United Nations Regional Commissions

Improving Global Road Safety

Setting Regional and National Road Traffic Casualty Reduction Targets

Report and Recommendations

UNITED NATIONS

United Nations Regional Commissions

Report of the implementation of the project

"Improving Global Road Safety: Setting Regional and National Road Traffic Casualty Reduction Targets"

Funded by the

United Nations Development Account

UNITED NATIONS

New York and Geneva, 2010

NOTE

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontier or boundaries.

ACKNOWLEDGEMENTS

This report on the implementation of the project "Improving Global Road Safety: setting regional and national road traffic reduction targets" funded by the United Nations Development Account, was commissioned by the United Nations Economic Commission for Europe, with kind additional funding by the Global Transport Knowledge Partnership (gTKP), from Mrs. Kate McMahon, Road Safety Consultant. It was produced in cooperation with the secretariats of all the United Nations regional commissions.

UNITED NATIONS NATIONS UNIES

THE SECRETARY-GENERAL

--

FOREWORD TO UNDA PUBLICATION ON ROAD SAFETY

In a world where more than 1 million people die and more than 50 million are injured each year in road traffic accidents, this publication provides an essential service.

More than half of all road traffic victims are of working age. So in addition to causing untold human suffering, road traffic deaths and injuries worldwide impose an annual financial cost running into the hundreds of billions of dollars. In low- and middle-income countries, this exceeds the development aid they receive.

Road safety is therefore an important global social, economic, development and public health concern. And because the number of cars on the roads is increasing in many countries, the problem could quickly become worse. There is a pressing need for greater efforts to reduce these unnecessary deaths and injuries.

Many traffic accidents are caused by factors that are known and can be prevented. These include driving at high speeds or under the influence of alcohol; failure to use seat belts, child restraints and helmets; a lack of respect for vulnerable road users, including pedestrians and cyclists; and unsafe road infrastructure. We know how to deal with these factors. But we must bridge the gap between knowing and doing.

Studies show that countries with road traffic casualty targets have a better road safety record and fewer fatalities than those without. Fixing goals helps to motivate people to take action, and to win political and institutional support.

A new project by the United Nations regional commissions has examined how setting targets can help countries implement road safety policies effectively, over a period of two years. This publication is the result of that project. It provides guidelines and recommendations for setting and reaching targets, appropriate to each country and region.

I commend this publication to all those concerned about deaths and injuries on the road. I urge United Nations Member States and global road safety partners to foster cooperation under United Nations auspices, to implement the strategies that we know will raise awareness, improve safety and, ultimately, save lives.

Ki Moon Ban

BAN Ki-moon

CONTENTS

SECTION 1 INTRODUCTION

1.1 Introduction

Road traffic injuries are a major social, economic, development and public health problem. Road crashes claim the lives of more than 1.3 million people and at least 50 million people are injured on the roads every year. Developing countries and economies in transition bear the majority of this burden so that road traffic crashes are a development issue that disproportionately affects the poor in low and middle-income countries. For instance when a family's breadwinner is killed or disabled in a road crash the whole family may be impoverished. Road crashes typically account for 1 to 3 per cent of a country's GDP.

The need for improving road safety has been acknowledged by the United Nations system and its member States for almost 60 years and extensive road safety work has been carried out by various global and regional organizations including the United Nations regional commissions, the World Health Organization (WHO) and the World Bank.

The United Nations Economic Commission for Europe (UNECE) pioneered road safety activities in the United Nations system with the establishment of an Ad Hoc Working Group on the prevention of road accidents in March 1950 followed by the Group of Experts on Road Traffic Safety (GE.20).

In 1988 the Working Party on Road Traffic Safety (WP.1), an intergovernmental body in which related NGOs play an active role, was established. Its primary function is to serve as guardian of the United Nations legal instruments aimed at harmonizing traffic regulations. In this context the commitment of UNECE to global action through elaborating and amending safety-related technical regulations and recommendations is of utmost importance. The Conventions on Road Traffic and on Roads Signs and Signals of 1968, and other related legal instruments addressing the main factors of road crashes i.e. the road user behaviour, the vehicle and the infrastructure, are real contributors to improved road safety and promotion of global actions in a systemic and proactive way.

The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) has also been working on road safety since 1951, while the other regional commissions have included this area of work more recently.

1.2 Background

The International Red Cross World Disasters report in 1998 warned that "road crashes are a worsening global disaster destroying lives and livelihoods, hampering development and leaving millions in greater vulnerability". Since then, the growing burden of road crashes has increasingly been recognised, and in 2004 WHO and the World Bank published the first World Report on Road Injury Prevention (WHO 2004).

The need for action to improve global road safety was recognised in the United Nations General Assembly Resolutions 58/289 of April 2004, 60/5 of October 2005, and 62/244 of March 2008. In particular, Resolution 60/5 strengthens the mandate for United Nations regional commissions and agencies to take forward action on road safety, and 62/244 invites "all member States to participate in the projects to be implemented by the United Nations regional commissions to assist low-and middle-income countries in setting their own national road traffic casualty reduction targets, as well as regional targets."

The United Nations regional commissions are advocating for increased political commitment to road safety; through a variety of initiatives and projects and in collaboration with major global road safety partners, the regional commissions are contributing to improving road safety in their respective regions.

The Intergovernmental Agreement on the Asian Highway Network developed under UNESCAP auspices, came into force in 2005 and is the first United Nations legal instrument in Asia that includes a road safety provision. UNESCAP organized a ministerial conference on transport in Busan, Republic of Korea, in November 2006, in which Ministers adopted a Declaration on Improving Road Safety in Asia and the Pacific; based on that, UNESCAP member countries have developed a number of goals, targets and indicators.

The African road safety conference, jointly organized by the United Nations Economic Commission for Africa (UNECA) and other partners in Accra, Ghana, in February 2007 wherein participating ministers adopted the Accra Declaration committing themselves to working together to stop the growing epidemic of death and injuries on African roads, is another example of concrete contribution.

A number of regional road safety meetings have taken place in the Eastern Mediterranean region organized by the United Nations Economic and Social Commission for Western Asia (UNESCWA).

The United Nations Economic Commission for Latin America and the Caribbean (UNECLAC) and other partners sponsored the first Latin America and Caribbean road safety stakeholders' forum in San José, in September 2006. Participants of this Latin America conference planned a number of actions for road safety in the Americas and adopted the Declaration of San José, which includes a call for the creation of a regional committee to help the countries of the collaborate on road safety.

The project "Improving global road safety: setting regional and national road traffic casualty reduction targets", to which the General Assembly resolution 62/244 refers, is funded by the United Nations Development Account (UNDA) for the period 2008-2009. It recognizes the value of targets in improving road safety and was set up to assist governments in low and middle income countries to develop regional and national road safety targets and to exchange experiences on good practices for achieving these targets by 2015. Activities under the project include regional meetings, advisory services, case studies, report on setting and achieving road safety targets, and inputs for the Global Ministerial Conference on Road Safety that took place in Moscow on 19-20 November 2009.

In the framework of the project, UNECE organized a seminar for countries from the Commonwealth of Independent States (CIS) in Minsk, Belarus, in May 2009. A road safety conference for South Eastern European countries was organized in Halkida, Greece, in June 2009. On that occasion UNECE, the European Basketball Federation (FIBA Europe), the Hellenic Basketball Federation and players from the national basketball team of Greece, signed a declaration requesting "Team Work and Fair Play on the Basketball Court and on our Roads". A road safety seminar-cum-study tour for experts from UNECE low and middle income countries was organized in Sweden, in November 2009, in cooperation with the Swedish Road Administration, followed by a road safety national seminar in Kyrgyzstan.

Such conferences and meetings were organized under the project by all regional commissions in various parts of the world in cooperation with other global road safety key stakeholders. Expert group meetings on improving road safety were organized by UNESCAP in Bangkok, Thailand, in October 2008 and September 2009. A workshop on setting regional and national road traffic casualty reduction targets in the UNESCWA

region was held in Abu Dhabi, UAE, in June 2009. A conference and workshop on "Make roads safe in Africa" were organized in Dar Es Salaam, Tanzania, in July 2009, by UNECA. Several workshops were organized under the project by UNECLAC in Buenos Aires, Argentina, in November 2008, in Panama City, in May 2009 and in Georgetown, Guyana, in August 2009.

This report describes the objectives of the project, its regional activities, and the key issues for the successful setting and achievement of road safety targets. It has been commissioned by the United Nations Economic Commission for Europe; additional funding was kindly provided by the Global Transport Knowledge Partnership (gTKP).

Promotion of road safety targets was the chosen topic for the UNDA project in the light of the successful results achieved by countries that have used targets as part of an effective road safety strategy. There is growing recognition globally of the potential for targets at regional or national level to give impetus to the greatly increased level of road safety activity that is needed over the next decade if the current worsening trends in road crash casualties are to be arrested and reversed.

The following section discusses how targets can contribute to making the world's roads safer in the decade of action for global road safety that was discussed at the First Global Ministerial Conference on Road Safety in Moscow in November 2009. A Summary of this Report was communicated to the Conference.

1.3 Objectives and rationale for the project

Road safety performance is improved through setting ambitious casualty reduction targets and adopting a safe system approach.

1.3.1 The importance of a targeted approach

Targeted road safety programmes have increasingly been the approach taken in many OECD countries since the late 1980s. In 1994, the OECD report *Targeted road safety programmes* (OECD, 1994) concluded that:

- The existence of targets and targeted road safety programmes increases the likelihood that safety policies will be implemented.
- Institutions in those countries with targeted road safety programmes change their behaviour once such a programme is introduced. Targeted road safety programmes can result in better integration of existing institutional efforts, generally require greater co-ordination and often produce a more focused allocation of resources.
- Road safety programmes with quantified targets have a wider scope than those without such targets, and target setting leads to better and more realistic programmes.

A Norwegian research report (Elvik 1993), examined road safety performance in Norwegian counties and found that counties that set quantified road safety targets were more successful in improving road safety than counties that did not. Target setting was further reviewed by the OECD in the report *Safety on the roads: What's the Vision* (OECD 2002) which concluded that targets have proven to be a valuable tool in the development of effective road safety programmes. There are several reasons why road safety targets deliver road safety benefits:

- Setting targets communicates the importance of road safety.
- Targets motivate stakeholders and increase accountability for achieving results.
- Targets convey the message that the Government is serious about reducing road casualties.

- Sub-national targets widen the sense of ownership by creating greater accountability, establishing more partnerships, and generating more action.
- Targets raise media and public awareness and motivate politicians to support policy changes and to provide resources.

By 2004, many countries had set national targets, and in addition regional targets had been set within the European Conference of Ministers of Transport (ECMT) for its member countries, for a 50% reduction in fatalities for 2000-2012, and for the European Union (EU) countries, for a 50% reduction for 2001-2010. These were ambitious targets and performance towards achieving them has been variable. A review of the safety performance of 14 OECD countries (Wong et al 2006) showed that countries with targets performed better than those without over the period 1981-1999, and that overall, countries with targets had 17% lower fatalities than countries without. The 2004 World Report on Road Traffic Injury Prevention (WHO 2004 op cit) recommended that national road safety strategies should include ambitious but achievable performance targets, supported by national plans that set out specific interventions to achieve them. However, setting targets does not guarantee their achievement, and few of the OECD countries are on track to achieve the 2012 target on current performance.

In recognition of the need to review road safety performance and consider how challenging and ambitious targets can be set and achieved, the Joint OECD/ECMT Transport Research Centre set up an expert group to review the state of the art in improving road safety performance. The report *Towards Zero: ambitious road safety targets and the safe system approach* (OECD 2008) describes the necessary fundamental shift in road safety thinking to achieve long term very ambitious targets. The findings of the *Towards Zero* report provide the framework for the recommendations of the present report.

