatives from the Ministry of Transport, the National Road Administration, the police, the insurance industry, research institutions and the motor vehicle inspectorate. Participants were: Mrs. Martine-Sophie Fouvez (ECMT), Mr. Matts-Ake Belin (Swedish Road Administration), Mr. Klaus Machata (Kuratorium für Verkehrssicherheit -- Austrian Road Safety Board) and Mr. Paul Wesemann (SWOV-NL). They also met the Minister of Transport, his State Secretary and an MP. June 2002⁶.

The experts and the ECMT Secretariat owe special thanks to Mr. Vidmantas Pumputis of the Ministry of Transport and Communication for his successful efforts in arranging interviews with different Lithuanian institutions. He was responsible for the contacts with ECMT. They also thank him for presenting the Lithuanian traffic organisation and structure. His work within the ECMT Secretariat to put together the information received was also extremely valuable.

They also wish to thank Mrs. Dalia Skaidra Salkauskiene of the Lithuanian Road Administration for her excellent interpretation.

Finally, the visiting team would like to thank all their interview partners for openly discussing Lithuanian road safety problems with them and for providing valuable information.

NOTES

- 1. Peer review, An OECD tool for co-operation and Change, OECD 2003.
- 2. Phare, Phare Multi-country Road Safety Project, Country report, Lithuania, 1999.
- 3. Phare, Final report, Measures to Improve Road Safety, Project No L19702-01-01-0003. 2000.
- 4. Mikkonen Valde, Existing Traffic Safety Programmes and Plans. 2001.
- 5. Lithuanian Working Group of Experts, Inception Report, Lithuanian Road Traffic Safety Condition. 2002.
- 6. Peer Review Lithuania, Austrian, Dutch and Swedish contributions. July 2002.

PART I

BACKGROUND INFORMATION

1.1. General¹





Population and Language

- 66.9% of Lithuania's 3.5 million citizens live in urban areas, giving the country a population density of 53.5 people per square km (138.6 people per sq. mi.).
- The population is 83.5% Lithuanian, 6.3% Russian, 6.7% Polish, and 3.5% others (Byelorussians, Ukrainians, Latvians, etc.).
- The official state language is Lithuanian, which is closely related to Sanskrit and belongs to the Baltic family of Indo-European languages.

[©] ECMT, 2004

Landscape and Climate

- Lithuania is larger than the other two Baltic States, Latvia and Estonia.
- With 65 300 sq. km (25 206 sq. mi.), Lithuania is even larger than Belgium, Denmark, the Netherlands or Switzerland.
- 70% of its lowland plains and hilly uplands are arable and forests account for 27.6% of the land. Lithuania has 722 rivers, more than 2 800 lakes and 99 km (61.5 mi.) of Baltic Sea coastline which are all mostly devoted to recreation and nature conservation.
- The climate is midway between maritime and continental, with an average daytime temperature of -5°C (23°F) in January and +23°C (80°F) in July. The growing season varies from 169 to 202 days.

Currency

Lithuania's currency is the Litas (LTL). One Litas equals 100 Lithuanian cents. Under a Currency Board system, the Litas is presently pegged to the Euro at a rate of 3.4528:1. Under the Currency Board, the amount of currency in circulation is tied to the Bank of Lithuania reserves.

1.1.1. Historical context²

Lithuanian statehood dates back to the early Middle Ages. At the end of the 14th century, Lithuania was a large empire extending from the Baltic to the shores of the Black Sea. For 120 years, from 1795, Russia occupied Lithuania. Under Tsarist rule, Lithuanian schools were closed, Lithuanian publications were forbidden and the Roman Catholic Church was suppressed.

After World War I Lithuania declared its independence, but the period between the two world wars was not tranquil for Lithuania. The country had to fight to defend its independence against Poland from 1918 to 1920. In 1920, it lost Vilnius to Poland, which kept it until World War II. Nevertheless, after 1920, independent Lithuania made good progress in rebuilding the nation.

In 1940, Lithuania was occupied once again. Under the Molotov-Ribbentrop Pact (1939), the Stalin regime of the Soviet Union illegally annexed Lithuania. The Pact divided Poland, much of Central Europe and the Baltic States between Germany and the Soviet Union. 20 000 Soviet troops were garrisoned in Lithuania and in return Vilnius was returned to Lithuania.

The Soviet occupation lasted 50 years. On 11 March 1990, Lithuania's newly-elected Parliament voted unanimously for independence and in September 1991, Lithuania was admitted to the United Nations.

Recent History

11 March 19990	Lithuania re-establishes its independence
17 September 1991	Lithuania is admitted to the United Nations
14 February 1993	Algirdas Brazauskas becomes the country's first freely elected president

31 August 1993	The last Russian troops leave Lithuania
4 January 1994	Lithuania becomes the first Baltic State to apply for NATO membership
12 June 1995	Lithuania signs a Europe [Associate] Agreement with the EU
OctNov. 1996	Parliamentary elections result in a pro-business governing coalition comprised of the conservative and Christian democratic parties
4 January 1998	Valdas Adamkus, a former high-level US Environmental Protection Agency official, is elected President
1February 1998	Lithuania becomes an Associate Member of the EU
December 1999	Lithuania is invited to start negotiations for the accession to the EU
February 2000	Start of the negotiations for the accession to the EU.
October 2000	Parliamentary elections, after which a new government is formed by the new policy coalition consisting of liberals and social-liberals
14 May 2001	Lithuania becomes 141st member of the World Trade Organisation.
July 2001	A shift to the left - a new coalition of social democrats and social liberals forms a new government
December 1999	Lithuania is invited to start negotiations for the accession to the EU
November 2002	Lithuania is invited to join the NATO Alliance
January 2003	President election. Rolandas Paksas is elected
10-11 May 2003	Referendum on EU accession

1.1.2. Economic context³

For the last twelve years, Lithuania has seen great changes in all economic sectors and at present, Lithuania's well-developed industrial base includes electronics, chemicals, machine tooling, metal processing, building material, food processing and light industry, including the manufacture of textile, clothing, furniture and household appliances.

Economic development can be divided into two stages: the first period from 1991 to 1994 was a period of dramatic decline typical of all post-communist states. The Lithuanian economy was very closely linked to the market of the Soviet Union. This means that in Soviet times about 40% of all industrial enterprises in Lithuania were directly linked to a centralised decision-making body controlled by all the ministries of the Soviet Union. The second period, from 1995 up until now, is a period of recovery marked not only by the stabilisation of the economy but also by its growth.

Lithuania has one of the fastest growing economies in Central and Eastern Europe, with the private sector now producing about 80% of the country's Gross Domestic Products (GDP). The GDP reflects tendencies of rapid growth: in 1995 the growth rate was 3.3%; 4.7% in 1996; and 7.3% in 1997. The growth rate of the economy slowed down in 1998 due to the financial crisis in Russia, but in 2000 and in 2001 the GDP grew quite rapidly. The development of the service industry sector has been the main driving force in the development of Lithuania's economy (see Figures I.2 and I.3).

Since 1993, the year of hyperinflation (189.0%), the annual inflation rate has been going down steadily in Lithuania (see Figure I.3). In 2001, the average annual inflation rate in Lithuania (2.0%) was the lowest in the Baltic States and most European countries (5.8% in Estonia, 2.5% in Latvia, 8.2% in Bulgaria, 4.8% in the Czech Republic, 6.1% in Poland, 8.08% in Slovenia and 9.8% in Hungary). This shows that low inflation guarantees stability in economy.



Figure I.2. Gross Domestic Product in Lithuania, 1995-2002 € billion

Source: Department of Statistics of Lithuania.





Source: Department of Statistics of Lithuania.

1.1.3. Governmental context⁴

Lithuania is an independent Democratic Republic. In Lithuania, the powers of the State are exercised by the Seimas (Parliament), the President of the Republic and Government, and the Judiciary. The scope of powers is defined by the Constitution. All these institutions are meant to serve the people.

The Seimas consist of representatives of the people. 141 Seimas members are elected for a four-year term on the basis of universal, equal, and direct suffrage by secret ballot. The Seimas is deemed elected when at least three-fifths of the Seimas members have been elected. The electoral procedure is established by law.

The President of the Republic is the Head of State. The President represents the State of Lithuania and performs all the duties which he or she is charged with by the Constitution and laws. The President of the Republic is elected by the citizens of the Republic of Lithuania on the basis of universal, equal, and direct suffrage by secret ballot for a five year term. The same person may not be elected President of the Republic of Lithuania for more than two consecutive terms.

1.2. Transport sector

Lithuania has a well-developed infrastructure. The country has four international airports, an ice-free seaport and a well-developed road network. This network is being upgraded with the assistance of the EU, the EBRD and the European Investment Bank⁵. Lithuania is a vital link between the EU and the East due to two Pan European Corridors running through Lithuania, a North to South road and rail route connecting Scandinavia with Central Europe, and an East to West route linking the large Eastern markets with the rest of Europe, including the ten most important markets in Europe.

Lithuania is strategically located in the gateway between the EU and the CIS. In a parallel direction to the Pan-European Transport, Corridor II, which connects Russia, Belarus, Poland and Germany, a sea route connecting Belarus, Lithuania and the Baltic Sea serves as another link between the East and the West. At present, the port of Klaipeda handles cargo that goes to and comes from Russia, Kazakhstan at one end and Germany, the Netherlands, the United States, and then South America and Asia at the other.

The Ministry of Transport and Communications co-ordinates the interrelationship between transport sectors (road, water, railway and air) and implements the general State transport strategy and policy.

1.2.1. Road Transport

The Lithuanian Road Administration under the Ministry of Transport and Communication is a State enterprise, which is in charge of the State roads.

There are 5.8 km of roads for 1 000 inhabitants in Lithuania and 331 km of state roads for 1 000 sq. km of territory⁶. The majority of roads (54%) have asphalt pavement. There are six European motorways crossing the country (Figure I.4).





- E67 Via Baltica: Helsinki Tallinn Riga Panevezys Kaunas Warsaw Wroclaw Praha,
- E28: Berlin Gdansk Kaliningrad Marijampole Prienai Vilnius Minsk,
- E77: Pskov Riga Siauliai Kaliningrad Warsaw Krakow Budapest,
- E85: Klaipeda Kaunas Vilnius Lida Cernovcy Bukuresti Aleksandropoul,
- E262: Kaunas Utena Daugavpils Rezekne Ostrawa,
- E272: Vilnius Panevezys Siauliai Palanga Klaipeda.

The State Road Transport Inspection under the Ministry of Communications is responsible for the issuance of licences to Lithuanian hauliers for transportation of goods by roads on international routes, licences for heavy-weight vehicles operating on Lithuanian roads, licences for transportation of passengers on long distances and international routes, the management of the international haulage register for Lithuanian companies, etc. One of the objectives of the State Road Transport Inspection is to ensure equal competitive conditions for all those engaged in road transport. Currently, the State Road Transport Inspection under the Ministry of Communications issues licences for international transportation of goods and passengers by roads as well as for regional transportation of passengers. The municipalities license urban passenger transport.

1.2.2. Maritime Transport

The Klaipeda State Seaport Authority is responsible for the management of the Klaipeda State Seaport infrastructure, leasing of the port land, collection of port dues, etc.

The port of Klaipeda has been designated the EU's regional priority port -- the only port in the region to receive funding from the EBRD and the European Investment Bank to finance major expansion projects. The port has steadily increased cargo handling over the past three years from 14 to over 17 million tonnes and handles 20% of the cargoes passing through all Eastern Baltic ports. Once current upgrades of modern container handling facilities are completed, the capacity of the port will grow to 40 million tonnes annually.

There are regular cargo-ferry lines including rail and Ro-Ro ships between Klaipeda and Flensberg, Mukran and Kiel (Germany), Ahus and Kalrshamn (Sweden), Aabenraa and Fredericia (Denmark).

1.2.3. Air Transport

The State administration of aviation is carried out by various institutions depending on their respective responsibilities: the Government of the Republic of Lithuania, the Ministry of Defence, the Ministry of Communications, the General Inspection of Ministry of Defence, the Head of the Army and the Administration of Civil Aviation. The Civil Aviation Administration is responsible for licensing civil aviation personnel, certifying air operators and flight safety control, registrating civil aircraft, issuing air worthiness certifications, and registering and approving civil aerodromes and navigation equipment. The Ministry of Communications issues licences for the transportation of passengers and goods by air as well as by post.

As regards air travel and cargo services, Vilnius International Airport is one of the most modern in the Baltic States. It is located just a few minutes outside the city centre. There are two airlines – the National air carrier "Lithuanian Airlines" and its subsidiary, "Air Lithuania". The main destinations include most major Eastern and Western European cities. There are also direct flights to the Middle East.

1.2.4. Railway Transport

The State Inspection of Railway under the Ministry of Communications is responsible for the supervision of matters related to railway transport. The Ministry of Communications issues licences for the railway transportation of passengers and goods by international routes as well as for the transportation of passengers by domestic routes.

Railways are one of the most important means of transport in Lithuania for long-distance freight transport. The rail system has good connections with the rail networks of the Baltic States and CIS countries. The main route between Russia and the Kaliningrad district passes through Lithuania. The total length of the railways is 1 905 kilometres (the density is 29.2 km for 1 000 sq km). Among the most commonly transported commodities are: crude oil and refined oil products, peat, metals, agricultural machinery, cars and other vehicles, chemical and mineral fertilisers, and coal.

*1.2.5. Transport Development Policy 2001-2015*⁷

The strategic management of the country's economic development is considered a permanent activity. It consists of strategic analysis, strategy development, revision and implementation, enabling timely adjustments to the changes in internal and international contexts as well as efficient use of the country's economic potential.

The Long-term Economic Development Strategy of Lithuania until 2015 was developed in pursuance of Resolution No. 1274 of the Government of the Republic of Lithuania "On Preparation of the Draft Long-term Economic Development Strategy of Lithuania" of 30 October 2001 and it is a constituent part of the Long-term State Evolution Strategy whose preparation is underway.

Road transport

Measures envisioned for implementation by 2004:

• The initiation of reconstruction of highways widening them to three traffic lines (using the Transport Infrastructure Needs Assessment -- TINA -- network as a priority); the asphalting of 600 kilometres of secondary roads in the course of the execution of a long-term transport development strategy; the installation of mandatory licensing of activities of cargo transport companies; the accession of Lithuania to the "green card" system.

Measures envisioned for implementation from 2004 to 2010:

• The asphalting of 700 additional kilometres of secondary roads; the continuation of the implementation of a highway reconstruction programme; the installation of information on weather and traffic management systems; the creation and introduction of a system for the improvement of the professional skills of carriers (of cargoes and passengers); the installation of environmental protection measures, gradually shifting towards alternative fuels and fuels that are less polluting for the environment, as well as making the exhaust gases and noise level requirements more severe.

Measures envisioned for implementation by 2015:

• The achievement of compliance of the TINA network of Lithuania's roads with the international requirements set for the TEN-Tr. (Trans-European) networks; increasing the share of asphalt roads to 70% in the public road network.

1.3. Trends in road safety: statistics and analysis

1.3.1. Statistical accident data collection and analysis

In Lithuania, statistical accident data are recorded and collected by the Traffic Supervision Service of the Lithuanian public police office. Accidents are divided into casualty accidents and damage-only accidents. State accident statistics include only casualty accidents, i.e. accidents with seriously injured people or fatalities.

Every day, the Traffic Supervision Service of the Lithuanian public police office summarises data on casualty accidents and stores this information in a central database. Every month, the Traffic Supervision Service produces an analysis of casualty accidents. Until 1991, the statistical accident data were not accurate. After Lithuanian independence, the accident registration system was made stricter and became more accurate. By the Order of the Ministry of Interior No. 28 of 22 January 1997 the Rules for Accident Registration were approved. By the Order of the Ministry of Interior No. 28 of 10 April 2002 new Rules for Accident Registration were approved. The Rules fully correspond to Western Europe accident registration norms.

The Lithuanian Roads Administration under the Ministry of Transport and Communications and Kaunas Transport and Road Research Institute continuously monitors the changes in the accident rate, identifies main accident causes, and makes proposals for the improvement of traffic safety. The Lithuanian Roads Administration under the Ministry of Transport and Communications and the Kaunas Transport and Road Research Institute creates a map of "black spots" on Lithuanian roads and performs a statistical analysis of accident data.

Registration and collection of accident data is one of the first elements to be studied with a view of solving the national problems of traffic safety. An accurate database allows a comprehensive data analysis, based on which the main accident causes are identified.

1.3.2. Traffic accident statistics in Lithuania

A rapid increase in the number of vehicles and continuously growing local and transit traffic are causing more and more problems in the field of traffic safety. In 1990, there were 225.3 vehicles for 1 000 inhabitants in Lithuania; at the beginning of 2002 the figure was 425.6 vehicles. The year 1990, just after the restoration of the independence in Lithuania, saw the beginning of the increase in the number of vehicles. Over 13 years the total number of vehicles increased by 630 554. Table I.1 presents data on registered cars for 1990-2002. During that period, the number of vehicles increased by 69%. Figure I.5 presents data on the number of vehicles and the number of people killed in accidents on a 13-year period.