Recommendations of the "Towards Zero" Report

1. Adopt a highly ambitious vision for road safety
2. Set interim targets to move systematically towards the vision
3. Develop a safe system approach, essential for achieving ambitious targets
4. Exploit proven interventions for early gains
5. Conduct sufficient data collection and analysis to understand crash risks and current performance
6. Strengthen the road safety management system
7. Accelerate knowledge transfer
8. Invest in road safety
9. Foster commitment at the highest levels of government

1.3.2 Types of targets

Road safety targets may be aspirational or empirically based. Aspirational targets are used in many countries and typically aspire to ambitious reductions in road deaths. They have the advantage of ambition and may involve a change in mind set from a conservative approach to casualty reduction. However, they are not linked to specific interventions or road safety programmes and may not be effective in creating the detailed dialogue between Government, stakeholders and the public that is needed to secure sustained and successful action. If such targets are not seen as feasible and achievable they may undermine the credibility of target setting and fail to lead to improvements in road safety management and programmes. Aspirational targets are best used as a means of establishing a long term vision for road safety improvements, such as the achievement of zero death and serious injury, in conjunction with interim targets for quantified improvements over specific time periods.

Road safety visions indicate a country's underlying community values in relation to the degree of acceptability of road trauma as a consequence of mobility. Some countries have adopted the value that it is unacceptable for anyone to be killed or seriously injured as a result of road crashes. Sweden's Vision Zero, for example, states that "Nobody is to be killed or seriously injured as a result of traffic accidents and that the design and functioning of the road transport system shall be adapted to the requirements resulting from this ruling". A similar approach is taken in the Netherlands with a vision based on sustainable safety which focuses on prevention of collisions and making roads more forgiving of human error by road users. This Safe System approach will be described in a later section.

Other countries have adopted visions such as Canada's Road Safety Vision 2010 "to have the safest roads in the world", a vision that is also being proposed in Great Britain for their post-2010 strategy.

Interim targets in support of road safety visions ideally should be empirically based. This means that they should reflect the estimated impact of interventions that are set out in a road safety strategy. Empirically derived targets typically are based on analysis of previous empirical evidence on the effectiveness of interventions, combined with analysis of past and future trends in casualties. In this way targets can be linked to a strategy for delivery and a road safety management plan that provides clear accountability and allocation of responsibility between Government and key agencies. Collection and analysis of sound data is integral to the process of setting empirically based targets and for monitoring the results of programmes in order to ensure that the necessary progress is being made to reach the target.

Targets can also be set at different levels: final outcome, intermediate outcome, or output targets. Final outcome targets usually refer to the total annual number of road casualties, either for a specific year or as part of a long-term vision such as zero deaths. Time-based targets are often set for a 10 year period. Intermediate outcome targets, or safety performance indicators, set goals for specific elements in a road safety strategy. They may be linked to the reduction of key risk factors such as speed, drink driving, seat belt and helmet use, or to vehicle and infrastructure standards. They may be geographically specific or they may relate to particular road user groups. Output targets are physical deliverables such as the number of speed enforcement operations and are linked to the means to achieve a desired outcome.

Final outcome targets are most usually set, and in many countries there is greater availability of data for final outcomes than for intermediate outcomes or outputs. However, such disaggregated data are important for increased understanding of crash risk and the priorities for action in a country. They are essential for designing appropriately tailored strategies, for efficiently deploying interventions in areas of highest risk and where the greatest potential improvements can be obtained, and for monitoring effectiveness (Wegman et al 2006).

Targets may also be set at national or regional level. Regional targets can provide useful impetus to national target setting as well as having a unifying function for the regional performance. It is arguable that without supporting and consistent national targets the likelihood of regional targets being achieved is limited as road safety is a national responsibility. A major benefit of regional targets is to encourage national governments to prioritize road safety and to provide a benchmark for the level of progress that is necessary and desirable. They are of particular value for low and middle-income countries as a means to promote road safety. Ministerial endorsement of a regional road safety target can be the necessary first step to developing a road safety programme in a country. Regular monitoring of progress within a region is a valuable means of raising the profile of road safety and highlighting where more action is needed. Comparative

data on progress can be a useful spur as no country wants to be shown to be performing comparatively badly.

There is no set rule as to which should come first, regional or national targets, and it is likely that some countries will set targets in advance of regional targets, especially in high-income countries with a tradition of road safety programmes. However, agreement to regional targets may act to raise ambition and to increase the focus on delivery.

1.3.3 Examples of national road safety targets

Sweden had a target of 50% reduction in fatalities between 1996 and 2007, together with several sub-targets that related to reductions in specific crash types such as head-on collisions and single vehicle accidents, reducing travel speeds and increasing seat belt use. However, by 2007 the decline in fatal casualties at 20% fell far short of the target and a new road safety strategy is being developed with targets for 2020 aligned with the long-term Vision Zero approach.

Canada has adopted both a national target of 30% reduction in the number of fatalities and serious injuries in 2008-2010 compared with 1996-2001, and detailed sub-targets that include specific crash types and road user groups. The sub-targets were based mainly on past achievements and on estimated future achievement.

In Great Britain, a national target for 2010 was set in 2000 for a 40% reduction in all fatal and serious injuries, and 50% for children, based on the average during 1994-1998. This target was empirically based using a "bottom-up" analytical approach. Trends in collisions and in collision rates per km of travel by road user group were examined, and the effectiveness of potential measures was estimated taking into account different traffic growth and policy implementation scenarios. Unique to Great Britain was a sub-target to reduce casualties by a greater extent in areas of social deprivation, thus integrating road safety policy with the government social policy priority of improving welfare in these areas. By 2008, the number of deaths and serious injuries had fallen by 40%, achieving the 2010 target, and the 50% child target was more than met with a fall of 59% in deaths and serious injuries. However, the decline in deaths at 29% lagged behind the fall in serious injuries. New targets for 2020 for deaths and serious injuries separately are in the process of being developed and consulted upon.

1.3.4 Ambitious long-term targets and the Safe System approach

Target setting is normally for a period of around ten years, but several countries have now taken a new approach for strategy formulation and planning that focuses on a long-term ambition in addition to a numerical target. This is a radical shift in the road safety sector that reflects the need for a raised level of ambition to reach safety standards that are common in other transport sectors such as aviation. Whereas such visions were previously seen as unachievable, it is now becoming politically unacceptable in a growing number of countries to endorse any significant number of deaths and serious injuries on the road network. Elimination of death and serious injury has thus become the appropriate level of ambition in the long term.

This shift in ambition requires a major policy shift and a commitment to innovation to achieve the desired result, rather than relying on current and projected performance expectations alone. This implies combining aspirational and evidence based targets, with the latter as milestones on the path to the ultimate goal, and with interventions shaped by the level of ambition. The major policy shift required is characterised the Safe System approach.

The Safe System approach is described in detail in the *Towards Zero* report. The underlying rationale is that road users should never be subject to impact energy levels

that are sufficient to cause death or serious injury. This leads to the need for innovative thinking about interventions, including developing forgiving infrastructure, improving vehicle safety for those both inside and outside the vehicle, and reducing traffic speed to better manage crash energy and reduce injury risk, especially for vulnerable road users. It requires a clear understanding of crash types and associated risks, and the existence of adequate legislation and enforcement to achieve high levels of road user compliance. There must be adequate controls over access to the road system for drivers through training and testing regimes, and alignment of road safety with other societal goals. A focus is required on interactions between interventions to lessen crash risk and severity, managing the interfaces between road and vehicle, vehicle and driver and non-motorised road users, and the infrastructure. An essential element is adequate institutional management capacity to prioritise road safety in areas beyond those where action is traditionally taken.

1.3.5 Objectives and methodology of the UNDA Targets project

The project *Improving Global Road Safety: setting regional and national road traffic casualty reduction targets* has been initiated as a continuation of efforts to implement the recommendations made in the United Nations General Assembly Resolution 60/5, that was reaffirmed in Resolution 62/244 stating the importance of addressing global road safety issues and the need for further strengthening of international cooperation and knowledge sharing taking into account the needs of developing countries. Road safety programmes that are focused on specific evidence based targets have proved a successful means of raising road safety performance in several developed countries. For this reason, the project is focused on assisting low and middle income countries to develop regional and national road traffic casualty reduction targets and to provide them with examples of good road safety practice that could help them to achieve the targets selected by 2015.

In order to be successful in delivering real improvements in the level of road safety, targets are not an end in themselves. They need to be developed within the context of improved road safety management and backed up by a strategy for their achievement. The focus of the project is a series of road safety seminars in each of the United Nations Regional Commission areas that will provide information on target setting and on good practice interventions that have been successfully employed in countries with good road safety records. These seminars are the starting point for a development process that will be needed for low and middle-income countries to make progress in reducing road traffic casualties. The seminars aim to bring together countries with similar problems together with a wide range of road safety experts from countries where targets are being or have been successfully used to support road safety policies and/or programmes. Such knowledge sharing is a vital component of action necessary to improve global road safety.

Safe System Strategies

Towards Zero sets out the key elements of strategies to implement a Safe Systems approach:

- They aim to eliminate all fatalities and serious trauma arising from road crashes in the long term.
- They recognise that prevention efforts notwithstanding, road users will remain fallible and crashes will occur.
- They stress that those involved in the design of the system need to accept responsibility for ensuring that no deaths or serious injuries occur as a result of using the road transport system, and that those who use the system need to accept responsibility for complying with the rules and constraints of the system. Establishment or strengthening of current arrangements for independent monitoring of system designer performance would support safe system performance.
- They aim to develop a transport system better able to accommodate human error by reducing crash energy through managing the interaction of all components of the transport system, but particularly through improved management of the road infrastructure, travel speed and vehicles.
- They seek close to 100% compliance with current rules, only possible through the implementation of innovative solutions including new technologies.
- They rely upon comprehensive management structures incorporating all key government agencies and other organisations which have a role in determining the safe functioning of the transport system.
- They align safety management decisions with broader transport and planning decisions that meet wider economic goals and human and environmental health goals.
- They reorient their interventions to focus on the inherent safety quality of the road infrastructure, and align travel speed to the safety thresholds implied by that infrastructure, whether it is an urban access street, or a major highway.
- They place greater priority on the use of technology to improve the safety of the road transport system, whether addressing drink driving through ignition interlocks, or improving the inherent safety of vehicles, and seek to develop technological links between the vehicle and the road infrastructure.
- They address road safety at an organisational or corporate level, whether through improvements in the standards and guidelines used by road authorities, or through encouraging mechanisms such as the development of an ISO standard that helps create a commercial demand, and a commercial return, for safe products and services.

The target setting seminars are designed to cover:

- Target setting, including collection of crash data.
- The different types of road safety targets.
- Ways to improve data collection.
- Good road safety practice that has been proven to be effective, focusing on the key areas of speeding, drink-driving, rates of use of seat belts and helmets, and infrastructure improvements.
- The importance of political commitment and good road safety management.
- Communication of risks and the need for targets and road safety measures.

Road safety targets already exist at regional level:

- European Union (EU) and European Conference of Ministers of Transport (ECMT) targets to reduce fatalities by 50% by 2010 and 2012 respectively.
- UNESCAP Ministers agreed to cut deaths by 600,000 by 2015.
- UNECA Ministers of Health and Transport agreed to reduce road fatalities by 50% by 2015.

These regional targets are a valuable starting point for countries to set their own targets, although they are largely aspirational rather than empirical and evidence based. The present project aims to assist countries to move towards national targets that are evidence based and linked to a road safety strategy. It is also expected that the project can be used to raise stakeholder and public awareness of the need to support the development and delivery of road safety targets and road safety interventions and to ensure follow-up and sustainability. Project findings should become a set of best practices to be used by all UN member States needing to improve road safety.

SECTION 2 IMPLEMENTATION OF THE PROJECT IN THE UNECE REGION

The UNECE region includes a diverse set of countries, and implementation of the UNDA project has concentrated on the non-EU member countries including Central Asian Republics. The participants at the seminars in these countries recognized that road traffic casualties are still dramatically affecting their countries and that road safety is not just a transport issue, but it is also a health, social, financial and economic hazard, negatively impacting on their development.

2.1 Road safety situation in the UNECE region

The UNECE region covers more than 47 million square kilometres and has 56 member States. These include the countries of Europe, but also countries in North America (Canada and United States), Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan) and Western Asia (Israel). The region is home to 20% of the world population. It includes some of the world's richest countries, as well as countries with a relatively low level of development. GNI per capita ranges from $460 in Turkmenistan to $84,890 in Luxembourg[1] (WHO 2009). With the exception of Andorra, Denmark, Liechtenstein, Luxembourg and Monaco, data for UNECE countries for 2006 or 2007 are available from the WHO Global Status Report on Road Safety, and this is the primary data source used in this section. However, for EU countries, data have been taken from Eurostat in order to ensure that for all countries a consistent definition of death within 30 days is used. The UNECE Transport Division database has also been used for earlier years for non-EU countries. Table 1 below shows the number of fatalities, the fatality rate per 100,000 population for either 2006 or 2007, and the income group (IG) as defined by the World Bank, for the UNECE member States.

Table 1 UNECE Member States Reported Road crash fatalities and rates per million population 2007

COUNTRY	FATALITIES	RATE	IG	COUNTRY	FATALITIES	RATE	IG
Albania[2]	384	120	M	Lithuania	739	218	M
Andorra	N/A	N/A		Luxembourg	43	90	H
Armenia	371	124	M	Malta	12	29	H
Austria	691	83	H	Monaco	N/A	N/A	H
Azerbaijan[1]	1107	131	M	Montenegro	122	204	M
Belarus	1517	157	M	Netherlands	709	43	H
Belgium	1067	102	H	Norway	233	50	H
Bosnia and Herzegovina	428	109	M	Poland	5583	147	M
Bulgaria	1006	132	M	Portugal	974	92	H
Canada*	2889	88	H	Rep of Moldova[5]	589	155	M
Croatia	619	136	M	Romania	2712	127	M
Cyprus	89	104	H	Russian Fed[1]	33308	234	M
Czech Rep	1221	120	H	San Marino	1	32	H
Denmark	406	74	H	Serbia	962	98	M
Estonia	196	147	H	Slovakia[3]	627	116	H
Finland	380	72	H	Slovenia	292	145	H

[1] Data are not available for Andorra, Liechtenstein and Monaco.

France	4620	75	H	Spain	3823	86	H
Georgia[4]	737	168	M	Sweden	471	52	H
Germany	4949	60	H	Switzerland*	370	49	H
Greece	1580	141	H	Tajikistan	464	69	L
Hungary	1232	123	H	FYR Macedonia*	140	69	M
Iceland*	30	100	H	Turkey[2*]	4633	62	M
Ireland	338	78	H	Turkmenistan[1*]	650	131	M
Israel	398	57	H	Ukraine	9921	215	M
Italy	5131	87	H	UK	3058	50	H
Kazakhstan[1]	4365	283	M	US*	42642	139	H
Kyrgyzstan[5]	1252	235	L	Uzbekistan[2*]	2034	74	L
Latvia	419	184	M				
Liechtenstein	N/A	N/A	H	UNECE total	153,796	122	

Source: WHO Global Status Report on Road Safety, UNECE Transport Division and Eurostat
Data for 2007 for deaths within 30 days except where marked: 1. within 7 days, 2. at the scene, 3. within 24 hours, 4. within 20 days, 5. within 1 year.
*Data for 2006

The rates of fatalities ranged from 29 in Malta to 283 in Kazakhstan. Nine countries, all in Western Europe plus Israel, had rates up to 60 per million population. Sixteen countries had rates between 60 and 100 per million, and this group included five countries in South East or Eastern Europe or Central Asia.

There were eighteen countries with rates between 100 and 150 per million, the majority in South East or Eastern Europe and Central Asia, but also including Belgium and the United States. The ten countries with the highest rates were all in Eastern Europe or Central Asia, apart from Lithuania.

The data in Table 1 and following tables are based on reported data. The Global Status Report on Road Safety (Table A2) also produced estimates of reported deaths adjusted for the 30 day definition of death in a road crash, and estimates adjusted where necessary for under-reporting based on a model using negative binomial regression. Table 1A shows fatalities and rates using adjusted data. The higher of the two estimates, either the 30 day adjusted figure or the modelled estimate, is shown in the table. For EU countries the Eurostat data have been used as in Table 1. The countries for which adjusted figures are used are shown in bold. The effect of the adjustments is to raise the UNECE total by 7%.

Table 1A UNECE Member States Adjusted Road crash fatalities and rates per million population 2007

COUNTRY	FATALITIES	RATE	IG	COUNTRY	FATALITIES	RATE	IG
Albania	**499**	**139**	M	Lithuania	739	218	M

Andorra	N/A	N/A		Luxembourg	43	90	H
Armenia	**417**	**139**	M	Malta	12	29	H
Austria	691	83	H	Monaco	N/A	N/A	H
Azerbaijan	**1,195**	**130**	M	Montenegro	122	204	M
Belarus	1,517	157	M	Netherlands	709	43	H
Belgium	1,067	102	H	Norway	233	50	H
Bosnia and Herzegovina	428	109	M	Poland	5,583	147	M
Bulgaria	1,006	132	M	Portugal	974	92	H
Canada*	2,889	88	H	Rep of Moldova	**571**	**151**	M
Croatia	619	136	M	Romania	2,712	127	M
Cyprus	89	104	H	Russian Fed	**35,972**	**252**	M
Czech Rep	1,221	120	H	San Marino	1	32	H
Denmark	406	74	H	Serbia	962	98	M
Estonia	196	147	H	Slovakia	627	116	H
Finland	380	72	H	Slovenia	292	145	H
France	4,620	75	H	Spain	3,823	86	H
Georgia	737	168	M	Sweden	471	52	H
Germany	4,949	60	H	Switzerland*	370	49	H
Greece	1,580	141	H	Tajikistan	**951**	**141**	L
Hungary	1,232	123	H	FYR Macedonia*	140	69	M
Iceland*	30	100	H	Turkey	**10,066**	**134**	M
Ireland	338	78	H	Turkmenistan	**926**	**186**	M
Israel	398	57	H	Ukraine	9,921	215	M
Italy	5,131	87	H	UK	3,058	50	H
Kazakhstan	**4,714**	**306**	M	US*	42,642	139	H
Kyrgyzstan	**1,214**	**228**	L	Uzbekistan	**2,644**	**97**	L
Latvia	419	184	M				

Liechtenstein	N/A	N/A	H	UNECE total	**164,915**	**131**	

Source: WHO Global Status Report on Road Safety and Eurostat
* 2006

As well as variation in the current level of road safety between different parts of the UNECE region, there has been considerable variation in performance over time. Table 2 shows the ten year trend in fatalities between 1996 and 2006 or 1997 and 2007.

Table 2 Ten year trend in reported fatalities 1997 to 2007

Country	Fat 1997	Fat 2007	%change		Country	Fat 1996 or 97	Fat 2006 or 07	% change
Albania[2]	266	384	44.4		Lithuania	752	739	-1.7
Andorra	N/A	N/A			Luxembourg	60	43	-28.3
Armenia	261	371	42.1		Malta	18	12	-33.3
Austria	1105	691	-37.5		Monaco	N/A	N/A	
Azerbaijan[1]	605	1107	83.0		Montenegro	N/A	122	
Belarus	1726	1517	-12.1		Netherlands	1163	709	-39.0
Belgium	1364	1067	-21.8		Norway	303	233	-23.1
Bosnia and Herzegovina	267	428	60.3		Poland	7310	5583	-23.6
Bulgaria	915	1006	9.9		Portugal	2521	974	-61.4
Canada*	3091	2889	-6.5		Rep of Moldova[5]	569	589	3.5
Croatia	714	619	-13.3		Romania	2863	2712	-5.3
Cyprus	115	89	-22.6		Russian Fed[1]	27665	33308	20.4
Czech Rep	1597	1221	-23.5		San Marino	N/A	1	
Denmark	489	406	-17.0		Serbia	N/A	962	
Estonia	280	196	-29.7		Slovakia[3]	788	627	-20.4
Finland	438	380	-13.2		Slovenia	357	292	-18.2
France	8445	4620	-45.3		Spain	5604	3823	-31.8
Georgia[4]	449	737	64.1		Sweden	541	471	-12.9
Germany	8549	4949	-42.1		Switzerland*	616	370	-39.9
Greece	2105	1580	-24.9		Tajikistan	450	464	3.1
Hungary	1391	1232	-11.4		FYR Macedonia*	154	140	-9.1

Iceland*	10	30	200		Turkey*[2]	5428	4633	--14.6
Ireland	473	338	-28.5		Turkmenistan*[1]	404	650	60.9
Israel	530	398	-24.9		Ukraine	5988	9921	65.7
Italy*	6676	5669	-15.1		UK	3743	3058	-18.3
Kazakhstan[1]	2364	4365	84.6		US*	41907	42642	1.7
Kyrgyzstan[5]	685	1252	82.8		Uzbekistan*[2]	1991	2034	2.1
Latvia	594	419	-29.5					
Liechtenstein	6	0			UNECE total		153,796	

Source: WHO Global Status Report on Road Safety, UNECE Transport Division and Eurostat
Data for deaths within 30 days except where marked: 1. within 7 days, 2. at the scene, 3. within 24 hours, 4. within 20 days, 5. within 1 year.
*Data for 1996 and 2006

Fatalities fell in 35 countries and rose in 16. For a few countries[2] data were not available for both years. The largest declines were experienced in Portugal, Germany, France, Switzerland, Austria, and the Netherlands, with the largest increases being in Kazakhstan, Kyrgyzstan, Azerbaijan, Ukraine, Georgia, and Turkmenistan. With some exceptions, the general pattern is one of falling fatalities in EU countries and other western European countries, and rising fatalities in Eastern Europe and Central Asia.

The World Bank categorises countries into low, medium and high income groups based on gross national income (GNI) per capita where low-income=$395 or less; medium-income=$396 to $11,455; and high-income=$11,456 or more. Amongst the regional UNECE member States, twenty-nine are high-income countries, twenty-one are medium-income, and three are low-income. The high-income countries include the EU members with the exception of Bulgaria, Latvia, Lithuania, Poland, and Romania which are medium-income. The other high-income countries are the non-EU European countries of Andorra, Iceland, Liechtenstein, Monaco, Norway, San Marino, and Switzerland. The remaining countries, mostly in Eastern Europe, are medium-income except for the Central Asian countries of Kyrgyzstan, Tajikistan and Uzbekistan which are low income. The non-regional UNECE member States, i.e. Canada, the United States and Israel are high-income countries.

Although there is overlap between the groups of countries by level of income in terms of the fatality rate per million population, the higher income countries tend to have lower fatality rates. The average rate for the high-income group is 8.6 with a range from 29 to 146, whilst the average for the medium income group is 153 with a range from 62 to 283. The low-income group averages 126 as it includes one country with a very high rate, 235, and two with low rates 69 and 74. Population based casualty rates are an imperfect measure of the level of safety in a country as they do not reflect the level of motorisation and the distance travelled, as is indicated by the rate for the US at 13.9 being more akin to rates in eastern Europe and twice that of Tajikistan. However, with this caveat, within the UNECE the greater road safety problems are more likely to be concentrated in the medium and low income countries.

This wide variation in incomes and fatality rates within the UNECE demonstrates that the UNDA Target project is just as relevant in this region as in regions where there is a lower level of development.

[2] Andorra, Monaco, Montenegro, San Marino, and Serbia.

According to the Global Status Report only seven countries (Albania, Armenia, Belarus, Greece, Montenegro, Serbia and UK[3]) do not have a lead agency in charge of road safety. All but ten countries (Albania, Armenia, Kyrgyzstan, Montenegro, Serbia, Tajikistan, FYR Macedonia, Turkey, Turkmenistan, and Ukraine) have measurable targets. Legislation on speed limits, drink/drive, motorcycle helmets, and seat belts is almost universal, with only Ukraine being without a motorcycle helmet law. Legislation on child restraints is absent in eight countries (Kyrgyzstan, Montenegro, Moldova, Serbia, FYR Macedonia, Turkmenistan, Ukraine, and Uzbekistan).