Total	Number of vehicles per 1 000 population	Cars	Trucks	Buses	Motorcycles	Mini vans
848 545	225.4	533 927	103 866	15 964	181 202	-
879 487	234.4	566 905	105 314	16 290	177 479	-
916 974	245.3	599 246	116 665	16 339	180 452	-
955 691	257.1	634 699	105 747	17 075	162 763	-
876 935	237.0	718 099	116 105	23 016	19 715	-
891 562	240.4	742 217	113 113	16 816	19 416	393
1 028 248	277.3	865 108	119 970	16 732	20 864	644
957 544	266.9	807 034	114 700	15 465	20 345	634
1 098 934	308.5	943 748	116 373	16 560	22 253	907
1 207 203	325.5	964 206*	76 190*	7 658	22 062	1 104
1 286 392	348.3	1 065 415*	73 289*	16 801	21 741	1 259
1 383 724	397.3	1 116 473	142 916	16 631	25 192	1 432
1 479 099	425.6	1 180 718	144 801	17 299	27 532	1 651
	Total 848 545 879 487 916 974 955 691 876 935 891 562 1 028 248 957 544 1 098 934 1 207 203 1 286 392 1 383 724 1 479 099	TotalNumber of vehicles per 1 000 population848 545225.4879 487234.4916 974245.3955 691257.1876 935237.0891 562240.41 028 248277.3957 544266.91 098 934308.51 207 203325.51 286 392348.31 383 724397.31 479 099425.6	Number of vehicles per 1 000 populationCars848 545225.4533 927879 487234.4566 905916 974245.3599 246955 691257.1634 699876 935237.0718 099891 562240.4742 2171 028 248277.3865 108957 544266.9807 0341 098 934308.5943 7481 207 203325.5964 206*1 286 392348.31 065 415*1 383 724397.31 116 4731 479 099425.61 180 718	Number of vehicles per 1 000 populationCarsTrucks848 545225.4533 927103 866879 487234.4566 905105 314916 974245.3599 246116 665955 691257.1634 699105 747876 935237.0718 099116 105891 562240.4742 217113 1131 028 248277.3865 108119 970957 544266.9807 034114 7001 098 934308.5943 748116 3731 207 203325.5964 206*76 190*1 286 392348.31 065 415*73 289*1 383 724397.31 116 473142 9161 479 099425.61 180 718144 801	Number of vehicles per 1 000 populationCarsTrucksBuses848 545225.4533 927103 86615 964879 487234.4566 905105 31416 290916 974245.3599 246116 66516 339955 691257.1634 699105 74717 075876 935237.0718 099116 10523 016891 562240.4742 217113 11316 8161 028 248277.3865 108119 97016 732957 544266.9807 034114 70015 4651 098 934308.5943 748116 37316 5601 207 203325.5964 206*76 190*7 6581 286 392348.31 065 415*73 289*16 8011 383 724397.31 116 473142 91616 6311 479 099425.61 180 718144 80117 299	TotalNumber of vehicles per 1 000 populationCarsTrucksBusesMotorcycles848 545225.4533 927103 86615 964181 202879 487234.4566 905105 31416 290177 479916 974245.3599 246116 66516 339180 452955 691257.1634 699105 74717 075162 763876 935237.0718 099116 10523 01619 715891 562240.4742 217113 11316 81619 4161 028 248277.3865 108119 97016 73220 864957 544266.9807 034114 70015 46520 3451 098 934308.5943 748116 37316 56022 2531 207 203325.5964 206*76 190*7 65822 0621 286 392348.31065 415*73 289*16 80121 7411 383 724397.31 116 473142 91616 63125 1921 479 099425.61 180 718144 80117 29927 532

Table I.1. Number of registered vehicles between 1990 and 2002

 * Excluding transporters as they are on existing classification divided by Car or Truck (2001 - 50 504; 2000 - 67 054).

Source: State vehicle register company, "Regitra", Vilnius 2002 www.regitra.lt/statistika/index.htm

In 1990, there were 5 135 accidents on Lithuanian roads -- 1 001 people were killed and 5 423 injured. In 2002, the number of accidents totalled 5 972, with 706 people killed and 7 103 injured. Table 1.2 gives information on accident rates in Lithuania on a 12-year period. In the Republic of Lithuania, between 1990 and 2002, there were 62 094 car accidents, which resulted in 9 721 deaths and 70 166 injuries. Thus, during this period, the annual loss was 750 people, with 5 000 people suffering from severe injuries.



Figure I.5. Trends in the number of vehicles and persons killed in accidents in 1990-2002, %

Table I.2.Number of road traffic accidents and casualties in Lithuania
from 1990 to 2002

	Accidents			Killed			Injured		
Year	Total	Per 100 000 population	Per 1 000 vehicles	Total	Per 100 000 population	Per 100 000 vehicles	Total	Per 100 000 population	Per 1 000 vehicles
1990	5 135	135.8	6.3	1 001*	26.9	124	5 423 ⁺	146.2	6.7
1991	6 067	162.4	7.1	1 173*	31.4	138	6.558^{+}	175.5	7.7
1992	4 049	108.1	4.6	836*	22.3	95	$4\ 194^+$	111.9	4.7
1993	4 3 1 9	115.6	4.7	958*	25.6	104	$4\ 490^{+}$	120.1	4.9
1994	3 902	104.8	4.1	765	20.5	80	4 146	111.3	4.3
1995	4 144	111.5	4.7	672	18.1	77	4 508	121.2	5.1
1996	4 579	123.7	5.1	667	18.0	75	5 223	140.7	5.3
1997	5 3 1 9	143.5	5.2	725	19.5	70	6 198	167.2	6.0
1998	6 4 4 5	174.0	5.6	829	22.4	72	7 667	207.0	6.6
1999	6 3 5 6	171.7	5.4	748	20.2	64	7 696	207.4	6.6
2000	5 807	157.2	4.5	641	17.3	50	6 960	188.5	5.4
2001	5 972	171.5	4.3	706	20.2	50.9	7 103	204.8	5.1
2002	6 090	1759	4.1	697	20.1	47.0	7 427	214.5	5.0

* Number of people killed in car accidents on a 30 day period with the reduction rate of 1.173.

+ Number of injuries in car accidents with the same reduction rate.

Source: Traffic Supervision Service, Vilnius 2003.



Figure I.6. Trend in road traffic fatalities 1980-2002



Figure I.7. Trend in road traffic fatalities by road user category 1999-2002

Between 1997 and 2002, the casualty figures seem to be similar: about 25-30% of the drivers, 25% of the passengers, 35-40% of the pedestrians and 10% of the cyclists were killed in car accidents. Figure I.9 indicates an inherent incompatibility between different transport modes, especially between car drivers and pedestrians. Such problems can only partly be dealt with by engineering measures, such as crossing aids (e.g. central islands, overpasses) and build-outs at zebra crossings. It seems that the high death toll is largely the consequence of the general lack of separation between road users, especially on the highest level roads, which again is partly due to deficiencies in land use planning. In addition, the presumed high speed levels in all areas are also an important part of the picture.

If we compare Table I.3 and Table I.4, it is clear that pedestrians are the main victims of car accidents, but the main group responsible for these accidents is drivers.

	1	.998	1	999	2()00	20)01	20	002
Traffic participants	Killed	Injured								
Drivers	210	2 017	226	2 0 5 6	173	1 779	192	1 878	194	1 951
Pedestrians	338	2 4 2 5	269	2 328	235	2 1 1 6	253	2 1 4 1	239	2 0 9 1
Cyclists	70	533	67	562	72	629	94	614	94	699
Passengers	200		161	2 700	155	2 398	163	2 4 3 5	162	2 651
Others	11	39	25	50	6	38	4	35	8	35
Total	829	7 667	748	7 646	641	6 960	706	7 103	697	7 427
Source: Traffic Supervision Service, Vilnius 2003.										

Table I.3. Number of people killed and injured in car accidentsfrom 1998 to 2002

Table I.4. Groups responsible for accidents from 1998 to 2002

Accident	19	98	19	99	200)0	20	01	20	02
groups	Acc.	(%)								
Drivers	4 117	63.9	4 217	66.3	3 769	64.9	3 920	65.6	4 106	67.4
Pedestrians	1 668	25.9	1 466	23.1	1 315	22.7	1 296	21.7	1 209	19.9
Cyclists	428	6.6	395	6.2	454	7.8	456	7.6	532	8.7
Others	232	3.6	278	4.4	269	4.6	300	5.1	243	3.9
Total	6 445	100	6 356	100	5 807	100	5 972	100	6 090	100

Source: Traffic Supervision Service, Vilnius 2003.

Table I.5.	Distribution of car accidents on State Lithuanian	Roads
	between 2000 and 2002	

Roads		2000			2001			2002	
	Acc.	Killed	Inj.	Acc.	Killed	Inj.	Acc.	Killed	Inj.
Main roads National roads Regional Roads	708 807 713	154 170 101	712 1 052 938	637 869 699	163 177 121	783 1 061 946	699 992 722	185 202 119	916 1 297 954
Total	2 116	425	2 702	2 205	461	2 790	2 413	506	3 167
Source: Traffic Supervision Service, Vilnius 2003.									

Lessons from the statistics on road traffic accidents in 2002:

- July was the most dangerous month of the year. During this month there were 645 accidents 1. in which 872 people were injured.
- Friday was the most dangerous day of the week. In the year 2002 there were 993 accidents 2. on Friday in which 1 147 people were injured and 137 killed.
- 3. The most dangerous period of the day was between 6 and 9 p.m. There were 1 387 accidents in which 1819 people were injured.
- 4. 60% of all accidents occurred in daylight. However, the 3 761 consequences of accidents that occurred at dark were much more serious.
- 5. *The age group between 15 and 24, suffered the most in accidents* – 2 103.
- The most frequent accident was a collision with a pedestrian. This kind of accident 6. represents 36%, or 2 166, of all accidents.
- The main group responsible for accidents is drivers. Such accidents represent up to 67%, or 7. 4 106 of all accidents.
- The majority of all accidents in the year of 2001 were caused by drivers with less than one 8. *year of driving experience*. There were 1 230 such accidents.
- 9. The greatest number of accidents were located in the region of Vilnius. There were 1 381 accidents and 1 783 people who suffered injuries.
- 10. Drunk drivers caused 766 accidents in which 1 186 people were injured.

One of the key problems is the high rate of pedestrians killed, which is far above the European average.

Figure I.8.



Share of Pedestrian Fatalities in European Countries 1999



Figure I.9. Road accident fatalities per million inhabitants in Europe in 2001

State	Number of killed	Killed per 1 million population
Norway	275	56
United Kingdom	3 598	60
Sweden	541	61
Netherlands	993	62
Denmark	431	81
Switzerland	592	82
Finland	433	83
Germany	6 977	84
Iceland	24	84
Ireland	411	108
Austria	958	118
Hungary	1 239	122
France	7 720	130
Czech Republic	1 334	130
Spain	5 517	140
Poland	5 517	143
Portugal	1 466	143
Estonia	199	147
Luxembourg	76	171
Greece	1 895	179
Lithuania	706	202
Latvia	517	221
Source: Trends in the Tr	ansport Sector 1970-2001, EC	CMT, 2003.

Comparison with other ECMT countries

It should be noted that important accident information is still lacking from the statistical data that were collected.

In Lithuania there were 706 fatalities in 2001. The death rate for one million inhabitants was 202, and 51 for 100 000 motor vehicles. These rates are high compared with most other countries in the EU. For example, the lowest death rates in the EU are 60 fatalities for one million inhabitants and 12 fatalities for 100 000 motor vehicles in the UK. Only a few EU-member countries have rates that are comparable with those of Lithuania (for example 210 fatalities for one million inhabitants in Portugal in 1999 and 50 fatalities for 100 000 motor vehicles in Greece in 1998). Other EU candidate countries (for example Poland, Hungary and the Czech Republic) can also be more or less compared to Lithuania.

Pedestrians represent a high percentage of the fatalities (37%). In the Netherlands, pedestrians only account for 10% of all fatalities. This is partly due to the fact that a lot of people in Lithuania walk to get from one place to another.

11% of the fatalities are cyclists; although this rate is lower than in the Netherlands (18%), it is still disproportionably high given the very small number of cyclists in Lithuania.

There is no doubt that inexperienced car drivers are to a great extent responsible for the high accident rates, although no figures are available. Moreover, statistics cannot be based on the age of the driver because new drivers from all age groups are still being added to the total number of drivers. It is generally understood that new drivers greatly contribute to the number of accidents. In 2000, 97 drivers with less then four years of experience were killed.

The age distribution of fatalities is quite different from the Netherlands, after correction for the age distribution in the population. Because age is strongly correlated with vehicle-use and the modal split is also quite different in the Netherlands, it is difficult to draw conclusions.

In Lithuania, young (15-24) and old (65+) people are killed relatively less than in the Netherlands; as previously stated, this might be caused by a different modal split (fewer use of cycles, mopeds or private transport -- especially cars -- in general).

40% of fatal accidents in Lithuania occur at night. This is much higher than in the Netherlands (25%). For pedestrians, the figure is even higher: 81% are killed at night (in the Netherlands, the figure is in proportion with all night-time fatal accidents: 27%).

Every driver involved in an accident is tested for alcohol. Of all drivers of motor vehicles who are killed, 40% are found to be under the influence of alcohol (i.e. over the legal limit of 0.4 pm). This is much higher than in the Netherlands where it is estimated that about 25% of car drivers killed are over the legal limit of 0.5 pm (Matthijssen, 2002). The high incidence of drinking and driving might partly explain the high proportion of night-time accidents.

Little is known about the sites of accidents.

		Lithuania		
Age	Killed (2000)	Popula (1999)	tion %	Killed per million population
0-14	34	754 800	20.4	4.5
15-24	136	525 400	14.2	25.9
25-44	228	1 121 100	30.3	20.3
45-64	161	817 700	22.1	19.7
65+	82	481 000	13	17.0
Total	641	3 700 000		17.3
		Netherland	8	
Age	Killed	Popula	tion	Killed per million
	(2000)	(1999)	%0	population
0-14	77	2 915 911	18.5	2.6
15-24	252	1 891 378	12.0	13.3
25-44	373	6 168 786	39.1	6.0
45-64	146	2 653 216	16.8	5.5
65+	242	2 130 934	13.5	11.4
Total	1 0 0 0			

Table I.6. Fatalities and fatality rate x age

73% of all fatal and injury accidents happen in cities and settlements; almost all others (26%) occur on state roads, that is, roads that are administered by the state, which are clearly defined for statistics. It is our understanding that the roads that are not administered by the state comprise a very broad variety of roads: almost all roads inside built-up areas (from residential streets to municipal expressways), all tertiary roads and some secondary roads outside built-up areas. The accident files contain no detailed information about the type of road. It is difficult to compare these data with Dutch accident data. The latest data make use of several road and site characteristics according to: speed limit, road administrator (state/province/municipality) and extent to which the area is built-up (inside/outside). Although the category "state roads" also exists in the Netherlands, they do not match the Lithuanian ones with respect to design and applicable traffic rules. State roads in Lithuania also comprise roads comparable with roads that are administered in the Netherlands by provinces and, in some cases, municipalities.

Because of the broad variety of non-state roads, and also because no further details are known about these accidents (traffic mode, time, age, etc.), it is difficult to interpret the nature of these accidents, which comprise 73% of the total.

Much more is known about accidents on state roads (26% of the total) because the Ministry of Transport has developed (through the TRRI) a database with detailed information on all fatal and

injury accidents for "black spot" analyses. To this end, all police records of accidents on state roads are collected, controlled and processed.

Nevertheless, it is clear that the majority of accidents occur on roads that are administered by the municipalities. From Dutch and other international experience, it can be supposed that an important share of the less serious accidents occurs inside built-up areas and an important share of the fatal accidents outside built-up areas.

Road type	Number of injury accidents per million vehicle-km
Outside built-up areas	
Motorway	0.05
Motor road	0.08
Main distributor	0.25
District artery	0.51
Inside built-up areas	
Neighbourhood artery	0.85
Local distributor	1.27
Residential street	0.73
Residential area	0.15
Source: (Van Schagen, 2000).	

Table I.7.	Injury	risk on	different	road types	in the	Netherlands	, 1995
							,

In the coming years, the number of road accidents will increase even more unless very comprehensive and effective road safety measures are taken. This is mainly due to the growth of motorised traffic. A preliminary analysis of SWOV (Dutch Institute for Road Safety Research) shows that in 2010, the number of motor vehicles (which was 1.3 million in 2001) will increase to almost 1.5 million (Koornstra, in preparation). In combination with a forecast of the (slowly decreasing) fatality rate, this growth in motorisation will result in 650-750 fatalities in 2010. This development of the fatality risk would be the result of a continuation of existing policy. Only additional, new safety measures can speed up the decrease of the fatality rate, hence the number of fatalities.

1.3.3. Conclusions - Statistical data on accidents

Drivers

- The main group responsible for accidents in the year 2002 was drivers. Such accidents represented 4 106 accidents (67%).
- In 2002, 194 drivers were killed in car accidents (28% of the total number of fatalities).
- Drunk drivers in 2002 caused 766 car accidents, in which 78 drivers were killed and 1 108 were injured.
- In 2002, drivers with 0-1 and 1-2 years of experience were involved in the majority of accidents.

Pedestrians

- In 2002, 239 pedestrians were killed in car accidents (34% of the total killed).
- From 1999 to 2002, the trend in accidents was similar; the most frequent type of accidents was collisions with pedestrians (38%).
- Nearly 70% of pedestrians killed every year were killed at night.
- November 2002 was the most dangerous month for pedestrians. In this month alone, 51 pedestrians were killed in accidents.

Vehicles

- Over a period of 12 years, the total number of vehicles increased by 535 179 (63%) vehicles.
- At the beginning of 2002, the average age of the Lithuanian vehicle park was 14 years.
- According to the vehicle technical inspection association "Transeksta", 52% of vehicles having their first revision showed serious deficiencies.

Road environment

• The greatest number of accidents occurred in cities. In the year 2002, there were 3 689 accidents located in cities and urban areas 61% of the total number of accidents). It is clear that municipalities are not active enough on the traffic safety issue.

1.4. Regulatory and legislative framework

1.4.1. Legislation

Lithuanian road traffic safety legislation is a new kind of Lithuanian legislation, and civil servants and experts can draw good examples from Western European countries in the area of road safety. Over a relatively short period, after Lithuania became independent, legal acts concerning road traffic safety were approved every year.

The most important Lithuanian legal acts dealing with road traffic safety:

• The Law of the Republic of Lithuania "On Safe Traffic on Roads" No. VII-2043 of 12 October 2000

This Law shall establish the legal basics of road traffic safety in the Republic of Lithuania, obligations of the State institutions in implementing the policy of road safety, and the principal rights and obligations of traffic participants, institutions of road supervision, police officers, and also the basic requirements linked with the technical condition of motor vehicles, checking of the technical condition of motor vehicles, in striving to safeguard the lives, health and property and improve the traffic conditions of transport and pedestrian traffic and also to reduce the negative effect of motor vehicles on the environment.

• The Law of the Republic of Lithuania "On Civil Responsibility of Vehicle Owners and Managers", No. IX-378 of 14 June 2001

The purpose of the Law on Compulsory Motor Third Party Liability Insurance of Vehicle Owners and Possessors is to establish the procedures of compulsory motor third party liability insurance for vehicle owners and possessors.

• Resolutions of the Government of the Republic of Lithuania "On Approval of State traffic safety programme 2002–2004 (Motor roads)" No. 25 of 11 June 2002

The main objective of this programme is to reduce the number of people killed in accidents.

• Order of the Ministry of Transport and Communications "On Training Vehicle Drivers" No 18 of 21 January 2000

Provisions for the Instruction of the Drivers of the Road vehicles shall regulate the conditions and procedure for the acquisition of the right to drive the road vehicles.

• Resolutions of the Government of the Republic of Lithuania "On Approval of Road Traffic Regulations" No 883 of 29 November 1993 (The latest edition was approved on 6 November 2000)

These rules establish the procedure for road traffic over the entire territory of the Republic of Lithuania. Behaviour of road-users shall be based on mutual respect and care. Roadusers shall know said rules and obey them, fulfil instructions on traffic procedure given by police and officials directing traffic, and also comply with the instructions conveyed by traffic light signals, road signs and road markings.

• The Law of the Republic of Lithuania "On Roads" No. I-891 of 25 September 1997. The Law of the Republic of Lithuania on "Non-engine Vehicles" No VIII-1744 of 20 June 2000

This Law regulates principles of road maintenance, use and protection between the road's owner and administration, and road users.

• The Order of the Ministry of Transport and Communications "On Approval of Road Vehicle State Technical Supervision Regulations" No. 445 of 26 November 1993 (The latest edition was approved on 22 August 2001 by Order No. 251)

These Rules shall establish the procedure for carrying out state technical supervision and shall be mandatory upon all natural and legal persons whose road vehicles shall be issued documents of registration. the purpose of the inspection is to control and assess the technical condition of the vehicles, to prohibit (restrict) further exploitation of the technically inefficient vehicles, and to check the data entered in the certificate of registration.

• Resolution of the Government of the Republic of Lithuania "On Approval State Trauma Prophylactic Programme 2000-2010 years" No 423 of 14 March 2000

The main objective of this programme is to reduce the number of people killed in accidents and to create an effective first aid system in Lithuania.

1.4.2. Targets and visions

Most ECMT countries have different kinds of road safety programmes (state, regional, local). Such programmes are considered to be one of the most important steps towards improving road safety in every country. Of course, if the state does not have clear road safety targets, this could have negative effects on future fatal accident rates. In 1997, the Government of Lithuania approved the State Road Safety Programme for 1997-2000. During this period, different road safety measures were implemented with good results: in 2000, the lowest number of fatal accidents in ten years was recorded. Between 2000 and 2002, when there were no approved State Road Safety Programmes, the number of annual fatal accidents increased. Only in June 2002 did the Government of Lithuania approve a new State Road Safety Programme.

Objectives of the State Traffic Safety Programme for 2002-2004

The programme presents the main ideas and targets "Safe road traffic is an important factor for the country's economy and social welfare." The main objective of this programme is to reduce the number of people killed in accidents.

Taking into consideration foreign experience, the high accident rate in Lithuania, its causes and the financial resources available for the next three years, the Programme plans to reduce the number of people killed by 4% in 2003, by 5% in 2002, and by 6% in 2004. In addition, it is hoped that the implementation of the measures under consideration of the Programme will have a positive effect on protecting the health and property of road users, on improving traffic conditions and reducing negative vehicle damage on the environment.

The State Programme also states that "the implementation of these objectives is rather complicated and, taking into account the existing traffic safety situation, it will require the efforts of not only the respective institutions, but also of all road users".

The structure of the components which have an effect on traffic safety

Traffic safety on roads is affected by many components. The programme presents a detailed analysis of these components which should be summed up to a closely related whole. They could then be divided into four groups: road user, vehicle, road and environment.

Each part of the system could be affected by legal, administrative, engineering, educational measures and scientific research work. The influence of all these components on traffic safety is equally important and depends directly on the country's economy, the funds allocated, the lifestyle of the inhabitants and their standard of living.

Taking into consideration a complicated and manifold environment of safety-affecting factors, the problems of traffic safety should be approached by all state levels: the Seimas of the Republic of Lithuania, the Government of the Republic of Lithuania, municipal institutions, economists and all road users, by ensuring close co-operation between these institutions.

The main role in this field falls under the executive authority -- starting from the formation and development of the legal basis needed, accumulation of material resources for the implementation of measures suggested and ending with public enforcement.

According to the Law on Safe Road Traffic of the Republic of Lithuania, the implementation of governmental traffic safety policy is controlled by a continuously-acting Traffic Safety Commission. This commission co-ordinates the activities of state administrative subjects, municipalities, public organisations, legal and physical persons and enterprises with no legal person rights.

There are many participants within the traffic safety system: the Ministry of Transport and Communications, the Ministry of Interior, the Ministry of Social Care and Labour, the Ministry of Health Care, municipalities, other state institutions, public organisations and scientific institutions.

Figure I.10. The structure of components that have an impact upon traffic safety



All the participants in the traffic safety system organise their activities according to determined functions. The aim of the Traffic Safety Commission as well as all the mentioned institutions is to identify accident causes, and to plan effective and modern measures for accident reduction.

Selection of traffic safety measures is closely connected to the preparation of state programmes and their implementation. The last Traffic Safety Programme was prepared for 1996–2000. Therefore, a new and progressive State Traffic Safety Programme is needed today, one which would provide for the implementation of traffic safety measures.

Priority trends to improve traffic safety activities

Taking into account the main causes of accidents on Lithuanian roads and traffic influencing factors, trying to attain the Programme objectives up to 2005 and to ensure traffic safety, the following priority trends will be implemented from 2002 up to 2005:

- Improvement in the legal basis of traffic safety.
- Improvement in a unified state regulation system of traffic safety.
- Training and education of road users.
- Explanation of the importance of traffic safety and its propagation.
- Public transport development.
- Traffic control improvement.
- Traffic condition improvement.
- Reducing the number of drunk drivers.
- Supervision of vehicles' technical condition and a wider use of safety measures.
- Improvement of first aid and rescue service operations.
- Training and improvement of the skills of vehicle drivers and traffic safety specialists.
- Execution of scientific research and co-operation with international organizations in the field of traffic safety.

When the priority trends in the assurance of traffic safety are foreseen, further implementation of the Programme will be related to concrete measures, which, if properly implemented, will ensure the effectiveness of the Programme.

Programme co-ordination and implementation

A State Traffic Safety Programme for 2002-2004 (for motor roads) will be implemented according to the action plan. The action plan describes the measures to improve traffic safety, the schedule for their introduction, the responsible executors and financing issues.

The action plan provides education for road users, including school and pre-school children, changes in traffic organisation in high-accident locations, road repairs, legal regulations, educational activities, scientific research work, preparation and development of specialists -- as defined by the Law on Road Traffic Safety of the Republic of Lithuania. The Traffic Safety Commission will co-ordinate the implementation of the action plan.

Evaluation of the Traffic Safety Programme

The experts from ECMT made an evaluation of the Road Safety Programme and, in general, this Programme is deemed good enough -- if all the institutions which are mentioned in this Programme implement all the assignments, then the target to reduce accident rates should be reached by the end of 2004. The experts prepared an evaluation table of the Programme and suggested ways to make the Programme more effective.

Stages of Traffic Safety Programmes	Evaluation of Traffic Safety Programme	Conditions
Problem analysis	The Programme presents an analysis of the problems, a description of the number of fatal accidents and the possibilities for changing the situation.	+
Formulation of vision	This Programme has a strategic view on road safety problems and presents possibilities for improving the existing situation.	+ -
Target setting	Realistic target setting presents measurable goals, but there is no estimation on the effects of targets.	++
Traffic safety measures	The action plan presents effective measures to improve the situation of traffic safety. All road safety measures are chosen to intervene effectively and solve traffic safety problems.	+++
Evaluation and monitoring	A general remark on the construction of the Traffic Safety Programme is that there is neither evaluation nor monitoring of the Road Safety Programme. For a programme creation to be successful, the mechanisms to assess the effects of road safety measures must be presented and compared with the target.	

Table I.8. Evaluation of the Traffic Safety Programme

Suggestions for the creation of the State Road Safety Programme

Problem analysis

When analysing road safety problems and developing measures to solve them, it is very important to evaluate the factors which directly influence the road safety situation. The problem analysis sector has to include the following areas:

- State economy possibilities to improve traffic safety and planning to invest funds into road safety activities. (This is a very important step, because without the equal financing of road safety activities, it is impossible to improve safety).
- To make a detailed statistical data analysis and identify the existing problems. (A detailed analysis of statistical data usually shows the main existing problems on the road safety issue).

- To compare a country's traffic safety situation with other countries. (Compared traffic safety statistical data with the other countries' situation).
- To gather research and data on the traffic safety issue. (Research and data about road conditions, road engineering, the behaviour of traffic participants, and research on other problems must present the apparent problems regarding the traffic issue.).
- To evaluate traffic volumes and dynamics of vehicles in the past and future. (The evaluation of present and future traffic volumes can request future safety activities).
- To evaluate general existing problems and find the causes of these problems. (The evaluation of general problems can help to create general road safety targets and visions).
- To evaluate possibilities to improve traffic safety measures at state, regional, and local levels. (It's not enough to create the state, national, and regional programme, the interaction between them must also be presented. The real effect of improving traffic safety conditions can be reached only when all traffic safety programmes interact correctly).

Visions

A vision on improving the road safety situation is quite different from a target. Most countries have Road Safety Programmes, in the sense that the authorities carry out a set of organised activities aimed at improving road safety. However, only some countries have a clear vision of the future of traffic safety.

In recent years, philosophies about improving road safety have been introduced in some countries. Road safety work has historically been quite successful in Sweden, for example, positioning it as one of the safest countries in the world. Still, fatalities and serious injuries in road traffic are seen as unacceptable in Sweden, especially when these are preventable. For that reason, Vision Zero (see Annex 1) was created.

The success of marketing a safety vision depends on several factors. A good vision should be⁸:

- Understandable: provide a clear description of the future, easy to explain.
- Desirable: appealing to different road user groups in the long term.
- Feasible: realistic, achievable in the long term.
- Guiding: useful in political decision-making.
- Motivating: all responsible agencies are ready to work for it.
- Flexible: stimulate initiatives on the one hand but offer adaptations to changing conditions on the other.

A vision of the future that society can support is the most efficient way to lead people in the right direction and induce creativity, energy and participation. At least as important as visions are quantitative targets. Experience shows that quantitative targets at national, regional and local levels are beneficial to the success of road safety work (Rumar, 1999).

Targets

The targets, one of the most important parts of the Road Safety Programme, must correspond to the development of a vision. The targets must present a national idea about improving the traffic safety situation during the execution period of the Programme. However, the targets should be realistic as regards the time frame.

The communication of the vision, targets and strategies to raise awareness throughout society should pave the way for ownership and acceptability of the measures introduced to tackle the social problem of road safety.

The setting of targets has proven its value in many countries. Setting targets leads to more realistic and effective programmes, results in more integration of institutional efforts and often produces a more focused allocation of resources by securing a political commitment.

Measures

In view of the set targets, an inventory should be made of possible safety measures, directed at human behaviour, vehicles, roads and the environment. The road safety measures are divided into:

- Engineering.
- Education.
- Prevention.
- Discipline.

A broad Traffic Safety Programme should include measures for roads as part of the transport system, land use planning, road infrastructure, traffic education, public information, legislation and enforcement, telematics and vehicle technology. The national and regional differences in regulations (for example, driving hours, vehicle standards, licensing provisions) should be taken into account.

The purpose of the road safety measures are:

- To reduce the risk of death or injury (reduction of speed, to create the highest passive safety standard of vehicles).
- To reduce the collision risk (implementation of road safety measures for speed reduction, change of the road environment).
- To reduce the behaviour of traffic participants (education, control, promotion).
- To reduce the exposure use of vehicle (to promote using the public and railways transport).

Monitoring

Monitoring of a safety plan or programme consists of the systematic analysis of the many actions and activities that make up the programme.

Safety programmes should interact with other types of programmes (environmental programmes or infrastructure programmes) and should form part of the decision-making process. Similarly, it is clear that in order to achieve high levels of success, road safety should be considered at the highest and earliest level of decision-making on urban and regional planning, on infrastructure projects and other major transportation decisions.

Monitoring of a programme must also present guidelines of financing analysis, whereby the largest countries make large investments in road safety activities and all investments provide feedback on the saving of life of traffic participants.

1.4.3. Speed limits and alcohol use

To ensure traffic safety in Lithuania, an additional speed limit has been introduced on accident spots on the road and dangerous road sections as well as places where there are many pedestrians. The speed is limited ⁹ in order to reduce the number of accidents, to mitigate their consequences, and to reduce the risk of accidents and transport costs.

Vehicle category	Urban area	Rural roads	Motorways		
Cars	50 km/h	90 km/h	110/130km/h*		
Cargo vehicle	50 km/h	70 km/h	90 km/h		
* Speed limit 130 km/h	April–September, 110 km	/h March-October.			

Table I.9. Speed limits on Lithuanian roads

Transport movement speed in different areas is limited by taking into consideration the following factors:

- Type of a road (town or out-of-town roads, traffic conditions on a concrete road section).
- Traffic intensity (when traffic intensity is high, the speed is limited by taking into consideration the permeability of the road and traffic safety improvement problems).
- Accident rates (whether accident rates are very high on a certain road section and whether it is difficult to implement engineering traffic safety improvement measures).
- Road environment (if there are any objects near the road where pedestrian traffic is intensive or drivers have to manoeuvre a lot on that road section and engineering traffic safety improvement measures have not been implemented).

According to the data presented by the Traffic Supervision Service, there are about 1 200 road accidents, 200 fatalities, and 1 500 injuries every year because drivers do not choose to drive at a safe speed.

- In 1997, there were 909 accidents, 179 fatalities and 1 730 injuries.
- In 1998, there were 1 346 accidents, 206 fatalities and 2 010 injuries.

- In 1999, there were 1 462 accidents, 242 fatalities and 1 861 injuries.
- In 2000, there were 1 252 accidents, 217 fatalities and 1 244 injuries.

Following the analysis [Kaunas Transport and Road Research Institute] of vehicle movement speeds on main and national roads, it was found out that:

- In 2000, (compared with 1999) the number of drivers who exceeded the speed limit decreased.
- In 2000, 19.9% to 48.6% of drivers exceeded the speed limit. Half of them, on average, exceeded the speed limit by 10 km/h.
- On the road section Vilnius-Kaunas of A1 Vilnius-Kaunas-Klaipėda, 45.5% of drivers exceeded the speed limit (the average traffic intensity is 14 774 vehicles/day). This situation could be explained by the fact that those drivers who intentionally exceed the speed limit affect other drivers in the traffic flow.
- It was noticed that on 162.6 kilometres of road A1, the number of drivers who exceeded the speed limit decreased. This is related to the increase of speed limit from 110 km/h to 130 km/h in April-September.

Studies of the data on vehicle flows on main and national roads in 1998–2000 show that the following regularity of speed change prevails: the number of drivers who exceed the speed limit increased in the first half of the year and then started to decrease gradually. Greater annual differences in driving speeds can be observed at the beginning and at the end of the year (in winter). This is related to different meteorological traffic conditions each year.

Drunk driving

According to Lithuanian law, driving a motor vehicle while under the influence of alcohol is prohibited. Since 1994, the permissible level of alcohol in the blood is 0.4 mg/100ml (methods of control: breath test/blood test). After an accident, all drivers are tested for alcohol rate. Table I.10 gives information about accident rates, the number of people killed and injured by drunk drivers. Drunk drivers in the year 2001 caused 770 car accidents, in which 101 drivers were killed and 1 071 were injured.

Accident group	1998		1999		2000		2001			2002					
	Accidents	Killed	Injured												
Drivers	824	111	1 1 2 5	823	76	1 1 5 6	831	69	1 1 5 9	770	101	1 071	766	78	1 108
Source: Data from Traffic Supervision.															

Table I.10. Number of accidents, killed and injured by drunk driversbetween 1998 and 2002
This rate appears to be high but is at the same time hard to compare with the rate of other EU Member States, as there Blood Alcohol Capacity (BAC) limits are higher and, unlike Lithuania, the general alcohol testing of all drivers involved in accidents which produced injuries is not standard in the EU. It should however be noted that there are in-depth European studies which state that up to 30% of all accidents could be linked to alcohol abuse.

NOTES

- 1. Department of Statistics of Lithuania, <u>www.std.lt/default_e.htm</u>
- OECD, Reviews of National Policies for education Lithuania examiners' report, Paris, 2000, p. 7.
- Ministry of Economy, Medium Term Economics strategy of Lithuania Review of Economic and Social Development of the Lithuanian Economy, Vilnius, 2001 www.ekm.lt/catalogs/9/index_e.shtml
- 4. Constitution of the Republic of Lithuania, <u>www.lrs.lt/</u>
- 5. Lithuanian Development Agency, Country Information, Vilnius, 2002.
- 6. Lithuanian Road Administration , General Information, Vilnius, 2002, <u>www.lra.lt/index_en.html</u>
- Ministry of Economy, Long-term economic development strategy of Lithuania until 2015, Vilnius, 2001, <u>www.ekm.lt/index_e.shtml</u>
- 8. OECD 'Safety on Roads What's the vision?' Paris. 2002, p. 23.
- 9. Resolutions of the Government of the Republic of Lithuania 'On Approval of Road Traffic Regulations', Vilnius, 2000.

PART II

ROAD SAFETY MANAGEMENT STRUCTURE IN LITHUANIA

2.1. Road Safety Organisational Framework in Lithuania

Lithuania is one of the candidate countries due to join the European Union on 1st May 2004. It is well known that a lot of attention is being paid to road traffic safety improvement in the European countries. At present, Lithuania is very active in improving traffic safety; therefore, the purpose of this project is to draw an in-depth analysis of the existing road safety situation and to make accurate recommendations on the possibilities to improve traffic safety conditions in the future.

The successful development of road transport, as well as of the whole transport system, has a direct influence on the growth of the country's economy. The geopolitical situation of Lithuania creates conditions for successful integration into the European transport network and transport service market. Therefore, the transport sector was recognised by the Government of the Republic of Lithuania as a priority sector whose development will be defined by the National Transport Development Programme until 2015. The Lithuanian transport sector has changed as the country's political and economical situation evolved.

Before Lithuania's independence, the police were the main body responsible for road safety in the country. Today, the responsibility for road safety has been reallocated to the State. The Lithuanian road safety system was confirmed on 7 July 1994 by Lithuanian Government Resolution No. 569.

Road safety organisation structure in Lithuania

There are three levels in the Lithuanian road safety structure (see Figure II.1.).

The first and highest level involves the Government of the Republic of Lithuania and the Traffic Safety Commission.

The second level is the ministerial level. The representatives of this level are the Ministry of Transport and Communications, the Ministry of Interior, the Ministry of Social Welfare and Labour, the Ministry of Health Care, municipalities and other ministries.

The third level is an executive level. All institutions under the ministries belong to this level. The most important are the Traffic Supervision Service, the Lithuanian Road Administration under the Ministry of Transport and Communications, The State Road Transport Inspectorate at the Ministry of Transport and Communications and others.