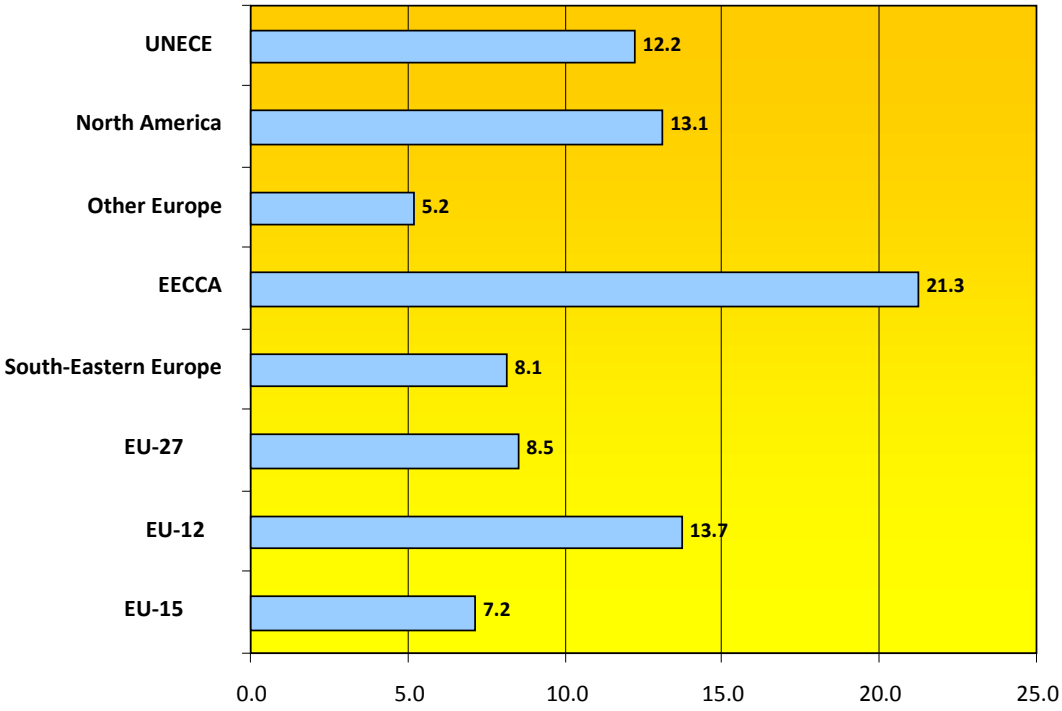
Legislation is necessary but not sufficient without good enforcement. The quality of enforcement is variable. Twenty-five countries were judged to have some deficiencies in enforcement, most commonly on speed limits and child restraints. Whereas lack of targets and legislation on child restraints is confined to a few countries in east and south east Europe and Central Asia, problems with enforcement are widespread across the entire UNECE region, including some countries in Western Europe.

The Global Status Report also shows the distribution of fatalities by road user group. This data is a little difficult to interpret without information on activity by road user group, so that for instance high proportions of cyclist deaths are likely to be correlated with high levels of cycling e.g. in the Netherlands, and vice versa, and are not therefore necessarily an indicator of an inherently unsafe environment for cyclists. In twenty-two countries, pedestrians accounted for one-fifth or fewer fatalities. These were nearly all high income countries with high levels of motorisation. The lowest proportion, 10%, was in Belgium, Iceland, and Norway. By contrast, in fourteen countries, mainly in Eastern Europe and Central Asia, pedestrians accounted for at least 34% of deaths and at least 40% in five of these countries. The highest percentage was in Ukraine with 56%.

The proportion of deaths amongst motorised two-wheeler users was very varied with twenty-four countries having no more than 10% of deaths on motorised two-wheelers, whilst in eight countries at least one-fifth of deaths were motorised two-wheeler users. The highest percentages were in Cyprus, Greece, and Malta. The countries with low incidence of two-wheeler deaths were predominately medium-income countries, whilst all the countries with high percentages were high-income.

[3] In the UK, the Department for Transport is responsible for road safety policy.

Fatalities per 100 000 inhabitants in the UNECE region,



Source: UNECE Transport Division

2.2 Road safety situation in UNECE by sub-regional groupings

Tables 3 to 8 summarise the key data by sub-regional group.

2.2.1 EU member States

The majority of member States of the EU are high-income but five countries, Bulgaria, Latvia, Lithuania, Poland, and Romania are medium-income. Even within these groupings, there is a wide range of GNI per capita, as shown in Table 3 below. For the high-income countries, the range is from over $80,000 in Luxembourg down to nearly $12,000 in the Czech Republic and Slovakia. The medium-income countries range from $4,590 in Bulgaria to nearly 10,000 in Latvia, Lithuania, and Poland. Fatality rates are also diverse. The lowest rate, 29 per million population is in Malta, and the highest rates are in Latvia (184) and Lithuania (218). Thirteen countries have rates between 50 and 100, eleven between 100 and 150.

The proportion of pedestrian fatalities was up to 20% in 14 countries, and over 30% in 5, all newer member States. The proportion of cyclist deaths was generally less than 10%, but much higher at 24% in the Netherlands reflecting high cyclist activity. Motorcyclists also accounted for a very variable proportion of deaths, with high rates, at least one-quarter, in Cyprus, France, Greece, Latvia, and Malta.

Table 3 EU countries reported road crash fatalities, income group and road user % of fatalities

COUNTRY	FATALS	FATALS	%CHANGE	POP	FATAL	IG	GNI	PED	CYC	M/C[2]
	1997	2007	1997-2007	2007 1000s	RATE Per m pop		PER CAP[1] US$ 2007	%	%	%
Austria	1105	691	-37.5	8361	83	H	42700	16	5	9
Belgium	1364	1067	-21.8	10457	101	H	40710	10	8	15
Bulgaria	915	1006	9.9	7639	131	M	4590	26	4	0
Cyprus	115	89	-22.6	855	114	H	24940	18	3	28
Czech Rep	1597	1221	-23.5	10186	119	H	14450	19	10	11
Denmark	489	406	-17.0	5461	75	H	59130*	N/A	N/A	N/A
Estonia	280	196	-29.7	1335	146	H	13200	19	9	6
Finland	438	380	-13.2	5277	72	H	44400	13	6	11
France	8445	4620	-45.3	61647	73	H	38500	12	3	25
Germany	8549	4949	-42.1	82599	60	H	38860	14	10	18
Greece	2105	1580	-24.9	11147	141	H	29630	16	1	30
Hungary	1391	1232	-11.4	10030	122	H	11570	23	12	10
Ireland	473	338	-28.5	4301	78	H	48140	20	3	8
Italy	6714	5131	-23.6	58877	87	H	33540	13	6	26
Latvia	567	419	-26.1	2277	184	M	9930	37	8	4
Lithuania	752	739	-1.7	3390	218	M	9920	32	7	5
Luxembourg	60	43	-28.3	480	90	H	84890*	N/A	N/A	N/A
Malta	18	12	-33.3	407	29	H	14575	36	0	29
Netherlands	1163	709	-39.0	16419	43	H	45820	12	24	18
Poland	7310	5583	-23.6	38082	146	M	9840	35	9	5
Portugal	2521	974	-61.4	10623	92	H	18950	16	4	22
Romania	2863	2794	-2.4	21438	130	M	6150	11	7	8
Slovakia	788	627	-20.4	5390	116	H	11730	34	8	8
Slovenia	357	292	-18.2	2002	145	H	20960	11	6	18

Spain	5604	3823	-31.8	44279	86	H	29450	15	2	19
Sweden	541	471	-12.9	9119	52	H	46060	12	6	16
UK	3743	3058	-18.3	60769	50	H	42740	21	4	19
EU27	60267	42448	-30.0		86					
EU15	43314	28238	-34.8		73					

Source: European Commission CARE Database; UNECE; WHO Global Status Report on Road Safety; World Bank

1. Atlas method; 2. All two-wheel motorised vehicle riders

*2008

Table 4 shows information for several road safety indicators: the urban speed limit, the Blood Alcohol Concentration (BAC) limit, deaths involving alcohol, and seat belt and helmet wearing rates.

An urban speed limit of 50 km/h is almost universal, and most countries have a drink-drive limit for the general population of 0.05 g/dl. A higher limit of 0.08 is the rule in Ireland, Malta and the UK, whilst the Czech Republic, Estonia, Hungary, Poland, and Sweden have a lower limit of 0.02 or zero. Deaths involving alcohol vary widely from 48% in Estonia to 5% or less in Bulgaria, the Czech Republic, Romania, and Slovakia.

Nine countries have front seat belt wearing rates of at least 90%, ten have rates between 75% and 90%, and only four countries have rates of 75% or less. Rear seat belt wearing rates are generally lower than rates for the front seat occupants with only six countries having rates of 80% or above, whilst two countries, Cyprus and Italy have only a tenth of occupants belted. In twelve countries half or fewer of rear seat occupants wear seat belts.

Helmet wearing rates are usually above 90%, but lower in Cyprus, Greece, and Italy, and unavailable in ten countries.

Table 4 EU countries' road safety indicators

COUNTRY	URBAN SPEED LIMIT KM/H	BAC LIMIT g/dl (general)	% DEATHS INVOLVING ALCOHOL	SEAT BELT WEARING RATE FRONT	SEAT BELT WEARING RATE REAR	HELMET WEARING RATE
Austria	50	0.05	8	89	49	95
Belgium	50	0.05	N/A	79	46	N/A
Bulgaria	50	0.05	5	N/A	N/A	N/A
Cyprus	50	0.05	18	81	9	68
Czech Rep	50	0.0	3	90	80	97
Denmark*						
Estonia	50	0.02	48	90	68	N/A

Finland	50	0.05	24	89	80	95
France	50	0.05	27	98	83	95
Germany	50	0.05	12	95/96	88	97/96
Greece	50	0.05	7	75	42	58/32
Hungary	50	0.0	12	71	40	95
Ireland	50	0.08	37	86	63	N/A
Italy	50	0.05	N/A	65	10	60
Latvia	50	0.05	21	77	32	93
Lithuania	50	0.04	12	N/A	N/A	N/A
Luxembourg*						
Malta	50	0.08	N/A	96	21	N/A
Netherlands	50	0.05	25	94	73	92/72
Poland	50	0.02	14	74	45	N/A
Portugal	50	0.05	31	86	28	N/A
Romania	50	0.0	2	80	20	90/65
Slovakia	60	0.0	4	N/A	N/A	N/A
Slovenia	50	0.05	38	85	50	N/A
Spain	50	0.05	N/A	89	69	98/92
Sweden	50	0.02	20	96	90	95
UK	48	0.08	17	91	84/90	98

Source: WHO Global Status Report on Road Safety
* Data unavailable

2.2.2 Eastern Europe, Caucasus and Central Asia

Table 5 shows data for the sub-regional grouping of the countries of Eastern Europe, Caucasus and Central Asia (EECCA). Seven of the twelve EECCA countries do not use the standard 30 day definition of a road traffic death, but the WHO Global Status Report includes adjusted estimates for 2007 on the 30 day definition and for these seven countries the 30 day adjusted data as well as the reported data are shown in brackets in the table. The adjustment raises the number of fatalities except in the cases of Kyrgyzstan and Moldova where the reported data is based on deaths within one year and the 30 day figures are 3% lower. The adjusted rates do not alter the relative positions of the individual countries, although they increase the number of fatalities by 8%, except in Uzbekistan where the increase is 30% as the reported deaths are only those at the crash scene.