The road safety organisation system also involves the media, non-governmental organisations, universities and scientific research institutes.

2.1.1. Role of the Government

State traffic safety policy

The role of the Government in the traffic safety activity is presented at the highest level of Lithuanian law -- in the Law on Road Traffic Safety of the Republic of Lithuania. According to this

regulation, the Government of the Republic of Lithuania is the highest responsible body on the traffic safety issue in Lithuania. Therefore, it is clear that governmental attitude is very important in solving road safety problems.

The Law on Road Traffic Safety mentions that the Government shall form State policy in the sphere of safeguarding traffic safety. In safeguarding traffic safety, the Government or its authorised institutions shall:

- 1. Approve the State Traffic Safety Programme and adopt legal acts regulating traffic safety.
- 2. Approve the basic technical requirements for road motor vehicles and set the requirements of motor vehicle designing.
- 3. Set the qualification requirements for vehicle and motorcycle drivers, drivers' training (education), conditions and procedure of examinations to acquire the right to drive vehicles of certain categories, set requirements and conditions for enterprises, which engage in training drivers or driving instruction.
- 4. Set the procedure for performing the State technical inspection of motor vehicles.
- 5. Answer questions involving the installation of new science and technology developments in transport spheres and organising the implementation of special purpose scientific programmes.
- 6. Plan measures through which the negative impact of motor vehicles upon the environment is lessened; set procedures for the carrying of dangerous loads across the territory of the Republic of Lithuania and issue licences to drivers engaging in the transportation of such.
- 7. Analyse the transportation policy implemented by foreign states and set a policy of further co-operation with foreign states according to the procedure established within the transport sphere.
- 8. Conduct supervision of motor vehicle production.
- 9. Take part in the elimination of the consequences of natural disasters and accidents, in organising search and rescue operations, organising investigation and registration of traffic disasters (except those involving road transport) and analysing the causes thereof.
- 10. Organise traffic regulation, supervision and preventive work with traffic participants.
- 11. Control the observance of traffic safety and the requirements of legal acts regulating road traffic.
- 12. Organise the control of the technical condition of motor vehicles on roads.
- 13. Organise the provision of first emergency medical aid for persons who are victims of motor vehicle accidents, until the arrival of first aid ambulance specialists.
- 14. Gather information concerning the violations of the Rules of the Road and motor vehicle accidents.
- 15. Control how individuals, all types of enterprises, and institutions and organisations adhere to laws and other standard acts, which set the requirements of traffic safety and protection of the environment from the harmful effects of motor vehicles.
- 16. Set the requirements and procedures for driver health checks.
- 17. Set the procedure for instructing traffic participants in administering medical first aid.

- 18. Verify whether the labour conditions of motor vehicle drivers, who work according to labour contracts, meet the requirements of the legal acts, which regulate the safety of work operations.
- 19. Examine the circumstances and causes of serious accidents at work and accidents at work with fatal consequences, in the course of which drivers of transport enterprises have become victims, and verify whether transport enterprises adhere to the procedure of investigating accidents at work.
- 20. Organise instructions on the basis of traffic safety in pre-school institutions and general education schools.
- 21. Approve compulsory and elective education programmes and provide methodical means and recommendations.



Figure II.1. Road safety organisation system in Lithuania

+ Positive activities According to the law on Traffic Safety: The Government of the Republic of Lithuania is the highest responsible body on the traffic safety issue. The Government of the Republic of Lithuania established the Traffic Safety Commission. - Negative activity The Law on Road Traffic Safety states that "in safeguarding traffic safety, the Government or its authorised institutions..." (The functions of the Government and its authorised institutions have to be clearly indicated).

Table II.1. Evaluation of activities of the Government of the Republic of Lithuania

2.1.2. Role of the Traffic Safety Commission

A policy was established by the Traffic Safety Commission for the successful implementation of traffic safety. Members of this Commission are representatives of state administrations, municipalities and non-governmental organisations. The Head of the Traffic Safety Commission is the Minister of Transport.

Purpose of the Traffic Safety Commission

- Set the priority directions and measures for improving traffic safety.
- Draft the State Traffic Safety Programme.
- Co-ordinate the activities of State administration and municipal administration entities.
- Co-ordinate the activities in the sphere of safeguarding traffic safety of the entities of State administration, municipal governments, public organisations, legal and natural persons and enterprises that do not have the rights of a legal person.
- Render an accounting to the Government regarding the implementation of the State policy on traffic safety.
- Analyse the condition of traffic safety within the Republic of Lithuania.

Table II.2. Evaluation of activities of the Traffic Safety Commission

+	Positive activities	According to the law on traffic safety: The Commission is the highest responsible body for the creation and implementation of the traffic safety programme. The Commission has to set the priority direction and measures for improving traffic safety. The Commission has to co-ordinate the activities in the sphere of safeguarding traffic safety. The activities of the Traffic Safety Commission involve the representatives of State Administration and municipalities and of non- governmental organisations.
_	Negative activities	Experts of the traffic safety are not involved in the activity of Commission Coordination of the traffic safety Commission is poor. It is not enough that Traffic Safety Commission meetings be organised two or three times a year. On a practical level, the influence of the Commission on the activities of all institution is not effective.

2.1.3. Role of the Ministry of Transport and Communications

State policy in the field of traffic safety is mainly concentrated within the Ministry of Transport and Communications. The actions of the main units of the Ministry are related to the assurance of traffic safety in Lithuania.

In 2002, the Ministry of Transport and Communications established a Traffic Safety Department. The Traffic Safety Department drafts the legal acts in the field of traffic safety and within its competence co-ordinates the implementation of laws and other legal acts. When executing the mentioned functions, the Traffic Safety Department follows European Union requirements. It analyses foreign laws and international legal acts related to road traffic safety, and gives proposals for the Traffic Safety Commission on the compliance of the current and newly prepared Lithuanian legal acts on road transport issues to European Union requirements.

The most important activities of the Ministry of Transport and Communications in ensuring traffic safety are:

1. Preparation and implementation of legal acts regulating traffic safety

Efficient legal regulation of traffic safety issues is one of the most important factors to ensure traffic safety. Most Lithuanian legal acts on traffic safety comply with those of Western Europe. In order to reduce the number of accidents and people involved and to join the requirements for road users in the European countries, the Ministry of Transport and Communications continuously develops the existing and prepares the new legal acts regulating traffic safety.

2. Traffic safety propagation for the public

The practice of improving traffic safety in Scandinavian countries showed that a huge benefit could be obtained from raising the awareness of road users and propagation of safety issues. Compared to other countries, Lithuania still has insufficiently developed information and communication actions in the field of traffic safety. Information on safety issues is still lacking; drivers and other road users have insufficient knowledge on the currently valid legal acts regulating road traffic, on rights and duties of the drivers and other road users, who often do not even know what their responsibilities are for the violations of traffic rules. To achieve better public information in 2002, the Ministry of Transport and Communications, together with the other ministries, following the State Traffic Safety Programme for the years 2002-2004, held a number of different traffic safety campaigns whose main objective was to explain traffic safety problems to the public.

3. Traffic safety assurance on Lithuanian state roads

In 2002, the "Programme for the Reduction of Accidents" was implemented on state roads. The main objective of this Programme was to reconstruct high-accident road sections, to introduce traffic safety improvement measures and to reduce the number of accidents and people killed. The Programme was prepared after a detailed examination of statistical accident data and the so-called "black spots". It is expected that the implementation of effective traffic safety measures will result in a successful reduction of accident risk every year.

4. Drivers' education

The Ministry of Transport and Communications is responsible for drivers' education.

The level of drivers' education is very important for the safety of both the driver and that of other road users. Beginners, usually young drivers, are more often inclined to make mistakes and to take risks, compared to experienced drivers. Their mistakes are more harmful than those of other road users. Due to this fact, the Ministry pays great attention to the education of drivers.

5. Technical inspections

The Ministry of Transport and Communications is responsible for the efficiency of the technical inspection system. The aim of such inspection is to control and to evaluate the technical condition of vehicles, to prohibit (or restrict) a future use of technically unsound vehicles and to verify the data in the registration certification. More detailed information about drivers' education is presented in Chapter II.5.

Role of the Lithuanian Road Administration under the Ministry of Transport and Communications

The Lithuanian Road Administration under the Ministry of Transport and Communications is a state enterprise, which is in charge of taking care of all state roads: their maintenance, management, improvement and their safety. After Lithuania gained its independence, the Lithuanian Road Administration under the Ministry of Transport and Communications paid increasing attention to the improvement of traffic safety on state roads. When designing or repairing roads, one is always seeking to create the safest environment possible. As early as 1996, signs with a high-quality reflecting film were erected on all main roads. Pavement marked by a very effective reflecting paint is widely used for all main and national roads. Main, national and regional roads were equipped with signal posts, marking a road edge. The posts help to improve traffic conditions at night or during the winter.

In order to improve the traffic safety situation in 1996, the Ministry of Transport and Communications issued the Decree of the Minister of Transport, which obliged the Lithuanian Road Administration under the Ministry of Transport and Communications to establish a Traffic Safety Unit.

The Traffic Safety Unit carried out the following work:

- Analyses of the causes of the initiation of "black spots".
- Determination of possible measures to be implemented.
- Organisation and control of the introduction of traffic improvement measures.

Aiming at a rational use of funds allocated for the reconstruction projects, the pay-back of measures is calculated according to Finnish company's VTT software TARVAL. To eliminate high accident locations on the roads, the following measures are implemented:

- Implementation of pedestrian and bicycle tracks.
- Intersection reconstruction.
- Implementation of metal safeguards.
- Other traffic safety improvement measures.

Role of the State Road Transport Inspectorate under the Ministry of Transport and Communications

The main activities of the State Road Transport Inspectorate related to traffic safety are driver training and the control of the state technical inspection system, and providing more detailed information about drivers' training systems.

The State Road Transport Inspectorate at the Ministry of Transport and Communications is a state enterprise¹, which was charged to take care of the following activities on the traffic safety issue:

- Issue licences for business of passenger transportation by roads on long-distance and international routes and cargo transportation on international routes.
- Form the network of bus traffic on long-distance and international routes.
- Define conditions and order to obtain drivers' licences for road vehicles, to examine drivers carrying dangerous goods and managers of road transport activities in order to determine their level of qualification.
- Form technical policy of road transport, prepare programmes for implementing these policies, arrange implementation of these programmes, develop and implement the road vehicle type approval system; issue permits for activities of expert offices.
- Authorise test stations; issue ATP certificates, extend and renovate their validity.
- Execute State supervision and control of managers of international road transport business, institutions for training drivers, technical inspection centres and expert offices.
- Verify condition of bus stations and stops, organisation of their work.

+	Positive activities	Lithuanian road administration under the Ministry of Transport and Communications is directly responsible for the safety condition on state roads. The implementation of traffic safety measures on state roads is effectively organised. The Ministry of Transport and Communications organises scientific research on traffic issues. The Ministry of Transport and Communications organises campaigns on traffic issues. The Ministry of Transport and Communications is involved in the drivers' training process. The Ministry of Transport and Communications organised effective co-ordination between the institutions, which are under the Ministry.
_	Negative activities	There is no direct ministerial responsibility for the drivers' training process (two ministries – no direct responsibilities). At the municipal level, the Ministry of Transport and Communications does not organise engineering road safety activities (except on state roads which pass through the municipalities' area). The vehicles technical inspection control system is not effective.

Table II.3. Evaluation of activities of the Ministry of Transport and Communications

2.1.4. Role of the Ministry of Interior

The Ministry of Interior is one of the main ministries in Lithuania, and it influences the everyday road safety situation. There are divisions within the Ministry of Interior that are involved in road traffic safety activities and take an active part in the different fields of traffic safety. The Traffic Police Supervision Service is one of the most important subdivisions of the Ministry of Interior. It is in charge of taking care of the control of traffic and traffic participants.

Role of the Traffic Supervision Service

After the restoration of Lithuanian independence in 1991, when the Soviet militia was reorganised into the police, a Traffic Police Authority of the Ministry of Interior established a Traffic Police Service². On 1 October 2001 the Traffic Police Service was re-organised into the Traffic Supervision Service, a structural unit of the Lithuanian public police office. The Service is composed of the Traffic Supervision Division, the Planning Division and the Traffic Prevention Unit, which are specialised according to the types of operations. Also, there is a Traffic Patrol Group, formed by three teams. The Traffic Supervision Service is a police institution within a state traffic safety system. Together with the other institutions, it forms and implements state policy in the field of public order and traffic safety improvement, and carries out traffic supervision on state roads as well as other functions defined by the legal acts. Great attention is being paid to preventive activities: issues of educational publications, organising competitions for children, traffic safety campaigns, visits to schools and other places for children education, to provide information for the mass media, etc.

In general, the Traffic Supervision Service is the main institution. It implements control functions of traffic participants and together with other institutions takes care of the education of road users. The Service is a structural unit of the Public Police Office, which represents the police within the state system of traffic safety, together with other institutions. It forms and implements state policy in the field of ensuring traffic safety, and carries out traffic supervision on main Lithuanian roads and other special functions according to the legal acts.

The Service established under the supervision of the Police Commissar General and divided units, specialises in different activities.

The main tasks of the Service are as follows:

- Co-ordination and control of the efforts and activities of public police, and supervisions traffic.
- Organisation and execution of traffic safety assurance measures and operations.
- Producing official documents, examination and analysis of legal cases of accidents, infringements of traffic rules and others.
- Improving traffic organisation. The Traffic Supervision Service together with representatives of municipality roads determines additional speed limitation respectively in municipality roads. Likewise, the Service together with owners of state roads determines additional speed limitation on state roads.
- Allowing candidate drivers to take their exams and issuing driving licenses (until this function is transferred to another institution, authorised by the Ministry of Interior).

+	Positive activities	The Ministry of Interior (Traffic Supervision Service) organised the control of traffic users. The Ministry of Interior organizes drivers' training exams . The Ministry of Interior is involved in the organisation of campaigns on traffic issues. The Ministry of Interior maintains the accident data bases . Every month , the Ministry of Interior prepares the analysis of statistical data on accidents.
_	Negative activities	The control of traffic users is not effectively organised. There is no direct responsibility for the control of traffic users. The penalty "point systems" are not effectively applicable. There is no approved special traffic users control system.

Table II.4. Evaluation of activities of the Ministry of Interior

2.1.5. Role of the Ministry of Health

The prime task of the Ministry of Health is to oversee the health of Lithuanian inhabitants, including disease prevention, and rehabilitation and health promotion.

The main task of the Ministry of Health of the Republic of Lithuania in ensuring traffic safety in Lithuania involves the first aid given to the people involved in accidents. Tackling the issue of efficient first aid, the Ministry of Health has prepared a "State Trauma Prophylactic Programme for 2000-2010", approved by the Resolution of the Government of the Republic of Lithuania "On Approval of State Trauma Prophylactic Programme for 2000-2010" No. 423 on 14 March 2000.

Since the implementation of the above-mentioned Programme, every year the Ministry of Health has introduced a number of measures to improve the first aid provided to the people involved in accidents.

The Ministry of Health has an accident prevention and strategy programme. The activities of that programme³ are useful in the field of traffic safety.

- Reorganising health care provision for injured people and establishing a logical system of hospitalisation according to the severity of the injury; creating a programme for medical and social rehabilitation; collaborating with other institutions in accident prevention.
- To develop programmes to improve traffic, household, and workplace safety with a technical and legislative basis; to create facilities for physical and social rehabilitation; to organize the production of orthopaedic devices in Lithuania or to make it possible to obtain them from abroad. The prevention of accidents at work and the application of the Law on Occupational Health are performed by the State Labour Inspection.
- Promoting the "Healthy Cities" programme and other regional activities aimed at accident prevention.
- Research should be aimed at accident prevention and the origins or causes of injury; the implementation of safe technology in the workplace, transport and domestic environment; the creation and implementation of new treatment methods to improve accident-related conditions.

+	Positive activities	The Ministry of Health has a long-term (2000-2010) accident prevention programme. A successful implementation of accident prevention programme. An effective first-aid rescue system in the biggest Lithuanian cities.
_	Negative activities	No specific communication on road safety health problems such as drunk-driving, visibility exist, lack of health campaigns in general. There are no special accident rescue divisions established in hospitals. First aid outside the cities and urban areas is not organised effectively enough.

Table II.5.	Evaluation	of activities	of the	Ministry	of Health
1 4010 11.0.	L'uluulion	of activities	or the	Trainiser y	or meanin

2.1.6. Role of the Ministry of Education and Science

The objectives of the Ministry of Education and Science in improving traffic safety are as follows:

- To improve the system of traffic safety skills and traffic rules in educational pre-school institutions, general education and vocational schools.
- To improve traffic safety educational programmes, qualification of teachers concerned with traffic safety and who work with parents.
- To strengthen co-operation of concerned institutions in the field of traffic safety.
- To organise public measures to improve children's traffic safety awareness, to establish non-compulsory traffic safety classes and schools.
- To promote traffic safety ideas through the mass media: radio, television, and press.

The Ministry of Education and Science approves traffic safety education plans for secondary schools. Traffic safety education in pre-school institutions is integrated into all chapters of the curriculum by allocating considerable attention to the formation of practical skills. Traffic safety is integrated into subjects for schoolchildren in grades 1-4 in the curricula of general education schools for 2002-2003. The teaching method of traffic safety for schoolchildren in grades 5-8 (12-18 lessons per school year) is to be considered by the School Council. Lessons in traffic safety are included in the maximum number of compulsory lessons.

Special traffic safety schools for schoolchildren have been established in Lithuania. Networks of traffic safety schools -- centres of traffic safety promotion in cities and town have been established by municipalities. The oldest traffic safety school is in Kaunas, created in 1979. This school was the first school where traffic safety lessons were held for schoolchildren. This tradition is being continued by other newly established traffic safety schools. Traffic safety schools focus on the following: organisation of traffic safety lessons for city and town schoolchildren, traffic safety study circles, the activities of young traffic patrols, conferences, festivals, camps etc. Trauma analysis is being carried out as well. Schools are informed of traffic accidents in which schoolchildren from their school were involved. There is also a video studio which makes short movies on traffic safety.

To improve schoolchildren's safety on the streets, a reflectors campaign was started. During this campaign, schoolchildren received reflectors and were involved in the observation of their use. To ensure schoolchildren's safety on the streets and roads, various campaigns such as: "Attention: Children on the Roads" are organised at the beginning of each school year. In 1999, young traffic patrols were put in place. At present, there are about 1 500 young traffic patrols. They patrol at pedestrian crossings and intersections near their schools, help during various events, and study Road Traffic Rules. They patrol with traffic policemen and make notices to those who infringe the rules, organise mini-lessons and games for primary school-children. The most active patrols come from the city of Kaunas and the regions of Panevėžys, Prienai and Vilkaviškis. Headquarters of the young traffic patrols have been established. A camp for young patrols -- "Švyturėlis" -- is organised during the summer. Inspection of young traffic patrols' teams and conferences are also being held.

Table II.6. Evaluation of activities of the Ministry of Education and Science

+	Positive activities	Special traffic safety education schools for schoolchildren have been established. Traffic safety is integrated into the subjects taught to schoolchildren in grade 1-8. School-children are more or less involved in traffic safety activities. The activities of different competitions (such as young traffic patrols), conferences and campaigns on the traffic safety issue have been organised.
_	Negative activities	Poor organisation of communication to school-children on traffic safety issues. Traffic safety lessons for school-children in grade 1-8 are not compulsory .

2.2. Scientific research on traffic safety

After Lithuania gained its independence, various institutions and organisations started to take an interest in traffic safety problems. To improve the Lithuanian traffic safety situation, much research related to traffic safety was carried out, which analysed the present Lithuanian traffic safety problems.

2.2.1. The activities of Transport and Road Research Institute (TRRI) in the field of traffic safety⁴

In order to improve the Lithuanian traffic safety situation, a lot of research activities related to traffic safety have been undertaken. The results, achieved by the TRRI as well as the Transport Scientific Research Centre are very important for improving the national traffic safety situation.

By the Decision of the Government of the Republic of Lithuania No. 1132 of 15 November 1994, a Working Group was established within the Transport and Road Research Institute to study accident causes and to carry out scientific research work in the field of traffic safety. Since 1994, when the Method for the Determination of Black Spots was prepared and introduced, the TRRI has been involved in the annual determination and analysis of "black spots" and high-accident locations on main and national Lithuanian roads.

In Lithuania, information about accidents is registered by police officers. Accident data are merely accumulated and no research has been carried out on their causes. The TRRI has created and has been continuously updating the accident database, information that is used for the analysis. The Lithuanian Road Administration accumulates all the information about road structures, conditions and traffic in the Lithuanian Road Information System, which is updated by the Transport and Road Research Institute.

The specialists of TRRI carry out additional surveys of traffic volume, road infrastructure, movement of vehicles and pedestrians and develop the accident database. By using information from the above-mentioned databases, the Institute specialists carry out a detailed analysis of accident causes, propose effective preventive traffic safety measures and give an evaluation of the measures previously introduced. The TARVAL programme, created together with Finnish experts, is used in the evaluation of the efficiency of the suggested traffic safety measures.

The data on traffic volume is used for the purpose of accident research. Reliability and accuracy of this data is under the responsibility of the Road Survey Division. In 1997, the automation of traffic volume counts started. Based on the previously-approved Long-term Programme on Traffic Counts, the network of automated traffic counting posts in the year 2005 will consist of 316 stationary posts on main and national Lithuanian roads. Temporary traffic counts are also performed on regional roads. Every year, traffic counts are carried out on main and national roads; the traffic composition is determined; and the analysis of traffic and driving speed is presented.

Regarding road construction, reconstruction and repair works, it is always necessary to make an evaluation of these projects from a traffic safety point of view. The Institute has highly-qualified specialists, working in the field of road network improvement, preparation and evaluation of investment programmes, creation of transport and road data bank. The specialists took part in a number of different traffic safety courses in various European countries, e.g. "Vehicle Insurance and Traffic Safety", "Creation of National Traffic Safety Systems in Scandinavian countries"; they were introduced to the English traffic safety system. There is a close co-operation with the Organisation for Economic Co-operation and Development (OECD), the Swedish Road and Transport Research Institute (VTI), the Road Laboratory of Great Britain (ROSPA), the Finnish Transport and the Road Research Institute and other traffic safety specialists.

2.2.2. Activities of Automobiles Transport Department of Vilnius Gediminas Technical University and a Joint Lithuanian-Polish enterprise "Transport Scientific Research Centre" in the field of traffic safety⁵

The main purpose of the Transport Scientific Research Center is to carry out scientific research on traffic safety issues. The Transport Scientific Research Centre was created by the Vilnius Gediminas Technical University (Lithuanian Ministry of Science and Education). A number of road transport department scientists and professors take part in the activities of this Centre.

The Centre, working in the field of traffic safety, closely co-operates with other local and foreign scientific institutions: the Polish Road Transport Institute, the Belarusian, Russian and Ukraine Road Transport Science Institutes, the Riga Technical University, the Swedish Transport and Road Science Research Institute, etc.

Traffic safety activities of the Road Department and the Center are as follows:

- Quality and reliability of road vehicles.
- Quality of vehicles' technical use, its development and control.
- Development of drivers' training and selection.
- Development of the skills of driving instructors and teachers.
- Preparation of traffic safety improvement measures.
- Creation of Lithuanian traffic safety programmes.

2.3. Road network

At the beginning of 2002, the total length of Lithuanian roads was 80 000 kilometres. The length of roads of state importance was 21 300 km, municipality roads: 39 000 km, municipality streets: 4 800 km and almost 15 000 km of other roads. State roads make up 27% of the total road network. They are divided into three groups: main, national and regional roads. The Lithuanian Road Administration (LRA) under the Ministry of Transport is responsible for the state roads network in Lithuania. Local roads are the responsibility of the municipalities.

Figure II.2. Lithuanian road network



The state road networks is categorised as follows:

Main roads	1 190 km	8%
National roads	4 864 km	22%
Regional roads	14 727 km	70%
Total:	21 315 km	100%

The national road network has not changed much in the last five years. In 1999, the length of main and national roads increased, whereas the network of regional roads decreased. In 2000, the length of roads did not change at all. In 2001 and 2002, the length of main and national roads increased. Table II.7 presents the breakdown of the different types of road pavement⁶.

Dovomont	State roads				
ravement –	Main	National	Region	Total	
Asphalt concrete	1 639.36	4 782.55	5 558.46	11 980.37	
Cement concrete	84.55	-	1.4	85.95	
Gravel paving	-	78.04	9 148.35	9 226.39	
Settlement paving	0.20	3.58	19.16	22.94	
Total:	1 724.11	4 864.17	14 727.37	21 315.65	

Table II.7. Lithuanian road network by type of pavement

Source: Lithuanian Road Administration under the Ministry of Transport and Communications, Vilnius, 2002.

The technical parameters of state roads are as follows:

- 57% of roads of state importance have asphalt, cement, and other black pavements.
- All main and national roads are cement or asphalt paved.
- The prevailing width of asphalt pavement is 6-7 metres.
- 20 per cent of asphalt pavements are wider than 7 metres.
- 521 km of roads are four-lane motorway.

There are 21 Road Weather Field Stations on Lithuanian state roads. Four new stations will be installed this year.

2.3.1. Road Maintenance in Lithuania

The Lithuanian Road Administration (LRA) under the Ministry of Transport is responsible for state road maintenance in Lithuania. Maintenance of local roads and city streets are the responsibility of the municipalities.

The Lithuanian Road Administration has eleven local regional road administrations, which are responsible for the development and maintenance of the state road network. Regional administrations are road owners. Ten of them have been established following the territorial principle and are located in Lithuanian administrative centres. One administration "Automagistrale" was established for the maintenance and development of two major (four lines) roads.

Regional road maintenance companies are independent legal entities. They maintain all state roads in their regions: from 1 500 to 3 000 kilometres of main, national, and regional roads. They have three to six structural units and road services, which maintain 300-500 km of roads. Road reconstruction, strengthening and periodical maintenance are handled by private contractors. The Lithuanian Road Administration organises tenders and awards contracts for large-scale work, and regional road administrations organise tenders for periodic road maintenance work. At present, private companies award contracts to perform the following work: road marking renovation, rehabilitation of damaged guard rail, crack filling in asphalt and cement pavements, road building repair. The volume

of such work is gradually increasing, and there is a trend for this work to be performed by private companies.

In Lithuania, the following road maintenance work is performed:

- Routine winter maintenance (snow ploughing, de-icing, road inspection, repair of road signs and small defects of other road elements) from November 1 until April 1.
- Routine summer maintenance (crack filling, patching, selective surface dressing on short road sections, gravel road and shoulder grading, repair of road signs and guard rails).

Routine road maintenance also includes:

- Minor repair of bridges and water culverts.
- Minor repair of earth bank and ditch cleaning.
- Mowing, brush cutting, refuse collecting.
- Renovation of road marking.
- Maintenance of Traffic Account System and Road Weather Information System.
- Daily road inspection.

In the winter, state roads are divided into four maintenance levels depending on the intensity of winter maintenance operations⁷. Roads of the first, second and third level, 7 000 km in total, are constantly and intensively maintained. Approximately 14 000 km of regional roads are cleaned but salted only at dangerous locations: at rises, on turns, etc.

Level 1: Motorway Vilnius-Kaunas-Klaipėda, from Vilnius to Sitkūnai. Road maintenance service is on duty on this road round the clock.

Level 2: All main roads and several national roads with a total length of 17 000 km. The Road Maintenance Service is on duty on these roads from 4 a.m. to 10 p.m.

Level 3: National roads and several regional roads covering the length of 5 500 km. These roads are maintained from 6 a.m. to 7 p.m.

The remaining regional roads: The total length is more than 14 000 km. The winter service is on duty from 8 a.m. to 6 p.m. These roads are cleaned only after the roads of the first three levels have been cleaned.

2.3.2. Activities to prevent accidents on Lithuanian roads

The analysis of accidents and high-accident locations ("black spots") determines the cause of individual accidents and helps to identify measures to reduce the number of accidents. Since 1994, the Transport and Road Research Institute has carried out an analysis of the black spots and high-accident locations on the main and national Lithuanian roads. An analysis of accident causes is carried out for

high-accident locations, and proposals to reduce the accident rate are made. This leads to an economic evaluation of traffic safety measures being carried out.

In Lithuania, state road accidents are investigated on main and national roads. These works are ordered and financed by the Lithuanian Road Administration (LRA).

The "Methodology for Black Spot Identification", prepared by the Transport and Road Research Institute in 1995, is used to describe accident data in Lithuania. It is based on methods used in Denmark and other countries. The methodology provides two criteria to identify a minimum accident number ($A_{min} = 4$) and a minimum accident coefficient ($AK_{min} = 0.8$). These criteria have been justified by accident investigations on European roads. Due to increased traffic volume there was a need to update the limit value of AK_{min} , since many high-accident locations with the same number of casualties do not meet the "black spot" criteria.

 Table II.8. Changes in the "black spots" on main and national Lithuanian roads

	Category of road	Time period			
Description		1995–1998	1996-1999	1997-2000	1998–2001
	Main	1 721.71	1 721.71	1 850.66	1 850.66
Road length, km	National	4 815.87	4 815.87	4 927.74	4 927.74
-	Total	6 537.58	6 537.58	6 778.40	6 778.40
	Main	70	94	99	76
Number of "black	National	82	103	115	110
spots	Total	152	197	214	186
Number f accidents on	Main	24.6	25.3	32.8	29.7
the "black spots" / total	National	17.0	16.8	32.6	20.0
number of accidents, percentage	Total	20.4	20.5	32.7	24.1

For in-depth black spot accident analysis, the Transport and Road Research Institute is preparing an inventory of the black spots. The analysis of black spots and high-accident locations determines the dominant accident causes and helps to identify measures to reduce the number of accidents. The analysis takes into consideration the road infrastructure, skid resistance, traffic measures suggested and solutions proposed to reduce accidents. Based on the type of accidents and other determining factors, the measures to reduce accidents are identified, i.e. pedestrian and bicycle tracks, overtaking lanes, pedestrian islands, ring intersections and safeguards are erected, and road marking is improved.

Based on investigation data, the majority of accidents could be due to pedestrians, bicyclists, drivers as well as the road and its environment and the weather conditions. However, road users of different groups are most frequently to blame for the accidents. In that case it is necessary to search for general causes.

In order to analyse accident causes at high-accident locations and the black spots, the passports of high-accident locations and the black spots are prepared by the Traffic Safety Group of the Transport and Road Research Institute. The passport consists of:

- 1. A summary of all accidents on the study road section. The summary gives the number of the accident's card, date, location, hour, type, driving conditions (pavement condition, illumination, weather conditions), circumstances and the number of killed or injured.
- 2. Photos of the road section under study.
- 3. A situation scheme of the road section with the existing road signs and accident locations marked.
- 4. A summary of accident data, comprising:
 - The number of casualties on the road section under study.
 - Accident distribution by type.
 - Accident distribution by month.
 - Accident distribution by weather conditions.
 - Road pavement condition.
 - The prevailing infringements of Traffic Rules on the road section under study.
 - The main accident causes, having determined accident occurrences.

The following major road-engineering preventive measures of traffic safety have been implemented in Lithuania:

- Development of pedestrian walkways and cycle track networks aiming at separating them from motor vehicle traffic.
- Installation of traffic lights at 'same-level' intersections outside the city area.
- Reconstruction of 'same-level' intersections into roundabout intersections.
- Reconstruction of X intersection into two T-form intersections, erection of traffic-lights.
- Taking complex engineering measures with the aim to ensure safe conditions for all road users.
- Other measures to warn road users beforehand (noise lanes, Bee-Bump humps etc.).
- The following measures have been used to mitigate accident consequences:
 - Installation of crash barriers on roads with a central reservation.
 - Elimination of obstacles from the road or road-side area or fencing them off.
 - Reducing the angle of the earth bank slope.
- The following measures for ensuring effective information and visual warnings against dangers have been put in place:
 - Reflectors of different shapes providing visual information on the arrangement, trajectory, width of traffic lanes, possible obstacles and the location of the road edge.
 - Timely and easily accessible information on destination points and directions.

Despite this comprehensive list of preventive measures, experts during their visit have witnessed some examples of dangerous road designs, which are illustrated below.

2.4. Vehicle Inspection and State Technical Inspection Requirements

State technical inspection and vehicle verification organisational structure and requirements in Lithuania are regulated by the Decree of the Minister of Transport No. 389 of 30 September 1993 on Approval of Normative Documents for the Organisation of State Technical Inspection of Vehicles and the Rules on State Technical Inspection of Vehicles, approved by the Decree of the Minister of Transport No. 445 of 26 November 1993.

The Ministry of Transport and Communications defines the order, periodicity and technical requirements for the state technical inspection of vehicles. State Technical Inspections of Vehicles in Lithuania are carried out by Technical Inspection Centres. A Technical Inspection Centre -- a private enterprise, registered in Lithuania, is authorised by the state to carry out technical inspections and expertise of vehicles in the state established order. The Centres are established within the areas defined by the Ministry. The right to establish a Centre is given to a legal and physical entity, after it has won the tender of the Ministry and has been awarded a contract, based on which a certificate for its activities is issued.

The Centre, depending on the size of the area and the need for state technical inspections, after having gotten the consent of the Ministry, sets up technical inspection stations. The stations are located in such a way that the greatest distance to the nearest technical inspection location is about 30 km. There are also strict requirements for an industrial-technical base of the Centre and for the qualification of experts and controllers. The initial aim of these requirements is to guarantee required industrial premises, equipment and instruments, enabling well-managed state technical inspections and expertise of vehicles.

The aim of the inspection is to control and evaluate a technical condition of vehicles, to prohibit (or restrict) the further use of technically disordered vehicles, and to verify registration data.

It is prohibited to use vehicles that have not been inspected in due time. The periodicity of inspections is controlled by the authorised policemen, the officers of passenger and cargo transport, and the State Road Transport Inspection under the Ministry of Transport and Communications. The latter also controls the activities of state technical inspection enterprises.

All ten technical inspection centres are members of the association "Transeksta". The owners or the managers can take their vehicles to any technical inspection centre or inspection station, irrespective of where the vehicle has been registered. The inspection and official registration of documents are carried out in the Centres or their stations, having received authorisation from the Ministry of Transport and Communications to perform these activities.

Photos of road sections with problems









During the inspection, the following points are verified to see whether⁸:

- The entries in the vehicle registration certificate correspond to the actual data.
- The vehicle's technical condition, design, operation of systems, aggregates and efficiency correspond to the technical requirements for used vehicles, the manufacturer's and other regulatory normative documents.
- The colours, distinctive signs, special lights and signals of the operative service vehicles correspond to the requirements established.
- Vehicles, equipped with radio stations, radio telephones, radio signalling devices or other radio communication means (except radio, TV, tape-recorders and mobile phones), have a certain type of permit issued by an authorised institution for the equipment and use of the above-mentioned devices.
- In the documents of technical expertise which are issued for the processed vehicles, the processing evaluation is positive.
- The vehicle's installed liquefied gas fuel system is based on valid documents on its periodic check-up.
- The officers, having a control right, can carry out controlled supervision and make decisions on vehicle conditions. Inspections of the vehicles shall be carried out:
 - For motor cycles: every 24 months.
 - For passenger vehicles: every 24 months.
 - For passenger vehicles (taxi cabs, vehicles intended for the instruction of the learner drivers and used for business purposes for the transportation of persons): every 12 months.
 - For passenger vehicles (taxi cabs and the ones used for business purposes for the transportation of persons, when the time of their exploitation exceeds the period of 5 years): every 6 months.
 - For vehicles used for everyday life: every 24 months.
 - For buses: every 6 months.

- For trolley-buses: every 6 months.
- For goods-carrying vehicles: every 12 months.
- For goods-carrying vehicles adapted for the transportation of persons: every 6 months.
- For vehicles that carry dangerous goods: every 6 months.
- For special vehicles (pursuant to their construction and equipment intended for carrying out special working functions and/or technological processes): every 12 months.
- For trailers and semi-trailers of goods vehicles: every 12 months.
- For trailers of passenger vehicles: every 24 months.

New vehicles (registered for the first time) shall be registered without subjecting them to technical inspection. However, the owner shall be obliged to deliver the registered vehicle to the centre or station where the identification of this vehicle shall be carried out, complement of the equipment shall be verified (state number signs, first aid kit, fire extinguisher, advance warning sign, wheel supports) and the documents checked.

Although a state-wide computer network allows for maximum data transparency and countrywide availability, it was repeatedly indicated to the experts that bribery might be involved in a high proportion of inspections. In addition, there could be a significant problem with the marketing of stolen cars from Western Europe.

Every car owner can have his car inspected in any of the inspection centre branches in the country. The average age of Lithuanian cars is 16 years; the regular inspection is every two years. This interval was criticised as being too long by our interview partners. The mileage of inspected cars is not recorded by the central computer system.