Table 5 EECCA countries reported road crash fatalities, income group and road user % of fatalities

COUNTRY	FATALS	FATALS	%CHANGE	POP	FATAL	IG	GNI	PED	CYC	M/C [2]
	1997	2007	1997-2007	2007 1000s	RATE Per m pop		PER CAP [1] US$ 2007	%	%	%
Armenia	261	371	42.1	3002271	124	M	2640	39	<1	0
Azerbaijan (adj 30 day)	605	1107 (1195)	83.0	8467167	131 (141)	M	2550	38	1	1
Belarus	1726	1517	-12.1	9688795	157	M	4220	40	9	4
Georgia	449	737	64.1	4395420	168	M	2120	28	<1	N/A
Kazakhstan (adj 30 day)	2364	4365 (4714)	84.6	15421861	283 (306)	M	5060	16	N/A	N/A
Kyrgyzstan (adj 30 day)	685	1252 (1214)	82.8	5316543	235 (228)	L	590	43	1	0
Rep of Moldova (adj 30 day)	569	589 (571)	3.5	3793604	155 (151)	M	1260	34	2	4
Russian Federation (adj 30 day)	27665	33308 (35972)	20.4	142498532	234 (252)	M	7560	36	0	2
Tajikistan	450	464	3.1	6735996	69	L	460	44	6	1
Turkmenista	404	650	60.9	4965278	131	M	123	29	5	N/A

n* (adj 30 day)		(702)			(141)		4			
Ukraine	5988	9921	65.7	46205382	215	M	2550	56	N/A	N/A
Uzbekistan* (adj 30 day)	1991	2034 (2644)	2.1	27372260	74 (97)	L	730	N/A	N/A	N/A
EECCA	43157	56315	30.5	277863109	213					

Source: UNECE; WHO Global Status Report on Road Safety. Fatality data as reported (see Table 1 for definition). Figures in brackets show fatalities and rate adjusted to 30 day definition of road traffic death.

1. Atlas method; 2. All two-wheel motorised vehicle riders

*1996 and 2006

As shown in Table 1A, the WHO modelled estimates also increase the numbers of fatalities further in the cases of Armenia, Tajikistan and Turkmenistan. Fatality rates in this sub-region are generally high, only two countries, Tajikistan and Uzbekistan, having reported rates below 100 per million population. If the modelled estimate is used for Tajikistan, the number of fatalities increases to 951 and the rate becomes 141. Four countries, Kazakhstan, Kyrgyzstan, the Russian Federation and Ukraine have rates above 200, and the average for the sub-region is also over 200. The relatively low rates for Tajikistan, even on adjusted data, and Uzbekistan are surprising given that the other low-income country, Kyrgyzstan has a reported rate of 235 and a similar level of income. All except Belarus have a worsening situation in terms of the number of fatalities, and in the decade up to 2007 increases in excess of 60% have occurred in half the countries. The proportion of deaths accounted for by pedestrians is also high except in Kazakhstan, whilst cyclist and motorcyclist percentages are very low.

Table 6 EECCA countries' road safety indicators

COUNTRY	URBAN SPEED LIMIT KM/H	BAC LIMIT g/dl (general)	% DEATHS INVOLVING ALCOHOL	SEAT BELT WEARING RATE FRONT	SEAT BELT WEARING RATE REAR	HELMET WEARING RATE
Armenia	60	0.08	6	N/A	N/A	N/A
Azerbaijan	60	0.0	3	N/A	N/A	N/A
Belarus	60	0.05	13	N/A	N/A	N/A
Georgia	60	0.02	37	N/A	N/A	N/A
Kazakhstan	60	No limit defined	3	NA	N/A	N/A
Kyrgyzstan	60	No limit defined	N/A	N/A	N/A	N/A

Rep of Moldova	60	0.05	17	N/A	N/A	N/A
Russian Federation	60	0.03	10	33	N/A	N/A
Tajikistan	60	0.03	5	N/A	N/A	N/A
Turkmenistan*	60	0.05	7	N/A	N/A	N/A
Ukraine	60	0.0	N/A	N/A	N/A	N/A
Uzbekistan*	70	NONE	N/A	N/A	N/A	N/A

Source: WHO Global Status Report on Road Safety

Table 6 shows data on key road safety indicators. The urban speed limit is 60 km/h in all countries except Uzbekistan where it is 70 km/h, going some way to explaining the generally high pedestrian fatality shares. Only one country, Armenia has a drink-drive limit over 0.05, but in two countries, Kazakhstan and Kyrgyzstan drink-drive offences are not defined by a BAC limit, and there is no limit in Uzbekistan. Deaths involving alcohol are generally low in those countries where data are available, except in Georgia where 37% of deaths are alcohol related. Data on seat belt and helmet wearing rates are not available, except for front seat belt wearing in the Russian Federation where the rate is only 33%.

2.2.3 South Eastern Europe

Table 7 below shows data for the sub-regional grouping of the countries of South Eastern Europe. Greece, Bulgaria and Romania are included in this table as well as in the tables for EU countries. Two of the ten countries do not use the standard 30 day definition of a road traffic death, but the WHO Global Status Report includes adjusted estimates for 2007 on the 30 day definition and for these two countries the adjusted data as well as the reported data are shown in the table. The adjustment raises the number of fatalities and the fatality markedly because the reported data for both Albania and Turkey are based on death at the crash scene. As shown in Table 1A, for Turkey the number of fatalities increases further to 10,066 if the modelled estimate is used. Fatality rates vary widely from 204 per million population in Montenegro to 69 in the FYR Macedonia. Data for Serbia and Montenegro separately are not available for 1997, but the combined total is 1659 in 1997 and 1084 in 2007, a reduction of 35%. The combined figure for 1997 is included in the regional total in the table.

Albania and the FYR Macedonia have high proportions of pedestrian fatalities, and in seven countries one-fifth of deaths are pedestrians. Two wheeled motor vehicle rider deaths account for relatively high proportions in Croatia and Greece.

Table 7 South Eastern Europe countries reported road crash fatalities, income group and road user % of fatalities

COUNTRY	FATALS	FATALS	%CHANGE	POP	FATAL	IG	GNI	PED	CYC	M/C[2]
	1997	2007	1997-2007	2007 1000s	RATE Per m pop		PER CAP[1] US$ 2007	%	%	%

Albania (adj 30 day)	266	384 (499)	44.4	3190	120 (156)	M	3290	40	6	9
Bosnia & Herzegovina	267	428	60.3	3935	109	M	3790	24	6	5
Bulgaria	915	1006	9.9	7639	131	M	4590	26	4	0
Croatia	714	619	-13.3	4555	136	M	10460	20	5	19
Greece	2105	1580	-24.9	11147	141	H	29630	16	1	30
Montenegro	N/A	122	N/A	598	204	M	5180	20	0	4
Romania	2863	2794	-2.4	21438	130	M	6150	11	7	8
Serbia	N/A	962	N/A	9858	98	M	4730	25	9	6
FYR Macedonia	154	140	-9.1	2038	69	M	3460	34	4	11
Turkey (adj 30 day)	5181	5007 (6509)	--14.6	74877	67 (87)	M	8020	19	2	8
SE Europe	14124	9874 (11378)	-30.1	139275	71 (82)					

Source: UNECE; WHO Global Status Report on Road Safety; Turkish National Police. Fatality data as reported (see Table 1 for definition). Figures in brackets show fatalities and rate adjusted to 30 day definition of road traffic death.

1. Atlas method; 2. All two-wheeled motor vehicle riders

Table 8 below shows data on key road safety indicators. The urban speed limit varies between 40 and 60 km/h, and the drink-drive limit ranges from zero to 0.05 g/dl. Deaths involving alcohol are low except in Croatia where they account for 30% of the total despite enforcement being rated as quite effective. Information on seat belt and helmet wearing is lacking in several countries and wearing rates are low except in Greece and Romania. In the latter the wearing rate for rear seat occupants is also low.

Table 8 South Eastern European countries' road safety indicators

Country	URBAN SPEED LIMIT KM/H	BAC LIMIT g/dl (general)	% DEATHS INVOLVING ALCOHOL	SEATBELT WEARING RATE FRONT	SEATBELT WEARING RATE REAR	HELMET WEARING RATE
Albania	40	0.05	5	30	N/A	N/A
Bosnia &	60	0.03	7	N/A	N/A	N/A

Herzegovina						
Bulgaria	50	0.05	5	N/A	N/A	N/A
Croatia	50	0.05	30	45 *	N/A	N/A
Greece	50	0.05	7	75	42	58/32
Montenegro	50	0.05	N/A	N/A	N/A	N/A
Romania	50	0.0	2	80	20	90/65
Serbia	60	0.05	6	50-60	4-5	N/A
FYR Macedonia	60	0.05	5	16 *	N/A	2
Turkey	50	0.05	2	70 intercity, 28 urban *	N/A	12

Source: WHO Global Status Report on Road Safety

- Separate rates for front and rear seats not available

2.3 Choice of countries for action

Preceding sections have described the diversity of income levels, fatality rates, and distribution of fatalities in the UNECE region. A consistent pattern emerges of a lower level of safety in medium and low-income countries of Eastern and South East Europe and Central Asia. The decision was taken therefore to concentrate resources in the UNDA Targets project in the first instance on Eastern Europe and Central Asian countries, and to organize a seminar for these countries, which was held in Minsk, Republic of Belarus, in cooperation with the Government of Belarus. This group of countries includes three low-income countries, Kyrgyzstan, Tajikistan, and Uzbekistan, and the medium-income countries of Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, the Republic of Moldova, Turkmenistan and the Russian Federation, thus fulfilling the objective of the project to assist low and medium-income countries.

In addition, the Evia Chamber of Commerce and Industry and the Hellenic Chambers Transport Association, with the support of the Hellenic Ministry of Transport and Communications hosted a conference for countries in South East Europe in recognition of their tendency to higher than average fatality rates compared with most of Western Europe. In addition to Greece, this group includes the medium-income countries of Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, Romania, Serbia, the Former Yugoslav Republic of Macedonia and Turkey.

The two events were also designed to focus on groups of countries that are homogeneous in terms of geographical location and road safety conditions. In addition, the countries chosen for the Minsk seminar have a commonality of political history and language. The Halkida conference countries are geographically close together and several also have common political background with similar problems. Tourism is also a common theme in these countries. The two groups together cover all the medium-income countries in UNECE apart from Latvia, Lithuania and Poland, all of which are EU members.

According to the WHO Global Status Report ten of the focus countries do not have measurable road safety targets, or a consistent national Road Safety Strategy, and for

those that do it is not clear whether these targets are empirically based and likely to be achievable.

The recommendations of the OECD *Towards Zero* report provide guidance to countries to assist in setting and achieving ambitious road safety targets and gave a valuable framework for the seminar and conference. These recommendations place targets firmly within the context of effective road safety management in a Safe System approach for delivery. One of the objectives of both the seminar and the conference therefore was to introduce the concept of the Safe System approach in the context of the OECD Report's recommendations as guidance on good practice in setting and achieving targets.

2.4 The UNECE regional seminar

2.4.1 Participation

The seminar was organized by the UNECE in cooperation with the Government of the Republic of Belarus. It took place in Minsk on 12-14 May 2009. Nine of the twelve countries in Eastern Europe, the Caucasus and Central Asia were represented, and delegates also came from several international organisations and from the other United Nations regional commissions (UNESCAP, UNESCWA and UNECLAC) and the United Nations Development Programme in the Republic of Belarus.

Regional participants came from the following countries: the Republic of Belarus, the Republic of Armenia, the Azerbaijani Republic, the Republic of Moldova, the Russian Federation, the Republic of Tajikistan, the Republic of Uzbekistan, Turkmenistan, and Ukraine. Georgia, Kazakhstan, and Kyrgyzstan were not represented, despite Kazakhstan and Kyrgyzstan having the highest fatality rates and growth of numbers of deaths in the region. Delegates represented Government Agencies: Ministries of the Interior, Transport, Education, and External Affairs, and Traffic Police. The Executive Committee of the Commonwealth of Independent States was also represented. Delegates also came from Poland, Greece, Great Britain and Spain.

The UNECE delegation included the Director and two staff members of the Transport Division. International Organisations included the European Commission, the Organisation for Security and Co-operation in Europe, the World Health Organisation, the International Road Transport Union, Intelligent Transport Systems and Services in Europe, the FIA Foundation, the Global Road Safety Partnership, and the International Road Assessment Programme.