In addition to the regular inspections, roadside checks are carried out by the centre in co-operation with the traffic police.

2.5. Drivers' training

Training of drivers in Lithuania is regulated by the Decree of the Minister of Transport No. 301 of 16 August 1999 on Conditions and the Order of Training of Vehicle Drivers, as well as the Decree of the Minister of Transport No. 18 of 21 January 2000 on Regulations for Training of Vehicle Drivers.

By the Decision of the Government of the Republic of Lithuania No. 137 of 5 February 2001, a Traffic Safety Commission was established and its regulations were approved. The main task of this Commission is to control the implementation of state policy in the field of traffic safety.

The Ministry of Health Care, the Ministry of Interior and the Ministry of Transport and Communications of the Republic of Lithuania organise and co-ordinate three main areas of the drivers training system⁹:

- Health examinations of people wishing to get a driving license.
- Determination of requirements for driving schools, drivers, skill development exams.
- Examination process and issue of driving licenses.



Figure II.3. Drivers training system in Lithuania

There are two parts to the driving test itself: a theoretical part (30 to 35 multiple choice questions, with two mistakes allowed) and a practical part (divided between a test in traffic and a test on a special testing ground; this the test lasts between half an hour, for private cars and one hour, for heavier lorries and professional carriers).

The State Road Transport Inspectorate under the Ministry of Transport and Communications coordinates the actions of enterprises, training drivers, develops their driving skills and carries out the control of these enterprises. Driving schools train people who apply for the right to drive a vehicle, and prepare them for a theoretical and practical exam. In 2002, there were about 360 driving schools in Lithuania (compared to 250 in 1997). To run a driving school, there are specific requirements concerning education -- a college degree is needed -- and an instructor licence granted by the Inspectorate after a special course (20 hours) in University.

The legal acts mentioned above, currently valid in Lithuania and regulating the system of drivers training, were prepared based on the EU Directive on driving licenses (91/439/EEB) and its amendments 94/26/EC, 96/47/EC, 97/26/EC, 2000/56/EC; also pursuant to EU Directive 76/914/EEC on a minimum level of drivers training. At present, Lithuania has determined vehicle categories, an age limit and requirements for drivers' behaviour. Requirements for the skill development exams meet the requirements and the main principles of the mentioned Directives. At present, the only form of driver's license does not meet the established form in the Directive amendment 96/47/EC, although from 1 January 2003 this incompliance has been eliminated.

In 2002, one could evaluate the average income in Lithuania at 1 000 Litas per month (approximately $173 \in$). The prices for a driving licence were as follows:

•	Driver training:	600 Litas (173€) includes 60 hours of theory, 20 hours of practice.
	(licence category B)	
•	Driving test:	30 Litas (8.6 \in) for the theoretical test

- Driving test: 30 Litas (8.6C) for the theoretical test. 50 Litas (14.5C) for the practical test.
- Driving licence: 6 Litas (2€).

Although these costs are quite consistent, there are numerous second-hand cars from Western Europe sold quite cheaply. This induces young drivers to become car owners without having acquired sufficient driving skills. The conjunction of inexperience and alcohol can, as in any other country, have very dramatic consequences.

There is no training for moped drivers. The only requirement is to be at least 15 years old and to wear a helmet. There are, however, plans to issue some kind of driving licence through the education system. Until now, weather and economic conditions have prevented the population from using mopeds and motorcycles very much.

2.6. Conclusions – Problems in the Road Safety organisational structure in Lithuania

First level

- In a two-year period, the Minister of Transport and Communications changed three times; which means that in this period of time, the policy for stable road safety policy was not improving.
- Since 2000, there were no approved road safety programmes at the governmental level in Lithuania. (In 2002, such a programme was approved.)
- Over a two-year period, only three Traffic Safety Commission meetings were held.
- The majority of the members of the Traffic Safety Commission are not road safety specialists; therefore their discussions can be questionable.

Second level

- The co-operation at ministerial level is not effective.
- Municipalities are not sufficiently involved in road safety activities.
- Every Ministry must have direct responsibility for traffic safety activities. (For example, the Ministry of Transport and Communications has direct responsibility for safety on state roads; the Ministry of Interior has no direct responsibility for traffic participant's control).

Third level

- Traffic participant's control.
- Road safety measures in the road sector.
- Organisation of vehicles technical inspection system.

NOTES

- 1. State Road Transport Inspectorate under the Ministry of Transport and Communications, Vilnius 2002, www.vkti.lt/english.htm
- 2. Public Police Office Traffic Supervision Service, Vilnius, 2002, www.viesoji.policija.lt/ept/
- 3. Ministry of Health, the Lithuanian Health Programme, Vilnius, 1998, www.sam.lt/index en.html
- 4. Transport and Road Research Institute, Lithuania, Kaunas, 2002.
- 5. Vilnius Gediminas Technical University, Automobiles Transport Department, Vilnius, 2002.
- 6. Lithuanian Road Administration under the Ministry of Transport and Communications, Vilnius, 2002, <u>www.lra.lt/index_en.html</u>
- 7. Lithuanian Road Administration under the Ministry of Transport and Communications, Vilnius, 2002, <u>www.lra.lt/index_en.html</u>
- 8. The Order of the Ministry of Transport and Communications "On Approval of Road Vehicle State Technical Supervision Regulations", Vilnius, 2001.
- 9. Order of the Ministry of Transport and Communications 'On Training Vehicle Drivers', Vilnius, 2000.

PART III

ACTIONS REQUIRED

Systematic work on road safety in Lithuania started around 1994, mainly fuelled by Lithuania's desire to get closer to the European Union by meeting the EU's requirements for a well organised transport sector. Unfortunately, several international experts have observed a major discrepancy between the plans proposed and their implementation in practice. An important milestone of Lithuania's road safety work is the Road Safety Act passed in October 2000. This forms a basis for overall objectives and the division of responsibilities in the society. Although road safety issues are promoted by several experts in the country, there is a significant lack of organised road safety interest groups in Lithuania.

After Lithuania gained its independence, the Government started road safety works some time around 1994. It appears that international players have played an instigating role in the process to bring about systematic road safety work in Lithuania.

The Phare programme is one of the three pre-accession instruments financed by the European Communities to assist the applicant countries of central Europe in their preparations for joining the European Union. The Phare programme has been providing support to the countries of Central Europe since 1989, helping them through a period of massive economic restructuring and political change. Following the 1993 Copenhagen Council's invitation to Central European countries to apply for membership, Phare support was reoriented, including a marked expansion for infrastructure investment¹. Road safety comprises an important aspect of the Phare programme. In October 2000, a final report was presented. The report contained an account of the road safety measures taken within the framework of the programme, together with a road safety plan for the period 2001-2005. It appears, however, that several of the international initiatives that have resulted in proposals for cost-effective road safety measures have not been realised in practice. According to a Finnish expert, the road safety situation in Lithuania is a paradoxical one. Several plans and programmes are awaiting implementation, while at the same time new plans are being compiled.

One highly important aspect of Lithuania's road safety work is the Road Safety Act passed by the President in October 2000 and which came into force on 1 January 2001. This Act lays down the basic criteria for road safety work in Lithuania. The Act also stipulates the responsibilities of the Government to implement road safety policies, the responsibilities of road users and regulations regarding the inspection of vehicles in order to prevent personal injury as well as property damage and to otherwise improve road traffic conditions. The Act was reportedly preceded by a debate between Members of Parliament and the Ministry of Transport. It has become apparent that parliamentary representatives wanted to take matters further but no consideration was given to them. Consequently, the Act is perceived by some as being somewhat watered-down.

Two programmes concerning road safety for the future have been compiled: a general communications programme for 2002 and a road safety programme for the period 2002-2004 in accordance with the requirements laid down under the Road Safety Act.

Although the media seem to report severe road traffic accidents, there do not appear to be any domestic forces (such as non-governmental organisations) promoting road safety issues in Lithuania. The driving forces propagating road safety appear to be primarily found among a small number of experts in the field. It is not apparent from the material studied and the discussions held whether the health sector has shown any explicit interest in this matter. It is likely that the introduction of

mandatory traffic insurance and an organisation to administer this system have introduced a player that clearly perceives the gains of fewer road traffic injuries. However, it is too early to assess the role that insurance companies will play.

Road safety problems

According to the Lithuanians, a fundamental reason for Lithuania's road safety problems is the increasing volume of road traffic. Accident analysis indicates that road accidents are primarily caused by erroneous behaviour on the part of road users.

According to the Lithuanians, the increase in the number of cars and the volume of traffic is a fundamental cause of the growing road safety problems in the country. At the same time, the increase in road traffic is viewed as positive and something that hardly needs to be regulated. Between 1992 and 2002, 7 547 people died and 58 185 were injured as the result of road accidents. The casualty rate compared with one of the best performing countries is high, with a fatality rate of about 17.3 for 100 000 inhabitants (compared with approximately 6.7 for Sweden).

The road safety problem is complex and is complicated by several risk factors. The need to prioritise measures often forces a focus on certain primary factors that then determine how safety problems are defined. Statistical analyses and black spot analyses conducted by the Lithuanians indicate that 80% of all accidents arise due to driver/pedestrian errors. According to the Lithuanians, this depends to a large extent on the fact that drivers and pedestrians lack respect for each other and that they are constantly in breach of traffic regulations. The conclusion drawn is that poor conduct and discipline and a lack of participation in road safety matters are the main reasons for the increase in the number of accidents in Lithuania. Lithuania is not the only country to adopt this view of the problem. It is in fact common in many areas of conventional road safety work. This "blame the victim" approach is not only symptomatic of road safety but is a general characteristic of many areas of research conducted on social problems²

Goals

Road safety is on the political agenda for several reasons. One significant reason is its importance in discussions regarding Lithuania's recent entry into the European Union. Another reason is the burden of road traffic injuries on the national economy. The primary ambition appears to be to break the upward trend in the number of people killed or injured on the roads and to achieve a continual risk reduction. There are ambitious plans for a risk reduction of 5-6% annually for the period extending until 2010. However, many people who practice in the field appear to be sceptical of quantified goals.

Although Lithuania has a defined road safety problem, it also implicitly or explicitly has a notion of how it would like the future to be. The all-embracing questions are therefore knowing which level of ambition Lithuania has and at what pace the improvements should be accomplished.

According to the Lithuanians, road safety is a priority issue with regard to the country's possible entry into the European Union. Furthermore, experts from Lithuania as well as international experts have stated that the road safety problem is an unnecessary cost to society and can be reduced through cost-effective measures. There are therefore also economic reasons for working with road safety matters. If damage to property is also taken into account, this further reinforces the economic reasons for working on safety issues.

The primary ambition appears to be to break the upward trend in the number of people killed or injured on the roads and to achieve a continual risk reduction. There are plans for a significant risk reduction of around 5% per year on average during the period 2002-2004. At the meeting with the Minister of Transport, however, an ambition was expressed to halve the number of deaths on the roads by 2010, which corresponds to EU and ECMT goals. This would require an average annual risk reduction of around 6%. There appears to be a certain degree of scepticism towards predefined goals among various parties in Lithuania. This is probably a consequence of the former Soviet Union's highly unrealistic demands regarding plans and production results.

Since the early 1990's, a number of expert reviews have been carried out and comprehensive lists of required actions have been provided. Some experts have even spent months in Lithuania for problem identification. However, from what we could identify from the interviews and the available information material, the numerous expert proposals lack implementation proposals to a large extent. It is acknowledged that Lithuania -- in the view of the accession process to the Union and the comparably high EU safety standards -- has already provided a number of legal precautions for comprehensive safety work, but little has been done to put the provisions into practice.

Lithuania appears to be on the right path to creating law and order in the road transport sector. Rules and large parts of the organisational criteria seem to be in place. This is not to say, however, that law and order are equivalent to satisfactory road safety. A far greater degree of commitment by society is required in order to achieve this.

Low Lithuanian safety standards do not appear to be a problem of lack of safety laws, experts or knowledge, but rather of structural deficiencies in responsibilities and co-operation, in land use planning and of a lack of safety awareness amongst decision makers and the public.

On the basis of this description and analysis of Lithuanian road safety and based on experts' experience of road safety issues in their own countries, the following are some reflections and recommendations that could contribute to more effective road safety work in Lithuania.

3.1. Policy instruments to be implemented

The policy process appears to be primarily influenced by international players. This peer review is a step in this process. Apart from international influences, the process is driven by experts in Lithuania and possibly also by a very small number of Members of Parliament.

An important starting point for the policy process is the knowledge that a road safety policy is always an expression of facts and values. It is therefore essential that a policy process treats these two aspects in considerable detail and that a large number of different players be involved in the process. According to the reviewer's opinion, there is currently a significant lack of open discussion on the values which should govern road safety work.

Recommendations:

- The Parliament and individual citizens should become involved in the policy process to a far greater extent than is the case today.
- For the promotion of road safety at the highest level, a Road Safety Committee has to be established in the Seimas of Lithuania. The purpose of this Committee has to be the creation of guidelines for improving road traffic safety in the Republic of Lithuania.
- The Government should take initiatives to organise interest groups for unprotected road users. This could possibly be co-ordinated and financed jointly with the insurance company responsible for administering the new traffic insurance in Lithuania.
- The health sector should become involved in road safety work. This should include the promotion of road safety awareness in day-to-day health care. Special first aid accident rescue divisions are the most important, and first aid hospitals have to be established. An effective first aid rescue system for road users who have suffered in car accidents in cities and urban areas must be created and implemented.
- Private firms should become involved in road safety work.

3.1.1. Institutional framework

The Traffic Safety Commission appears to be the key body for safety issues in Lithuania. Various tasks are attributed to the Commission by the Lithuanian "Law on Traffic Safety" (2000). A law of this kind, which describes the tasks and co-ordination of safety issues at all levels in detail, does not exist even in many Member States of the European Union. From the responses of various interviewed partners, however, one gets the impression that the very ambitious contents of the Law have not yet been implemented. According to the Law, the Commission should co-ordinate efforts and institutions, including "state and municipal administration, and representatives of non-governmental organisations".

As far as perceived, there is little safety work (and co-ordination) in and with municipalities and reviewers did not hear of any non-governmental organisations in the safety field. Moreover, only politicians (ministers and vice ministers) currently sit on the Commission which, together with a meeting frequency of "not less than two times a year", does not seem to be an appropriate construction to deal efficiently with this comprehensive job. Therefore, it is proposed to develop the ideas of the Road Safety Law and transform the Commission into a task force of experts and institutions that would deal with all road safety issues more efficiently. Ministers should only have a supervising role in the Commission but not be involved into the operative work of the group.

Part of the task of such a new group would be to set up a detailed inventory of current responsibilities in the safety field and, where necessary and feasible, start a streamlining process. This applies in particular to the intertwined responsibilities of the Ministry of Interior and the Ministry of Transport. It should be mentioned that the task of the Traffic Safety Department within the Transport Ministry was not clear to us, especially as this department is currently staffed with only one or two persons. In our view, the existence of a safety group within the Transport Ministry is a prerequisite to

efficient ministerial safety work, and should also serve as the Ministry's contact point with the Safety Commission. But such a department needs to be given a reasonably sized staff, together with a clearly defined dossier.

The task force should also be concerned with the elaboration, management and evaluation of a long-term road safety programme with numerical reduction targets.

There have been efforts to set up a parliamentary Committee for Road Safety. Such committees are *de facto* standard in the Member States of the EU and serve as key vehicles for safety legislation. It is strongly recommended to implement such a committee in the Lithuanian Parliament.

From the practical experience of our site visits, it seems to be imperative to include road safety aspects into the Lithuanian land use and regional planning regulations.

- The Traffic Safety Administration must be established under the Government of Lithuania. The Traffic Safety Administration must give suggestions for every municipality and for the State roads to improve road safety measures (according to recommendations in section 2.4 Vehicle Inspection and State Technical Inspection Requirements). Many ECMT countries have a Traffic Safety Administration, which is in charge of municipal and State road traffic safety activities.
- One Ministry has to be responsible for the drivers' training process.
- The vehicle technical inspection control system **has to be organised** more effectively. (More than 50% of vehicles checked for the first time had serious defects).
- The Head of the Traffic Safety Commission **must have more influence** (power) over all institutions in charge of traffic safety activities. It could be suggested that, whilst the Minister of Transport remains the head of the TSC, the Prime Minister is given a role to ensure coherence and co-ordination of road safety policy between all Ministries involved.
- A group of experts has to be established on the Traffic Safety Commission. The purpose of this group should be to create and evaluate suggestions on improving traffic safety conditions.
- Since the traffic safety situation in Lithuania is insufficient and in order for all institutions to have a more effective activity, the meetings have to be organised more often than they have been in 2002.
- The Ministry of Interior **must have direct responsibility** for the control of traffic users.
- The creation of traffic users control systems must involve scientific research institutes.
- An effective penalty "point systems" for young drivers/beginners has to be created.
- **Municipalities have to be more active** in the implementation of road safety measures on roads and streets.
- Incentives should come from the top: a clear role should be given to municipalities in a global road safety policy
| Road safety
structure | Recommendations |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First level | The stable road safety policy has to be improved.
A working group of specialists under the Traffic Safety Commission has to
be established. The members of this group have to be specialists from state
institutions, universities, research institutes and non-governmental
organisations.
There has to be effective coordination between all traffic safety institutions.
For that purpose, the Traffic Safety Administration must be established under
the Traffic Safety Commission or under the Government of Lithuania. |
| Second level | More influence at ministerial level from the Traffic Safety Commission. A role might be given to the Prime Minister to ensure cohesion in the Government. The Traffic Safety Administration must give suggestions for every municipality and for the State roads to improve road safety measures. A new financing tool should be established for the financing of Traffic Safety activities. |
| Third level | The traffic participant's control must be organised by an effective strategy
plan. (This could be developed by the Traffic Safety Administration must).
Special requirements for new drivers (up to two year) have to be prepared.
(as well as Special "point-system" penalties for breaking "Road Traffic
Rules", special driving licenses for young drivers).
Provisions in the State budget for road safety measures should be much
higher.
The vehicle technical inspection system has to be reorganised because at
present, there are too many cars in bad technical condition. Imports of old
unsafe cars should be made more difficult. |

Table III.1. Institutions

These recommendations are illustrated by the following figure:

Figure III.1. Recommendations for the reorganisation of the road safety organisation structure in Lithuania



3.1.2. Vehicles

The average age of cars is 13-14 years. The share of Russian cars is small and ever-decreasing. Many newly-registered cars are used cars of western origin.

A system of periodic technical vehicle inspection exists, practically in conformity with international standards. Public discussion is on-going on the integrity and efficiency of these (private) centres that are controlled by the State Road Transport Inspectorate of the Ministry of Transport and Communications. We did not receive substantive evidence on these claims. On the other hand, for several reasons, the quality of these centres should be beyond any doubt; the State has an important responsibility in this respect.

The average age of cars is much higher in Lithuania than in the Netherlands (where it is 7.5 years) and probably all other EU countries. Even if these cars are in perfect condition, their crash-worthiness is much less then that of newer cars that have been improved considerably in recent years. In addition, many of these imported used cars are said to be repaired after a crash; these repairs are seldom done perfectly. All imported used cars have their registration inspected by one of the technical inspection centres but deficient repairs are hard to detect at vehicle inspections.

Therefore, it can be said that the age of the car park has a negative effect on road safety, especially for the drivers and passengers themselves in serious crashes.

Technical Vehicle Inspections

In most of the Member States of the EU, technical flaws contribute to less than 1% of all accidents. The situation in Lithuania might be somewhat different. At first glance, the management of technical car inspections seems well organised (joint venture with German TÜV). During the interviews, however, several persons interviewed indicated that bribery could be involved in a major part of technical inspections. Moreover, an inspection interval of two years for cars is twice the current standard in the EU. Putting this information altogether, one might be inclined to consider that the technical standard of vehicles could well play a certain part in the Lithuanian safety problem. It is therefore proposed to lower the inspection interval to one year -- with exceptions for new cars -- and to enforce the fight against bribery in this context.

Daytime Running Lights

Lithuania is a typical Scandinavian country, especially when it comes to light and weather conditions. Success has been achieved in other Scandinavian countries by the use of daytime running lights (DRL). A certain proportion of head-on and left turning collisions can be prevented by DRL, and positive effects have also been observed on car accidents involving pedestrians and cyclists. It is therefore proposed to consider the introduction of DRL in Lithuania.

Seatbelts

EU regulations (91/671/EWG) require the use of seatbelts in all fitted cars, including on rear seats. It is considered of utmost importance to extend the existing Lithuanian seatbelt use requirement to rear seats.

Data on the actual wearing rates of seatbelts, however, are not available.

Recommendations:

- It should be made less profitable to import and/or buy repaired used cars and relatively old used cars. The age of imported vehicles should therefore be limited and they should be certified.
- Extend the existing Lithuanian seatbelt use requirement to rear seats.
- Consider the introduction of DRL in Lithuania.

3.1.3. Education and training improvements

As previously stated, the share of inexperienced car drivers is probably large, which will increase the risk of accident. Information on the knowledge and skills of newly-admitted drivers is not available, nor of the experienced drivers. As regards formal organisation, the driver training and licensing system meets more or less international standards. From accident statistics it can be concluded that a large number of drivers drive while under the influence of alcohol. But little empirical data are available on other risky driver behaviour of car drivers.

Speed measurements on a section of a main road (motorway and motor road) show that 45% of car drivers exceed the limit of 100, 110 or 130 km/h. In the Netherlands, 10% of drivers on motorways go 17 km/h or more over the speed limit of 100 km/h; the average speed of cars is 95 km/h. On a motorway sections with a limit of 120 km/h, the average speed is 114 km/h; 10% of the cars drive 15 km/h or more over the limit.

Alcohol

There is a lower tolerance law on drunk driving (BAC limit 0,4‰) than in most EU countries. However, there are indications of an increased share of drunk driving accidents, which currently contribute to about 15% of all fatalities. This rate appears to be high but is at the same time hard to compare with the rate of EU Member States, as their BAC limits are higher and, unlike Lithuania, the general alcohol testing of all drivers involved in (injury) accidents is not standard in the EU. It should be noted that there have been European in-depth studies which report that up to 30% of all accidents could be linked to alcohol abuse.

It is proposed to follow the example of many EU countries (see e.g. Finland) to embark on a large scale road-side alcohol screening with comparably cheap alcohol detectors which provide a rough but quick first indication of possible alcohol abuse and which can be used to efficiently filter out potentially drunk drivers, without significant additional resource demands from the traffic police.

Recommendations:

- More information should be collected on speeding (including on secondary roads outside urban areas and on arteries inside urban areas) and on drinking and driving (time and location).
- Speeding and drunk driving should be given high priority in police enforcement.
- Limit the number of drivers' training schools (so as to control school activities effectively).
- Establish drivers' training schools where the drivers improve their driving skills.
- Issue temporary driver's licenses for drivers who do not have two years of practice.
- For the drivers who do not have two years of practice -- exact traffic rules and "point" system.
- Organise special campaigns to improve driver behaviour.
- More action on the organisation of traffic safety communication campaigns (e.g. distribution of reflectors).
- Drivers who infringe traffic rules (driving through pedestrian crossings without stopping as required by rules), must be seriously punished.

- Education of society on pedestrians' problems.
- More effective and efficient enforcement strategies can be learned from international experience (cf. OECD, 2002).

3.1.4. Monitoring: A "safety impact assessment procedure" -- Enforcement/Penalties

Safety measures on different levels of road hierarchy

From the interviews and from the information gathered, it can be concluded that proper black spot treatment is only carried out for "main" and "national" roads. Nevertheless, it is clear that the majority of accidents occur on roads that are being administered by municipalities. There were indications that practically no such treatment is carried out for the more than 14 000 km of regional roads, which constitute the major part of Lithuania's extra-urban road network. It must be stressed that in European Member States, a significant part of injury accidents and 25% of fatalities. In addition, the representative of the traffic police indicated that it is currently hard to keep up regular enforcement on regional roads due to limited resources.

For municipality roads, no black spot treatment seems to be compulsory. The quality of safety work seems to differ from town to town.

It is therefore proposed to extend the obligation of carrying out black spot treatment to all types of roads, along the lines of the Traffic Safety Law. This would imply explicitly forcing all municipalities to carry out regular black spot treatment on their roads and to report to a central body about the measures and their impacts.

Funds for Road Safety

The funds for "Traffic Engineering Safety Measures" have decreased significantly since 1999. It was also stated by interview partners in the Road Administration that approximately only 10-15% of all necessary annual black spot treatments can presently be carried out, due mainly to a lack of funds. The availability of adequate financial resources is a prerequisite for implementing safety improvements for the road infrastructure and should therefore be assured in the future.

Experts were told that the penalties for infringements in road traffic are high, "sometimes unrealistic" and that they can reach the order of magnitude of average monthly salaries in severe cases. In any case, it should be ensured that a substantive part of the money collected is used for funding concrete road safety measures.

In order to trigger more efficient safety work in municipalities, the government should seek to provide incentives to towns to come forward with integrated safety plans (urban thoroughfares, area wide schemes) which should be financially supported at the state level (similar to research funding of the EU).

It is also proposed to initiate a Road Safety Fund that would be used to support research work and pilot feasible studies on new safety measures and methodologies.

Nonetheless, lack of money is not always the key problem. It must be stressed that the lack of funds is often a very good excuse to refrain from embarking on efficient work and adopting new methods. At the same time, is should be mentioned that efficient safety work is always a matter of well motivated staffs and the presence of "champions", i.e. key persons with the ability to inspire and to trigger safety competition, e.g. between towns or institutions.

Accident database

Experts were told that the traffic police would run a central accident database and that other institutions would only receive subsets of the data for their work, e.g. the Research Centre for black spot identification. It is proposed to design the new system so that all institutions in road safety can have unlimited access to data (with personal data made anonymous, when appropriate), possibly via a Geographic Information System user interface (GIS) to ensure state of the art visualisation. In addition, it is proposed to consider the matching of accident data with hospital data which will allow estimating the order of magnitude of underreporting and learning more about the real consequences and costs of accidents.

In any case, accident statistics should be improved on all parts of the road network, also on municipal roads. Information should also be collected on traffic volumes on all parts of the road network. The lack of information on the safety level of municipal road is a key missing element.

The role of the insurance sector

An obligatory liability insurance has been introduced in Lithuania quite recently. According to the new regulation, all insurers have to deliver 15% of their premium revenues to the national insurance bureau, of which 3% must be invested in road safety work (this 3% totals about 330 000 euros per year). Currently, the premiums are fixed by the state. A Bonus/Malus system has been introduced. A model has been introduced according to which the premiums are doubled in case of drunk driving. In cases of a drunken driving accident, premiums are tripled. Currently, work is being done on an information technology (IT) project to provide the database needed for this model.

The first payments of the insurers under the new regulation only arrived in April 2002, so no practical road safety work has yet been carried out. However, the bureau is reflecting upon different options as to how the money could be spent most efficiently. One possibility is the provision of financial incentives to municipalities in order to trigger local safety work.

The regulations that have lately been set up in connection with the obligatory liability insurance will contribute to improving Lithuanian road safety. Insurers are obliged to spend part of their revenues in safety work, and premiums are linked to (drunk driving) infringements. It is proposed to consult with the insurers, or the National Insurance Bureau, in the framework of the Traffic Safety Commission.

Independent road safety organisations

In many Member States of the EU, independent Safety Organisations with different kinds of revenue structures were established a long time ago. It is obvious that an independent organisation -- which should also take over research responsibilities -- can give a valuable impulse to safety work.

Recommendations:

- Ensure that the money collected as penalties for infringements is at least partially used for the implementation of the road safety policy.
- Favour the development of independent non-governmental Safety Organisations.
- Increase the role of the insurance sector, with compulsory feedbacks in the financing of road safety policies.

3.2. Specific actions on road network

The definition of the road safety problem is of decisive importance to the orientation of future operational work on road safety issues. Unfortunately, Lithuania seems to be making the same mistake that most Western countries have made, i.e. defining the safety problem primarily in terms of road accidents and as a problem that stems from the ability and will of road users to act appropriately and safely. The road safety problem is far more complex than this. Focusing on road accidents as an individual problem is highly inappropriate and will in all likelihood lead to a dead end. Even if it is true that many accidents are due to errors by road users, this does not explain the high injury and fatality rate. Rather, the explanation is that, for various reasons, people sometimes make mistakes that lead to accidents, and if these accidents arise in a situation where the kinetic energy is higher than the human body can tolerate, then serious injury will result. The type of accidents and the degree of kinetic energy are therefore decisive to the road safety problem. For example, if the system permits conflicts between pedestrians and cars and these crashes occur at speeds (kinetic energy) higher than 50 km per hour, the fatality risk is around 80%. At a speed of 30 km per hour, the fatality risk is only $10\%^3$. The number of accidents is in turn primarily determined by exposure.

Even if conditions for safe road traffic can be created, there are limits to what the system can tolerate. The conditions of use -- which are a key to safe road traffic and which entail a large responsibility for road users and people who use the road system in their profession -- are to follow speed limits, use protective equipment and not to drive when intoxicated or otherwise temporarily in an unfit state to drive. In the longer term, attempts can be made to solve these behaviour problems with technical solutions such as speed restriction systems, seat belt reminders, anti-alcohol locks, etc. Such solutions are currently also being discussed in Sweden.

The road safety problem in Lithuania, given the unregulated development in road traffic, is primarily a manifestation of too much emphasis being placed on accessibility in relation to the design of the road system.

Road Safety Audits

High cost effectiveness is attributed to safety audits of existing or newly constructed roads. According to the information of the Road Administration, experience with safety audits has already been gained. It is proposed to make safety audits part of the regular work of the Administration, to start with high level roads and proceed, in the mid term, with roads at medium and low level.

Speed Limits

Until the year 2003 the urban speed limit was 60 km/h, which is not in line with the European *de facto* standard of 50 km/h. New wording of the Lithuanian traffic regulations from 1 September 2003 fixes the speed limit in cities and settlements at 50 km/h. Decreasing the limit to 50 km/h is seen as a major step towards better urban safety that has also shown to be effective in other countries, see e.g. the recent Czech experience. A prerequisite for any impact of lowered speed limits is of course proper enforcement by the police and adequate awareness building actions, together with a proper reconsideration of urban road layouts. For those highly sensitive areas -- areas with high shares of (young) pedestrians and/or cyclists -- with a current speed limit of 40 km/h, a reduction to the standard of 30 km/h already in force in many urban areas should be considered. However, such actions must undoubtedly be accompanied by a restructuring of road space (traffic calming) as only roads that provide the visual perception of a sensitive area to drivers will automatically induce sustainable speed levels, even without enforcement.

The motorway speed limit of 130 km/h seems too high for the current Lithuanian situation, especially when taking into account the actual use of motorways by different road users including pedestrians.

Other observations

In the long run, it will not be feasible to sustain turning places on motorways, as they are safety hazards. The same is true for bus stops and private property access along the motorways. These features are neither compatible with high traffic densities (reportedly increasing at over 10% per year) nor with the high driving speeds – and are rarely found elsewhere in the EU.

Recommendations:

- To formulate the problem to a greater extent in terms of road safety being mainly a system problem, where the road traffic environment, vehicles and speed levels do not coincide with each other.
- To concentrate efforts directed at road users on enforcing speed restrictions, on the use of protective equipment and on not driving while intoxicated or otherwise in an temporarily unfit state to drive.
- The Traffic Safety Administration must be established under the Government of Lithuania. The Traffic Safety Administration must give suggestions for every municipality and for the State roads to improve road safety measures.

In the Netherlands, a set of leading principles and guidelines for road-design has been developed in recent years. This general concept was called "sustainable road safety" (Van Schagen & Janssen, 2000). A cornerstone is the (hierarchical) categorisation of roads into three classes, each with a different function: through roads (flow function: high speeds and large volumes), distributor roads (distribute traffic over districts and regions containing scattered destinations) and access roads (enable direct access to properties alongside a road or street). Outside built-up areas, all three road categories are present whereas inside built-up areas can be found distributor and access roads, and not through roads. The design criteria for each category have been used to evaluate the Lithuanian road network.

In general, the existing road network has many characteristics of a hierarchical system with road categories that resemble the sustainable safe categories. Consequently, this system however has not been worked out. Some examples:

- Through roads do enter into built up areas; at city boundaries their function changes suddenly to that of a distributor road but their lay out still serves a flow function.
- Vulnerable road users (pedestrians, bicyclists) are frequently found on through and distributor roads, inside as well as outside built-up areas; this is due to a lack of service roads, access roads, separate (pedestrian or cycle) lanes and at grade crossings.
- Houses, enterprises and markets frequently have direct access to through roads.

For each road category, examples of bad design were found:

- Destinations like bus stops and market stalls are frequently found alongside the carriageway of through and distributor roads outside built-up areas.
- No speed-reducing measures on through roads (lower speed limit at black spots on motorways).
- Grade crossings on through and distributor roads.
- None or too short accelerating lanes at junctions or service areas on through roads.
- None or very poor cycle lanes on distributor roads inside built-up areas.

Recommendations:

- Develop a philosophy for the design of the road network and develop general principles for each road category, including municipal roads.
- Do a safety audit of a sample of various roads, inside and outside built-up areas, in cities, villages and small settlements. (cf. Road Safety Audit of the Via Baltica by Viatek and Sweroad).
- Prepare multi-year programmes for improvements in road design at the national and local level.

3.3. Strategic "schedule" for action

The Lithuanian peoples' choice of strategies and instruments of control is closely related to their definition of the safety problem. An overall impression is that the main strategy for improving road safety is to improve the (inadequate) ability and will of road users. The organisation is task-based with certain co-ordinating functions for the road safety problem. The Lithuanian peoples' choice of strategies and control instruments is closely linked to their definition of the safety problem. The work now needs to be organised based on the Lithuanians' definition of the policy problem, the goals they wish to achieve and the combinations of control instruments that should be implemented.

An overall impression is that the main strategy for improving road safety is to improve the (inadequate) ability and will of road users. The most important road safety measures, apart from the initiatives to maintain vehicles in their original state, are driving lessons, education in schools, information campaigns and police supervision.

Measures relating to the road environment aim primarily at improving sign-posting and road surface characteristics and generally improving the development of the road system. Speed limits are generally perceived as positive and efforts are primarily being made to ensure greater adherence to current speed limits. However, there is a current debate on whether to reduce the speed limit from 60 km per hour in built-up areas to 50 km per hour.

The organisation is task-based; the National Road Administration is responsible for state roads, the motor vehicle inspectorate is responsible for driving licences and vehicle inspections, the police for supervision, etc. Lithuania has also taken initiatives to set up structures to co-ordinate its road safety work. For example, it has set up a road safety commission, whose tasks are defined in the aforementioned Road Safety Act. The commission has no fixed administrative resources and meets on average only two times per year. It is difficult to determine which organisation in society can be said to have a clearly defined responsibility for ensuring that road safety goals are met.

Goals are one way of expressing the desired level of ambition, what is possible to achieve based on the facts currently available. Goals are also a way of expressing basic values and approaches. The basic purpose of setting goals is for them to steer the work on road safety. Evidently, a process has begun in Lithuania with the aim of explicitly expressing the goals of road safety policy in the country. The process that has been initiated is primarily a scientifically calculated process (with a large degree of help from international experts) that is expected to lead to a quantified road safety objective based on the assessed effects that realistic and cost-effective road safety measures can lead to. In parallel with this, there also appears to be a political ambition to express a will, in line with other countries in Europe, to halve the number of road accident fatalities over a 10-year period.

Recommendations:

- To give expression to a fundamental value or vision that it is unacceptable that people are being killed and seriously injured in road traffic accidents.
- To focus on the number of fatalities and seriously injured instead of on accidents causing minor injuries.
- To devote special priority to vulnerable road users (pedestrians, cyclists and children) especially at night.
- To address the specific problem of car drivers under the influence of alcohol.
- To involve experts, public parties, private parties and politicians in a process to formulate goals jointly.

• To strive to develop credible quantified goals regarding road safety.

3.3.1. Strategies and organisation

The choice of strategies and organisation should depend on how the problems are formulated and on the goals that have been set. With the current definition of problems, the ambitious goals for road safety and the planned programme of measures, it will be very difficult to radically reduce the number of people killed on Lithuanian roads. Even if Lithuania is successful in reducing the risks, it will soon encounter the same dilemma as countries such as Sweden which have considerably improved road safety, i.e. the need to redesign the entire road transport system.

The major challenge should therefore be to implement long-term sustainable solutions to the safety problem from the outset. The Government and public players do not have the means to do this on their own. There is a substantial need for partnerships between the private and public sectors. Private parties that intend to develop land, transport companies, insurance companies, etc. must therefore become involved in the process in order to create a road transport system that is safe in the long term. It is in everyone's interests to help prevent fatalities from road accidents and therefore all parties can contribute with measures and even through financing. This is a long-term project that is not helped by overly ambitious quantified road safety goals in the short term. One must keep in mind that the effects are of a long-term nature. However, it is important to emphasise the leadership of the various collective players and their importance for a safe road transport system.