2.4.2 Opening sessions

The seminar was opened by Mr. Anatoly Kuleshov, Minister of Interior of the Republic of Belarus, Mr. Antonius Broek, United Nations Resident Coordinator and United Nations Development Programme (UNDP) Resident Representative, and Mrs. Eva Molnar, Director of Transport Division in the UNECE, in the presence of Deputy Ministers of Health, Transport and Education from Belarus and the Deputy Minister of Health of Ukraine.

Mr Kuleshov described the road safety situation in Belarus and said that the seminar was an opportunity to raise awareness and to develop understanding of solutions. Belarus wants to look at foreign experience and learn new ways of improving road safety. Mrs Molnar described the road safety situation in the UNECE region and showed the variation in performance in different sub-regions, with fatalities per 100,000 population in Eastern Europe the Caucasus and Central Asia being nearly twice the UNECE average. Unlike EU countries, many of these countries have experienced a worsening situation over the decade 1997 to 2007. Road Safety is a multi-dimensional task that involves all levels of Government and all sectors of society. Particular challenges in the EECCA area are the

need for a strategy, the capacity to absorb available funds and knowledge, and political support and ownership. Mrs Molnar explained the role of UNECE and the Working Party on Road Traffic Safety (WP.1), and how it can contribute to safety improvement through the United Nations road safety legal instruments, the Conventions on Road Traffic and on Road Signs and Signals respectively (1968) and through analytical work and capacity building.

The next sessions described the objectives of the seminar and the broader global road safety context. The work of the WHO in co-ordinating the United Nations Road Safety Collaboration and producing Good Practice Manuals was presented, and a description of the forthcoming Global Status Report on Road Safety was given. The participants heard from the FIA Foundation about the current campaign by the Commission for Global Road Safety for a Road Safety Decade of Action, and the expected worsening road safety position up to 2020 without action. The goal of the decade of action is to save 5 million lives by reducing the annual number of deaths expected in 2020 from 1.9 to 0.9 million. The aim is for the Global Ministerial Conference in Moscow in November 2009 to support the Decade of Action, to support an action plan of $300 million to invest in capacity building and to support the investment of at least 10% of all road project finance to be devoted to safe road assessment and design.

2.4.3 Road safety situation by country

All participating countries were given the opportunity to present the state of road safety in their country, and statements were made by representatives from Armenia, Belarus, Moldova, the Russian Federation, Ukraine and Uzbekistan. A short description of road safety in each country that attended the seminar follows, drawing on information presented at the seminar as well as the Global Status Report. Summary data for all the EECCA countries are shown in Tables 5 and 6 above.

Armenia

Road traffic deaths are rising, up by 42% between 1997 and 2007 with a further increase in 2008 to 407 deaths and 3,125 injuries. 39% of deaths are pedestrians, but cyclists and two-wheel motor vehicle riders account for less than 2%. Many crashes on highways are due to overturning. It is calculated that road crashes account for 1% of national income. The drink-drive limit at 0.08 g/dl is relatively high but deaths involving alcohol account for only 6% of the total. Seat belt and helmet wearing are legal requirements, but enforcement is not very effective. Road safety audits are required for new and existing infrastructure.

On 13th August 2009 the Government of Armenia ratified the national road safety strategy together with a five-year action plan. There is widespread non-use of seat belts and a key element of the programme is enforcement of seat belt legislation by the police, including making sure that the police themselves belt up. There will also be construction of tunnels and pedestrian crossings on the most dangerous sections of national highways. The Ministry of Transport and the Police are to work in cooperation with the National Road Safety Council to increase public awareness of road safety[4].

Azerbaijan

Traffic fatalities increased by 83% over the 1997-2007 period. Pedestrians accounted for 38% of deaths. There is a road safety strategy and there are targets. The drink-drive limit is zero and well enforced, with only 3% of deaths involving alcohol. Seat belt and helmet laws are also enforced, but no information is available on wearing rates.

[4] Source: communication from the Executive Director of the Road Safety Council.

Road safety audits are required for major new construction projects and existing infrastructure.

Belarus

Although over the last decade there had been a worsening situation in both numbers and severity of road crashes, the last two years has seen a decline in casualties and Belarus is the only country in the EECCA region where traffic deaths fell between 1997 and 2007, by 12%. Private automobile ownership has been increasing since 1999 leading to a need for improvements to the traffic system. Vulnerable road user safety is a particular problem with pedestrians accounting for 40% of casualties, cyclists 9% and two-wheel motor vehicle riders 4%. The Traffic Police have responsibility for road safety, and they carry out awareness raising campaigns and road safety education in schools. Speed and drink-driving are major risk factors which are being targeted. Infrastructure measures to reduce speed and improvements such as safety fences and rumble strips on sides of roads and at pedestrian crossings have been implemented. Road safety audits are required for major new road construction projects and existing infrastructure. A particular problem is transit traffic on the East-West traffic corridor through Belarus.

Moldova

Road deaths increased by only 3% between 1997 and 2007. There is a road safety strategy and there are targets. The drink-drive limit is 0.05 g/dl, but it is not effectively enforced and 17% of deaths are alcohol related. There are seat belt and helmet wearing laws but enforcement is very poor for the helmet law, and uncertain for seat belt wearing. Pedestrians make up 34% of deaths, cyclists 2%, and two wheeled motor vehicle riders 4%. Road safety audits are required for major new road construction projects and existing infrastructure. Children are at particular risk. A new road safety plan for 2009 was launched in 2006 with new laws on alcohol and drugs, a health test for drivers, and bringing driver testing into line with EU rules. Speed cameras and new alcohol tests are being introduced. However, progress is being constrained by a cut of 50% in the numbers of traffic police. The aim is for more use of technology.

The Russian Federation

Road deaths rose by a fifth between 1997 and 2007, and the fatality rate is one of the highest in the region, although there has been some improvement since 2004. 36% of deaths are pedestrians. There is a road safety strategy and there are targets. Laws exist for seat belt and helmet wearing and are fairly well enforced, but only one-third of front seat occupants comply. The drink-drive limit of 0.03 g/dl is also fairly well enforced and 10% of deaths are alcohol related. Road safety audits are required for major new road construction projects and existing infrastructure. The findings of the ECMT road safety capacity audit are being assessed and used.

Tajikistan

Both the growth in fatalities and the rate are amongst the lowest in the region and it is also the country with the lowest per capita income. Vulnerable road users are at high risk, with pedestrians accounting for 44%, cyclists 6%, but two wheeled motor vehicle riders only 1%. The drink-drive limit of 0.03 g/dl is well enforced and 5% of deaths are alcohol related. Enforcement is less effective for seat belt and helmet laws. Road safety audits are required for major new road construction projects and existing infrastructure.

Turkmenistan

There has been rapid growth in fatalities, up by 61% between 1997 and 2007. Pedestrians account for 29% of deaths and cyclists 5%. The drink-drive limit of 0.05 is

well enforced and alcohol related deaths are 7% of the total. Enforcement of seat belt and helmet wearing is also good. Road safety audits are required for major new road construction projects and existing infrastructure.

Ukraine

The growth in fatalities between 1997 and 2007, 66%, and the fatality rate, 215 per million population, are amongst the highest in the region, but there was a large improvement in 2008 when deaths fell from 9921 in 2007 to 6760[5]. Pedestrian deaths are a major problem accounting for 56% of the total. The drink drive limit is zero but there is no information about the alcohol related death rate or enforcement effectiveness. There is no helmet wearing law, and the seat belt law does not apply to all occupants. Audits are required for major new road construction but not for existing roads.

Uzbekistan

There was only a rise of 2% in fatalities between 1996 and 2006, and the fatality rate was also very low. Uzbekistan is one of the three low-income countries in the region. No data are available on fatalities by road user group. There is a road safety strategy and a target. There is a drink-drive law but it is not defined by a BAC limit. Enforcement is judged to be effective but a figure for alcohol related deaths is not available. The situation is similar for seat belt and helmet wearing with good enforcement but no data on wearing rates. Road safety audits are required for major new road construction projects and existing infrastructure. There has been an increase in road safety activity in the last ten years. This will improve development of economic cooperation and facilitate international freight transport movements. Financial assistance for infrastructure development has been provided by the Asian Development Bank in the form of a loan of $75 million, which will be put towards the acquisition of special technology and equipment with the goal of building and reconstruction of roadways in Uzbekistan. There are regular monthly traffic safety meetings which address crash reduction measures, particularly focusing on pedestrians and children, driver behaviour and public awareness campaigns.

2.4.4 Reports from other United Nations regional commissions

Representatives from UNESCWA, UNECLAC and UNESCAP described the road safety situation and activities under the UNDA Targets project in their regions.

In the UNESCWA region, a Middle East and North Africa Road Safety Partnership has been established bringing together Governments, businesses, and civil society organisations to support projects to reduce casualties. It focuses on knowledge sharing, implementation of projects, and creation of partnerships. A workshop was held in Doha in 2008 resulting in the Doha Declaration on road safety action. In June 2009 UNESCWA will convene a targets workshop in Abu Dhabi[6]. Its objectives will be to assist countries by providing information on good practices; to help with development of targets; to review road safety statistics and to set ambitious targets, as well as to discuss road safety management.

UNECLAC is the region with the highest rate of death and injury in the world at 26.1 deaths per 100 million population, which is projected to rise to 31 by 2020 without new measures. Many countries in the region are setting up road safety agencies and developing plans to address the problem, and UNECLAC is creating a network of national

[5] The 2007 figure is from the Global Status report, whilst the 2008 figure was presented at the seminar and may not be on the same definition.

[6] This workshop is described in Section 4 of this report.

agencies, civil society and academic institutions. UNECLAC organized a seminar in Buenos Aires in November 2008, and further seminars are to be held during 2009 for Central America, Colombia and Mexico, and for Caribbean countries[7].

UNESCAP is a large and diverse region ranging from Central Asia to Australasia and includes 62% of the world population and more than half of the global fatalities with only one fifth of the world's vehicles. The presentation set out the goals and recent actions of each country, and UNESCAP's goals in addressing the road safety problem. These goals and a target to save 600,000 lives between 2007 and 2015 have been developed at a series of UNESCAP meetings, and they are expected to be finalised in September 2009.

2.4.5 Presentations from international experts

The findings of the report "Towards Zero" were presented. The presentation described the recommendations of the report, in particular the Safe System Approach and how road safety management systems should be organised to deliver ambitious targets. Achievement of improved road safety requires an effective road safety management system with a strong results focus. A lead agency should be identified and the roles and responsibilities of all agencies should be clear. Performance targets in terms of intermediate and final outcomes and a strategy for delivery need to be defined. Targets should be an interim step towards the Vision of zero deaths and serious injuries on the roads.

The experiences of road safety planning in Spain, France, Poland, Western Australia and Great Britain were presented as examples of good practice. Spain set a target of reduction in the number of fatalities by 40% between 2003 and 2008, and is committed to the EU target of 50% reduction by 2010. By 2008 fatalities were 31% below the 2001 level, a saving of 1,694 lives. A Strategic National Road Safety Plan for 2004-2008 was produced and from 2005-2008 many key projects were established. These include creating a National Observatory for Road safety, changes to the system of penalties, improvements to infrastructure and in the collection and dissemination of road safety information. A new road safety plan is being developed. As well as the national plan there are regional and municipal plans. Municipal Road Safety Plans will be compulsory for cities by 2012.

In France, present road safety policy was established in 2002 as one of the President's 3 major projects. The Interministerial Committee for Road Safety (CISR) chaired by the Prime Minister formulates the French road safety policy coordinated by the interministerial delegate, involving the Ministries of Transport, Interior, Defense, Justice, National Education, Health, Labor, and Youth and Sport. Locally, the territorial administrative units ("départements") have safety councils. Policy focuses on behavior, infrastructure and vehicles, and compliance with the rules. Penalties and enforcement have increased, and by the end of 2008 there were 2,300 speed cameras.

The Polish National Road Safety Program, GAMBIT, for 2000-2007 was described. GAMBIT 2005 set a target of reducing deaths by 2,800 (50%) in ten years from 2003 to 2013. It has five key objectives: to build a long-term effective road safety policy; to improve road user behaviour; to protect pedestrians, children and cyclists; to improve infrastructure safety; to reduce crash severity.

A new road safety strategy for Western Australia, *Towards Zero,* was endorsed by the Government in March 2009 following a comprehensive programme of public consultation. Community Forums were set up to gauge public opinion on road safety issues. The policy options for the Strategy were consulted upon and the results of community

[7] The UNECLAC activities are described in Section 4 of this report.

perception were compared with expert analysis on effectiveness of safer systems solutions.

In Great Britain, the underlying principle for road safety target setting was that policy should be evidence based, the target should be challenging but achievable based on empirical analysis, and there should be a Strategy for implementation and regular monitoring of progress. The 2010 target was for a reduction of 40% in the number killed or seriously injured by 2010 compared with the average for 1994-98. A more testing target of 50% was set for children. Progress has been good and the 40% target is likely to be achieved, whilst the 50% target for children was achieved in 2007. The Department for Transport is now consulting on a new Strategy for 2020 which will adopt the Safe System Approach and will have separate targets for deaths and serious injuries.

The use of the existing good practice manuals, and the need for reliable data systems were described by the Global Road Safety Partnership representative. Representatives from the International Road Transport Union (IRU) and the International Road Federation (IRF) described their work and how they can contribute to improving road safety internationally. The IRU supports all measures that improve road safety if they effectively target the main causes of accidents involving trucks. Its priorities are sustainable development and facilitation of trade, tourism and road transport. The IRF is working on major highways: the Silk Road, the Trans-African Roads project, the Pan-American Highway, the Black Sea Ring Highway, and the Adriatic-Ionian Highway. They have organized seminars on Conspicuity Marking in Belarus and in the UAE, and are collaborating with the UNRSC to produce a Policy Framework Guide for Safe Road Infrastructure.

The work of the International Road Assessment Programme (iRAP) was presented. Risk assessments are carried out using a specially equipped vehicle with on-road assessment and video recording followed by data analysis. A report is produced that gives star ratings for the road network and a programme for remedial measures. The final stage is support for programme implementation. In addition to assessing the roads for risk, iRAP offers solutions tailored for the road conditions and for its use by different road user groups. An online Road Safety Toolkit has been developed which can be used to diagnose problems and give solutions. The country reports show detailed maps of the inspected roads with star ratings and locations of recommended countermeasures, and predictions of casualty savings.

ERTICO's work on Intelligent Transport Systems was described. The Intelligent Car Initiative will provide new solutions through an integrated system approach to vehicle safety. The EasyWay project will foster pan-European harmonized deployment of ITS on the Trans-European Network through traffic management, traveler information services, freight and logistics. The European Commission's ITS Action Plan has road safety as a main priority including advanced driver assistance systems, introduction of pan-European eCall, and effects of ITS on vulnerable road users. The key ITS applications to improve road safety cover both vehicle and infrastructure safety; the in-vehicle safety is both active (crash prevention) and passive (injury mitigation).

The European Commission Delegate to Belarus described EU Road Safety policy. A target to reduce deaths by 50% by 2010 was set in 2001. Policy is set out in the White Paper on Transport (2001) and the European Road Safety Action Programme (2003). An integrated approach involving road infrastructure, vehicle safety and human behavior is taken. Policy on infrastructure is to ensure that safety is integrated at all stages and to bring about a common high level of safety of roads in all Member States. The EuroNCAP programme is used to improve vehicle safety by requiring that cars sold in Europe must have a minimum of 4 stars. Other initiatives are the Directive on driver licensing and the European Road Safety Charter and the Road Safety Observatory.

In the closing session of the seminar conclusions and recommendations for taking forward action on target setting were discussed and agreed (see Chapter 8 below).

2.5 The conference on improving road traffic safety in South-Eastern Europe

2.5.1 Participation

A conference on improving road traffic safety in South-Eastern Europe was hosted by the Evia Chamber of Commerce and Industry and the Hellenic Chambers Transport Association, with the support of the Hellenic Ministry of Transport and Communications. The conference took place in Halkida, Greece, on 25-26 June 2009.

The purpose of the conference was to focus on improving road safety in South-Eastern Europe as part of the United Nations global project on setting regional and national road traffic casualty reduction targets. Regional participants came from the following countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Former Yugoslav Republic of Macedonia, Greece, Montenegro, Romania, Serbia and Turkey. Delegates represented Government Agencies: Ministries of the Interior, Transport and Communications, and Health, representatives of local government and Chambers of Commerce, Traffic Police, and NGOs and commercial interests. Delegates also came from France, Italy and the Netherlands.

The UNECE delegation included the Director and staff members of the Transport Division. International Organizations included the European Commission, the World Health Organization, the FIA Foundation, the Orthodox Centre of the Ecumenical Patriarchate, Switzerland, the South East Europe Transport Observatory, the Global Road Safety Partnership, and the International Road Assessment Programme.

2.5.2 Opening sessions

The Conference was opened on behalf of the Greek Minister of Transport and Communications by Mrs. Evagelia Tsaga, Director General in the Ministry, and Mrs. Eva Molnar, Director of Transport Division, UNECE. Mr. Panagiotis Simosis, President, Evia Chamber of Commerce and Industry, and Mr. Evagelos Spanoudakis, President of the Chania Chamber of Commerce and Industry, Vice-President Hellenic Chambers Transport Association welcomed the participants. Mrs. Molnar said that the road safety crisis is a growing problem and has human and economic costs. Road safety is a shared responsibility. Mr. Spanoudakis said that the aim is to create a Greek transport system that is safe and efficient that will assist modernization and development. Road safety in Greece is inadequate and the fatality rate is much higher than the EU average, putting Greece 22nd in the ranking order.

A special session was devoted to basketball champions supporting road safety. The players of the Greek national basketball team, the Hellenic Basketball federation and FIBA Europe promoted "Fair Play" and "Team Work" in maintaining safe roads across Greece and elsewhere. Stressing that individuals often do not recognize the importance of complying with the rules, thinking that a mistake or minor "bending" of rules affects only themselves, the Greek basketball champions invited people to abide by the rules and start work as a team and play fair in road traffic. The players signed a statement promoting these ideas which is included in the present report as Annex I.

The global road safety context was described in presentations from the FIA Foundation on the forthcoming Global Ministerial conference and the proposed Decade of Action on road safety, and from UNECE on the key risks and the work of UNECE and the other United Nations regional commissions.

Speakers from the European Commission, the South East Europe Transport Observatory (SEETO), and the Orthodox Centre of the Ecumenical Patriarchate described their work. SEETO promotes development of the SE Europe Core Regional Transport Network. A Road safety working group was established in January 2009 to deal with the administrative and regulatory procedures necessary to foster the cooperation in road safety in the SEETO region, promote road safety best practice and increase awareness among decision makers and the Steering Committee about the road safety situation in South East Europe. The Orthodox Church cooperates with other religions and sectors of society, and supports road traffic victims.

2.5.3 Road safety in Greece

Presentations from Greece, the host country, described the road safety situation and road safety work in Greece. The Strategic Plan for 2005-2010 contains many road safety measures including a code of traffic conduct, improvements to driver training, testing and licensing, improving driver behaviour, a new points system and road safety awareness campaigns and road safety education. Deaths have fallen significantly 2000-2007, but additional effort is needed to implement the Strategic Plan and to increase public awareness and media support. The Traffic Police in Central Greece described progress on enforcement. Speed violations have dropped and drink-drive checks have risen. Compliance with seat belt and helmet wearing rules has improved. In 2009 there are measures to improve police training and enforcement and seminars to improve driver behaviour.

Presentations from the Hellenic Institute of Transport Engineers and the Road Traffic Safety Observatory of the Technical Chamber of Greece described how they promote measures to improve infrastructure, and support road safety actions on road user behaviour, vehicle safety, emergency response and enforcement. The work of an NGO, the Panos Mylonas Road Safety Institute, was also described. It supports the Greek State to improve effectiveness on key Road Safety issues, and provides the context for effective partnership across sectors. It aims to increase awareness of road safety and to mobilize public and private organizations into action.

At the end of the first day of the conference, representatives of the Hellenic Chambers of Commerce and Industry adopted a Declaration in which they resolved to support UNECE work, use their network in Greece to support promotional campaigns, advocate road safety measures, and establish funding mechanisms for implementing them. They invited the other South Eastern European countries to take action, agree road safety goals, and fully implement UNECE road safety related legal instruments. The Declaration is at Annex II.

2.5.4 Road traffic safety in South Eastern Europe

The delegates from the countries present at the conference made presentations on the situation in each of their countries. A short description of road safety in each country that attended the seminar follows, drawing on information presented at the seminar as well as the Global Status Report. Summary data for all the South Eastern European countries are shown in Tables 7 and 8 above.

Albania

There have been major changes in Albania in the numbers of vehicles and drivers and in road infrastructure. The increased traffic has led to a rise in road crashes and road safety is a Government priority, but there is neither a road safety strategy nor targets. The fatality rate, particularly as adjusted for the 30 day definition, is one of the highest in the sub-region, and deaths have been increasing rapidly. Vulnerable road user safety is a problem, with 40% of deaths being amongst pedestrians. The main areas for action

improvements in road quality, use of road safety audits, dealing with black spots, improved road discipline, dealing with corrupt issue of driving licences, and road safety education. Enforcement of traffic law on speed, drink-drive, helmet and seat belt use is judged to be effective, but only 30% of front seat occupants wear belts. There are road safety audits for major new road construction projects.

Bosnia and Herzegovina

Although the fatality rate is lower than in several other SE European countries, deaths have been increasing at the fastest rate in the sub-region. There is no information on helmet and seat belt wearing rates, but enforcement is judged to be moderately effective. A National Road Safety law was adopted in 2006 to harmonize road safety rules. A World Bank study has resulted in a plan to establish a Road Safety Office in the Ministry of Communication and Transport to coordinate road safety strategy, policy and action programmes, statistics, economics and promotion. A National Road Safety Coordination Council will include the Ministries of Transport, Interior, Health and Education to coordinate national strategy development and monitoring. A World Bank Road Infrastructure and Safety project worth $25 million is being implemented.

Following a Road Safety Audit of the South East Europe Core Regional Transport Network, a Road Safety Strategy has been drafted and there is a proposal for laws and regulations to implement mandatory audits. A draft road safety manual and a standardized set of audit procedures have been prepared.

Bulgaria

The fatality rate is fairly high, but the growth in deaths has been only 10% over the 1997 to 2007 period. However, the situation is worsening with deaths rising by 5% 2007-2008. Key risk factors and crash circumstances are speeding, lack of seat belt wearing, new and unlicensed drivers, residential areas, hours of darkness, single vehicle crashes, head-on collisions, old vehicles and poor road infrastructure. Legislative action has been taken for instance on compulsory use of child restraints, licence deprivation and a points system for offenders. A speed control network has been established and a National Strategy for Preservation of Children's Life and Health has been implemented. More action is needed on speed, seat belt use, raising awareness, drink-driving, local authority action, and working with the media. A National Road Safety Strategy for the next ten years is to be developed. There is no information on helmet and seat belt wearing rates, but enforcement is judged to be moderately effective. There are road safety audits for major new road construction projects and for existing roads.

Croatia

The Ministry of the Interior proposed a National Road Traffic Safety Programme that was accepted by the Government of the Republic of Croatia in 1994. The programme is continuing and in the context of negotiations on accession to the European Union, both the directives and the guidelines binding Member States to improve road traffic safety are being implemented. In 2008 deaths were 7% above the 2007 level, but in the previous ten years deaths fell by 13% despite increasing traffic. The aim is to reduce deaths per 100,000 population to 10 from 13.8 by 2010. Deaths involving alcohol are very high at 30% despite enforcement being judged to be quite effective. Seat belt wearing is low, only 45% and there is no information on helmet use. There are road safety audits for major new road construction projects and for existing roads.