Recommendations:

- To delimit information campaigns on road safety mainly to fatalities and serious injuries. Road safety work should be less concerned with accidents that cause property damage.
- To work together with the health service to develop better ways of assessing the extent of injuries.
- To clarify the responsibilities of the designers of the system (i.e. the National Road Administration, the police, private parties, local authorities) for safety in the road transport system.
- To draw up tangible safety plans that are clearly co-ordinated with other investment plans relating to the road transport system. The plans should cover actions by the police with regard to road users, the support required in the form of information and how professional road users can assure the quality of their own transport.
- The Traffic Safety Administration must be established under the Government of Lithuania. The Traffic Safety Administration must give suggestions for every municipality and for the State roads to improve road safety measures.
- To develop the activities of the Road Safety Commission by appointing approximately five experts responsible for supporting the political leadership and following up operational work on road safety.
- To compare the results of road safety work with other countries, especially with what has been achieved within other types of transport and working life.

3.3.2. Permanent monitoring

Most knowledge and expertise of traffic safety is related to the construction and maintenance of state roads and is of a technical nature (road engineering). In universities there are experts in vehicle technology. We have seen relatively few examples of road safety research. Most of it was done by the TRRI, commissioned by the Ministry of Transport.

Reviewers found no special expertise in behavioural sciences relating to road safety. This can be disadvantageous for improvements in police enforcement, drivers' training, education and also road design, at the national as well as at the local level.

There was also insufficient information as to whether municipalities have sufficient access to the expertise in road engineering.

Recommendation:

• Seek access to knowledge and expertise in behavioural sciences relating to road safety, at all levels including university and municipalities.

3.3.3. Co-operation planning

The coordinating responsibility for road safety policy at the national level is laid down at the Ministry of Transport. It is clear that the organisation and means within the Ministry are much too weak for this task. In order to operate effectively, it would need a traffic safety department with a number of highly qualified experts (in the field of road engineering, vehicle technology, behavioural sciences, economics and public administration), sufficient administrative support and a substantial budget.

Most safety efforts of the Ministry of Transport are devoted to the (construction and maintenance of) state roads.

The Ministry is also responsible for vehicle admittance and inspection and for driver training and licensing. The organisation and financing of these state tasks seem sufficient.

Besides publicity campaigns, other programmes were not found for safety training and education (e.g. for young pedestrians at school or by their parents, for young cyclists or moped-riders at school or in special courses).

The enforcement of traffic rules is the responsibility of the police (notably of a special branch, the traffic police); the police are nationally organised (in ten counties and three to six regions per county) under the final responsibility of the Minister of Interior. The police operate all over the country, on all roads. Because of a lack of resources, enforcement is concentrated on the major roads inside and outside built-up areas.

The organisation and means for a basic level of police enforcement seem sufficient.

It is not known whether the municipal tasks in the field of road construction and maintenance are sufficiently organised and financed. The national police is responsible for the police enforcement on municipal roads.

Recommendations:

- Create a traffic safety department and supply it with all necessary means.
- Incorporate educational measures in the traffic safety plan.

3.3.4. Time schedule for action

Road Safety Action Plans

The existing draft of a "State Traffic Safety Programme 2002-2004" mentions clearly the existing overlap in institutional responsibilities for specific safety issues. This corresponds very well with our observations during the visit. It was repeatedly mentioned in the interviews that experts of different institutions hardly had the chance to co-operate, and that there was no common strategy behind dispersed safety activities.

The measures described in the action plan are vague in parts, whereas in other parts they seem to contain very comprehensive undertakings, without a clear indication of the means or the purposes, for example: the "... more effective work of Traffic Safety Commissions within the municipalities" or the "establishment of centralised database of accidents and infringements".

Recommendations:

- Set out, in parallel with the execution of the current action plan, a long-term safety programme (for example, 10 or 12 years).
- Set a clear numerical target (e.g. the 50% fatality reduction proposed at ECMT level).
- Set clear sub-targets for specific problem areas such as pedestrian fatalities.
- Break down the target and responsibilities for reaching the target to regions and municipalities.
- Set up a programme task force to deal with management and evaluation tasks, as well as with adjusting the strategy as soon as the common goal gets out of reach.
- Use the OECD publication "Road Safety What's the Vision?" and the ECMT reference paper "Past, Present and Future Road Safety Work in ECMT" as a basis⁴.

It is further suggested to introduce a regular monitoring procedure by the ECMT that would annually evaluate the results of the programme, the latest accident figures broken down in certain categories, and a specific set of safety performance indicators (see next paragraph).

Road Safety Performance Indicators

Apart from the assessment of speed levels on main roads, there is currently no systematic collection of safety performance indicators (SPI) and no systematic evaluation of the impacts of the various safety campaigns for instance. It is therefore proposed to systematically assess the following

key parameters on all types of roads by using a harmonised procedure together with an evaluation plan (see ETSC report on SPI, 2001)⁵:

- Speed limits, on all road types, inside and outside urban areas, for all motorised vehicle types.
- Levels of alcohol use derived from roadside surveys.
- Seatbelt and child restraint use on all seats, separated by driver, front seat passenger, and rear seat passengers.

It is further suggested to test the various safety campaigns with different target groups already in the design stage, in order to avoid inefficient investments.

The impact of police enforcement campaigns should be systematically evaluated as well.

NOTES

- 1. European Commission, What is Phare? http://europa.eu.int/comm/enlargement/pas/phare/index.htm. 2002.
- 2. Dunn, W.N., Public policy analysis: an introduction. 2nd ed. 1994, New Jersey: Prentice-Hall, Inc.
- 3. Swedish Ministry of Transport and Communications, En Route to a Society with Safe Road Traffic. 1997.
- 4. "Road Safety What's the Vision?", [OECD, 2002]. "Past, Present and Future Road Safety Work in ECMT", [CEMT/CM(2002)14/FINAL].
- 5. Safety Performance Indicators, ETSC report, 2001.

SYNTHESIS OF RECOMMENDATIONS

Low Lithuanian safety standards do not appear to be a problem of lack of safety experts or knowledge, but rather of structural deficiencies in responsibilities and co-operation, in land use planning and of a lack of safety awareness amongst decision-makers and the public.

General context

- Improve accident statistics on all parts of the road network, including municipal roads.
- Collect information on traffic volumes on all parts of the road network.
- Give priority to the main problem areas which seem to be: vulnerable road users (pedestrians, cyclists), especially at night; car drivers under the influence of alcohol; municipal roads.
- Seek access to the knowledge and expertise in behavioural sciences in addition to technical engineering of roads and vehicles.
- Favour the development of independent non-governmental Safety Organisations.
- Parliament and individual citizens must become involved in the policy process to a far greater extent than is the case today.
- A special parliamentary Standing Committee should be set up with the responsibility of discussing and stipulating goals and objectives for work on road safety.
- The Government should take initiatives to organise interest groups for unprotected road users. This could possibly be co-ordinated and financed jointly with the insurance company responsible for administering the new traffic insurance in Lithuania.
- The health sector should become involved in the work on road safety.
- Private firms should become involved in road safety work.

Ministerial level

- The Traffic Safety Administration must be established under the Government of Lithuania. The Traffic Safety Administration must give suggestions for every municipality and for the State roads to improve road safety measures.
- One ministry has to be responsible for the drivers training process.

- The vehicle technical inspection control system has to be organised more effectively.
- The Head of the Traffic Safety Commission must have more influence (power) over all institutions in charge of traffic safety activities. It could be suggested that, whilst the Minister of Transport remains the head of the TSC, the Prime Minister is given a role to ensure coherence and co-ordination of road safety policy between all Ministries involved.
- A group of experts should be set up in the Traffic Safety Commission. The purpose of this group would be to create and evaluate suggestions on improving traffic safety conditions.
- Since the traffic safety situation in Lithuania is insufficient and in order for all institutions to have a more effective activity, decision-makers in the field of road safety should meet more frequently than in 2002.
- The Ministry of Interior should have direct responsibility for the control of traffic users.

Roads

- Clarify the responsibilities of the designers of the system (i.e. the National Road Administration, the police, private parties, local authorities) for safety in the road transport system.
- Develop a philosophy for the design of the road network and develop general principles for each road category, including municipal roads.
- Do a safety audit of a sample of various roads, inside and outside built-up areas, in cities, villages and small settlements.
- Prepare multi-year programmes for improvements in road design at the national and local level.
- Implement speed limitation according to the hierarchy of the road network and the rules prevailing at international level, on all road types, inside and outside urban areas, for all motorised vehicle types.

Vehicles

- Make it less profitable to import and/or buy repaired used cars and relatively old used cars. The age of imported vehicles should therefore be limited and they should be certified.
- Extend the existing Lithuanian seatbelt use requirement to rear seats.
- Consider the introduction of DRL in Lithuania.

Education and behaviour

• More information should be collected on speeding (also on secondary roads outside urban areas and on arteries inside urban areas) and on drinking and driving (time and location).

- Speeding and drunk driving should be given high priority for police enforcement.
- Establish drivers' training schools where the drivers improve their driving skills and limit their number, so as to control school activities effectively.
- Issue temporary drivers' licenses for drivers who do not have two years of practice. For drivers who do not have two years of practice examine the opportunity to check their knowledge of traffic rules and introduce a "penalty point" system.
- Drivers who infringe traffic rules (driving through pedestrian crossings without stopping as required by rules), should still be seriously punished.
- More effective and efficient enforcement strategies can be learned from international experiences.

Communication

- Give expression to a fundamental value or vision that it is unacceptable that people are being killed and seriously injured in road traffic accidents.
- Focus on the number of fatalities and seriously injured instead of on accidents causing minor injuries.
- Devote special priority to unprotected road users (pedestrians, cyclists and children), especially at night.
- Involve experts, public parties, private parties and politicians in a process to formulate credible quantified goals jointly and communicate on them consequently.
- Organize special campaigns to improve driver behaviour. Education of society on pedestrians' problems is urgently needed.
- Need for more action on the organisation of traffic safety communication campaigns, at low costs (e.g. distribution of reflectors).
- Formulate the problem to a greater extent, in terms of road safety being mainly a system problem, where the road traffic environment, vehicles and speed levels do not coincide with each other.
- Concentrate efforts directed at road users on enforcing speed restrictions, on the use of protective equipment and on not driving while intoxicated or otherwise in a temporarily unfit state to drive.

Resources

• Ensure that the money collected as penalties for infringements is at least partially used for the implementation of the road safety policy.

• Increase the role of the insurance sector, with compulsory feedback in the financing of road safety policies.

A vision to be monitored

- Set out, in parallel with the execution of the current action plan, a long term safety programme (for example, 10 or 12 years).
- Set a clear numerical target (e.g. the 50% fatality reduction proposed at ECMT level).
- Set clear sub-targets for specific problem areas such as pedestrian fatalities or accidents at night.
- Draw up these safety plans in such a way that they are clearly co-ordinated with other investment plans relating to the road transport system. The plans should cover actions by the police with regard to road users, the support required in the form of information and how professional road users can assure the quality of their own transport.
- Break down the target and responsibilities for reaching the target in regions and municipalities.
- Set up a programme task force to deal with management and evaluation tasks, as well as with adjusting the strategy as soon as the common goal gets out of reach.
- Compare the results of road safety work with other countries, but especially with what has been achieved in the field of other types of transport and working life.
- Take for example the OECD publication "Road Safety What's the Vision?" and the ECMT reference paper "Past, Present and Future Road Safety Work in ECMT" as a basis for long-term planning of the National Road Safety Policy.

Annex 1

A BRIEF DESCRIPTION OF VISION ZERO

According to previously-adopted road safety goals, the number of fatalities and injuries shall continually decrease. Drawn to its logical conclusion, this ultimately means that no one will be killed or injured in road traffic. Vision Zero expresses this in the following way: in the long run, no one will be killed or seriously injured within the road transport system. In order to achieve this vision, the responsibility for road traffic safety must be shared according to the following principles:

- 1. The designers of the system are always ultimately responsible for the design, operations and use of the road transport system and are thereby responsible for the level of safety within the entire system.
- 2. Road users are responsible for following the rules set by the system designers when using the road transport system.
- 3. If road users fail to obey these rules due to a lack of knowledge, acceptance or ability, or if injuries do occur, the system designers are required to take the necessary further steps to counteract people being killed and seriously injured.

With this Vision Zero approach, the concern for human life and health is an absolutely mandatory element in the design and functioning of the road transport system. This means that a road traffic safety mode of thinking must be clearly integrated into all the processes that affect safety within the road transport system. The level of violence that the human body can tolerate without being killed or seriously injured shall be the basic parameter in the design of the road transport system.

The long-term work on road traffic safety should be based to a much greater extent on human limitations, on the human need that the design of the system takes human error into consideration and on the human desire and ability to place demands on the design of the road transport system. With this as a basis, the operational strategy of Vision Zero has been formulated as a description of the interaction required between the different parties in society to achieve a society with safe road traffic. The success of this work depends on the citizens placing demands on the design and functioning of the road transport system.

Additionally, a strategy has been formulated for the measures that should be taken to attain safe road traffic. According to this strategy of action, speed is the most important regulating factor for safe road traffic. The speed should be determined by the technical standard of both roads and vehicles so as not to exceed the level of violence that the human body can tolerate. In the past, road traffic safety measures have been aimed primarily at accident prevention, largely due to the fact that the focus of the problem has always been the individual road user and the accident itself. In essence, Vision Zero means that accidents *per se* can be acceptable as long as they do not cause serious health impairments. This creates an increased demand for injury prevention measures, primarily in the design of vehicles and the road environment. The type of measures or combination of such to be used varies from case to

case. However, it is obvious that the focus will be shifted towards injury prevention measures that are largely aimed at improving the design of the road transport system rather than enhancing the ability of the individual road user¹.

NOTE

1. Swedish Ministry of Transport and Communications, En Route to a Society with Safe Road Traffic, 1997.

Annex 2

LIST OF PERSONS VISITED BY EXPERTS IN CHRONOLOGICAL ORDER

- Mr Vidmantas PUMPUTIS Head of the Traffic Safety Unit Ministry of Transport and Communications Gedimino av 17 LT-2679 VILNIUS
- Mr Gintautas SLEDERIS Traffic Safety Department Ministry of Transport and Communications Gedimino av 17 LT-2679 VILNIUS
- Mr ZADOJENKO Foreign Relations Department Ministry of Transport and Communications Gedimino av 17 LT-2679 VILNIUS
- Mr LIPSEVICIUS Road Transport Inspectorate Ministry of Transport and Communications Gedimino av 17 LT-2679 VILNIUS
- Prof. Alvydas PIKUNAS Head of the Automobile Engineering Department Vilnius Gedimino Technical University J. Basanaviciaus Str. 28 LT-2009 VILNIUS
- Mr Algimantas KRIZINAUSKAS Motor Third Party Liability Insurance Bureau of the Republic of Lithuania Algirdo g.38 LT-2006 VILNIUS

- Mr Henrikas JURKUVENAS Head of Road maintenance Division Lithuanian Road Administration 36/2 J. Basanaviciaus Str. LT-2009 VILNIUS
- Mr Pranas JUODIS Perspective Planning Division Lithuanian Road Administration 36/2 J. Basanaviciaus Str. LT-2009 VILNIUS
- Mr Renius ZEROMSKAS President Association of Companies for Road Vehicle State Inspection Lentvario g.7 LT-2028 VILNIUS
- Mr Vytautas SENDZIKAS Vice-President Association of Companies for Road Vehicle State Inspection Lentvario g.7 LT-2028 VILNIUS
- Mr Povilas IMBRASAS General Director Technisches Prüfzentrum der KFZ Lentvario str.7a LT-2028 VILNIUS
- Mr BAUBLYS Deputy Director of Kaunas Region Road Directorate
- Dr Mindaugas DIMAITIS Head of Road Division Transport and Road Research Institute I. Kanto 25, P.O. Box 2082 LT-3000 KAUNAS
- Mr Anders GUJIS Transport and Road Research Institute I. Kanto 25, P.O. Box 2082 LT-3000 KAUNAS
- Mr Jonas SAPRAGONAS Professor Transport Engineering Department Kaunas University of Technology Kestucio str.27 LT-3004 KAUNAS

- Mr Kazimieras EIROSIUS General Director Automagistrale Kauno g. 14 LT-4200 VIEVIS
- Mr Vladislavas MOLIS Director Automagistrale Kauno g. 14 LT-4200 VIEVIS
- Mr Virginijus MARTISAUSKAS Member of Parliament Journalist Gedemino pr.53 LT-2002 VILNIUS
- Mr Zigmantas BALCYTIS Minister of Transport and Communications Ministry of Transport and Communications Gedimino av 17 LT-2679 VILNIUS
- Mr Alminas MACIULIS State Secretary Ministry of Transport and Communications European Integration and International Relations Department Gedimino av 17 LT-2679 VILNIUS
- Ms Rimante BRIEDYTE Director of International and European Affairs Department Ministry of Transport and Communications Gedimino av 17 LT-2679 VILNIUS
- Mr J. BLAZEVICIUS Road traffic Police Giraites g.3 LT-2009 VILNIUS
- Mr Darius SADAUNYKAS Head of Drivers Training Department State Road Transport inspectorate Ministry of Transport and Communications Svitrigailos 42/31 LT-2600 VILNIUS

[©] ECMT, 2004

• Mr KAMAITIS Deputy Head of Department Department of Traffic City of Vilnius

Annex 3

ACRONYMS AND BODIES

OECD	Organisation for Economic Co-operation and Development – established on 30 September 1961
ECMT	European Conference of Ministers of Transport – established on 17 October 1953
CIS	Community of Independent States
EU	European Union
TINA	Transport Infrastructure Needs Assessment
PHARE	Poland Hungary Aid for Reconstruction of Economy (Later enlarged to include other Central European acceding EU countries)
TEN-Tr	Trans European Networks – Transport
SWOV	Dutch Institute for Road Safety Research (Leidenscham-Netherlands)
TRRI	Transport and Road Research Institute (Kaunas-Lithuania)
LRA	Lithuanian Road Administration
LTS	Litas – Lithuanian national currency
BAC	Blood Alcohol Capacity
TSC	Traffic Safety Commission
DTL	Daytime Running Lights

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16 PRINTED IN FRANCE (75 2004 07 1 P) ISBN 92-821-2319-7 - Dépôt légal nº 8385