Montenegro

Both the numbers of deaths and the rate have increased in Montenegro over the last few years, and the rate at 204 per million population is much higher than in the other

countries in the sub-region. This is attributed to rising traffic, poor infrastructure, poor driver training, lack of enforcement, poor driver behaviour, and low vehicle standards. Action programmes include infrastructure measures, increased enforcement, banning import of sub-standard vehicles, and improved road safety education. A National Road Safety Strategy is being prepared, new campaigns are being launched, and a EuroRAP project is being planned. There is no information about the percentage of alcohol related deaths, or seat belt and helmet wearing. Enforcement is judged to be fairly effective. There are road safety audits for major new road construction projects and for existing roads.

Romania

The fatality rate is quite high at 130 per million population, but deaths have fallen slightly between 1997 and 2007. The proportion of deaths attributed to vulnerable road users is amongst the lowest in the EU. There is a drink-drive limit of zero that is well enforced, and the proportion of deaths involving alcohol is only 2%. Seat belt wearing is high for front seat occupants, but low in the rear and enforcement is only fair. Helmet wearing rates are high, though lower for passengers than for drivers, but enforcement is only moderately effective. A major effort has been made to improve emergency response services with integration of the police, fire and ambulance services into a new emergency medicine system. There are mobile intensive care units, helicopter evacuation, and full emergency care rooms in hospitals. There are road safety audits for major new road construction projects and for existing roads.

Serbia

There has been a downward trend in road traffic deaths from 1,700 in 1991 to 892 in 2008. The rate per 100,000 population in 2007 was 98, higher than in most Western European countries, but lower than in most countries of South Eastern Europe. The key risks are speed which accounts for 58% of deaths, lack of seat belts, alcohol and road infrastructure deficiencies. There are road safety audits for major new road construction projects and for existing roads.A new model of traffic policing is in place with use of speed control devices and traffic accident investigation vehicles, and first aid training. New traffic law is being introduced with a coordinating body for traffic safety that includes a Traffic Safety Agency, Traffic Regulation innovation, and a penalty points system. Problems for road safety in Serbia are due to the lack of priority in the past and the fact that the traffic police were the only road safety stakeholder and lacked training. There is no national road safety strategy in place. The drink-drive limit is quite well enforced and 6% of deaths involve alcohol. Enforcement is poor for helmet and seat belt wearing. About half of front seat occupants are belted but less than 5% in the rear.

The Former Yugoslav Republic of Macedonia

The fatality rate is one of the lowest in the sub-region, and deaths fell by 9% between 1997 and 2007. Pedestrian deaths account for a third of the total. The national strategy for road safety has a clear vision to reduce victims in traffic by 50% to 2014 and zero for children. The key risk areas are: unsuitable road and road infrastructure maintenance; poor legislation and compliance with the law; improper behavior of road users; speeding; not giving way; driving under influence of alcohol and other illicit substances; non-application or low level of application of passive safety equipment. Main aims of National strategy for road safety are to: decrease crashes caused by speeding, not giving way, alcohol and drug use; improve restraint use; protect vulnerable road users; provide safe road environment; improve emergency care; improve law enforcement; coordinate all activities. Seat belt and helmet wearing rates are very low, and there is little enforcement of helmet laws and only fair enforcement of seat belt wearing. There are road safety audits for major new road construction projects and for existing roads.

Turkey

Adjusted for the 30 day definition and using the WHO modelled figure (see Table 1A), the fatality rate is about average for the sub-region, and deaths fell by 15% between 1997 and 2007. The drink-drive limit is well enforced and alcohol related deaths are only 2% of the total. The helmet law is less well enforced and only 12% of riders wear helmets. Seat belt wearing is high on rural roads but low in urban areas, despite enforcement being judged to be good. The Turkish national Police have coordinated a project to strengthen enforcement in coordination with infrastructure, emergency care and education activities. Targets were set for enforcement in the areas of speed, seat belts, drink-drive, helmets, heavy vehicle checks and red light violations. A GIS system allows police information to be mapped digitally which enables focusing law enforcement on hot spots and rehabilitation of black spots in coordination with relevant authorities. There is a highway upgrading programme to carry out road safety audits, reduce black spots and improve maintenance.

2.5.5 Presentations from international experts

Representatives from other European countries with good road safety records described the approach to road safety policy in their countries, and there were presentations on road safety measures and on the work of victim organizations.

In Italy, road safety is the responsibility of the Department of Inland Transport in cooperation with Ministries of Internal Affairs, Health, Education, and Industry and Economic Development, together with stakeholders, universities and research centres. The National Annual Plan for Road Safety sets the structure for action to be taken at legislative and financial level, allocates responsibilities below national level, plans infrastructure improvements, and identifies targets and indicators. Policy addresses behaviour through campaigns and enforcement, vehicle safety and infrastructure.

The Dutch Road Safety programme was described. In the last ten years deaths fell by 30% to 750 in 2008 which was the target set for 2010 in 2004. There was a decrease in accidents across all ages, in particular amongst the elderly and child pedestrians, and on 50km and 80km roads. Risk factors are still alcohol and drugs, speed, and 50km and 80km roads, scooters, mopeds and motorcycles, young drivers, cyclists, night time accidents. A new Strategy for 2020 has a target of 500 deaths. It was produced after a consultative process involving all levels of Government, and stakeholders. It will continue the successful approach of cooperation, sustainable safety, and an integrated approach. Key measures will target vulnerable road users, alcohol and drug use, and innovative vehicle technology. The programme will be monitored and updated every two years.

The road safety programmes in France and in Great Britain were presented as in Minsk. Presentations similar to those in Minsk were also given on the use of the WHO Good practice manuals, and on the International Road Assessment Programme. The work of the European Federation of Road Traffic Victims, that campaigns for greater justice and recognition for road crash victims and to provide assistance to them, was described. Amongst their aims are better trauma management and rehabilitation, recognition of the effect on the bereaved, fair and just criminal proceedings, and strict liability laws for vulnerable road user protection.

2.6 Conclusions and Recommendations of the Seminar and Conference

The participants recognized that road traffic casualties are still dramatically affecting their countries and that road safety is not just a transport issue, but it is also a health, social, financial and economic hazard, negatively impacting on their development. The Seminar and the Conference provided an opportunity to discuss the problem of road

safety in Eastern and South Eastern Europe and Central Asia and to learn about the most recent developments using a multidisciplinary approach.

The common understanding was that improving road safety can be seen as a social contract in which all the participants from both public and private sectors should be accountable for their respective actions and failures. While attention should mainly focus on road crash prevention measures, post-crash measures are equally important to ensure minimal loss of life and trauma of persons engaged in crashes. To this end close cooperation and coordination among relevant agencies such as police, ambulance rescue services, fire fitting and hospitals are indispensable.

Noting that the absolute and universal value of the human person integrity and life constitutes a basic element of human rights, the participants underlined the responsibilities of road users, as members of the community, to behave according to the road traffic rules and respect each other. Taking stock of the increasing importance of tourism as an economic development factor, the participants felt that safe roads may present an additional advantage in attracting tourism in south-eastern Europe.

In the framework of international collaboration among government, business and civil society on an action oriented plan to upgrade road safety and support victims and their families, the participants noted that religious institutions could play a key role and that this represents an area that should be explored.

The following set of Recommendations to address the road safety problem through collective efforts and cooperation at all levels were adopted at both the Minsk and Halkida events:

Recommendations:

1. The lessons learned during the seminar, especially about road safety initiatives and practices that can help Governments to set and achieve road safety targets at relatively low cost and within a short time frame, should be disseminated to the other government authorities involved in road safety in the countries participating in the seminar (Ministries of Interior, Transport, Health and Education).

2. Quantifying the road safety problem through good national statistics and research is an essential first step in establishing campaigns to improve road safety. Countries should therefore adopt/improve methodology for data collection and set-up/improve the existing national computerised databases on road crashes. To this end, UNECE Glossary and database on road traffic accidents would be an appropriate basis.

3. Governments have a primary role to play in creating safe road traffic conditions through legislation, enforcement and education and they also need to optimise their expenditures. Reducing the number of road casualties leads to reduced costs for the Governments and the society. It is recommended to countries that have not set road safety targets yet, to begin to analyze and model data in order to produce evidence-based casualty reduction targets. In addition, data should be collected in order to have indicators in terms of different road safety problems or groups of road users (for example, separate targets for drinking and driving, use of seatbelts and child restraints and wearing of helmets). When setting targets, effectiveness should prevail on any other consideration, to the maximum extent possible.

4. Political will and commitment are key in improving road safety and these are needed to secure funds and address properly the main priorities in road safety, such as improving the infrastructure, education and enforcement which are high-cost measures.

5. International cooperation and knowledge-sharing in road safety should be further strengthened taking into account the needs of low and middle income countries; to this end, as a first step, a number of advisory missions should be conducted after the seminar upon request of countries in order to assess their road safety problems and help them develop targets in a bilateral setting.

6. It is recommended that Governments actively participate in the decision-making process concerning the UN Conventions on Road Traffic and on Road Signs and Signals, 1968, which takes place in the Working Party on Road Traffic Safety (WP.1). This would also provide for an appropriate forum where individual member countries learn from each other's experience and are able to compare their progress in achieving the targets with other countries in the region.

7. The results of the seminar should be included in the final report of the project, which should be communicated to the Global Ministerial Conference on Road Safety to be held in Moscow, Russian Federation, 19-20 November 2009, and further promoted as guidelines to be followed by countries in all the United Nations regional commissions' geographical areas.

2.7 Discussion of the outcome of Seminar and Conference and their contribution to the UNDA targets project

These two events were aimed at assisting UNECE countries to meet the objective of the UNDA project "Setting Regional and National Road Traffic Casualty Reduction Targets" which is to assist governments in low and middle income countries to develop regional and national road safety targets and to exchange experiences on good practices for achieving these targets by 2015. They focused on the South Eastern and Eastern countries in the UNECE region because these countries have the highest rates of deaths in road traffic crashes in the region, and many of them are experiencing growing road safety problems due to rapid motorisation. In addition, many of the countries have experienced political changes that require a reassessment and reorganisation of the way that road safety is managed.

It was notable during both events that the same key risk factors are common to all countries: speed, drink-driving, lack of use of seat belts and helmets, and infrastructure inadequacies. The latter in particular was highlighted by many participants. The needs to increase enforcement of traffic law and to raise awareness of road users of road traffic risk were also common themes.

There were some differences in the organization of road safety. In the countries that attended the Minsk seminar road safety was usually the responsibility of the Traffic Police, whose primary focus was on enforcement and education. The countries of South Eastern Europe had more diverse organization with police, Interior Ministry and Transport Ministry involvement. Although some countries were using a more cooperative and collaborative approach, many in both regions were not fully committed to partnership working across all levels of Government and society.

Target setting was being considered or had already taken place in some countries, but an integrated approach with empirically derived evidence-based targets and a strategy for delivery was usually not yet in place.

The Seminar and the Conference provided the participants with an important opportunity to hear about the latest thinking in road safety. The recommendations of the OECD report "Towards Zero" that advocates a Safe System approach and target setting, together with good road safety management practice, should help countries to reassess their road safety practice and take up these new ideas. The experience of countries that

have already made good progress on road safety and the ways that they approach road safety policy also gave the participants important insight into the changes that they will need to implement.

Of course both events, in the time available, could not go into great depth, and it is always open to question how much of an impact such events can have when participants return to the pressures and constraints of their countries' problems and resources. It is the start of a process of change and development, but it would be unrealistic to expect that well developed targets and strategies will be set just as a result of these discussions. However, there is a clear willingness to tackle the road safety problem, and to use targeted methods to raise the performance. The acknowledgement that road safety is a social, economic and development issue, and that it is not acceptable to continue the remorseless loss of life that can accompany motorization, is a positive step forward that should lead to results.

The Global Ministerial Road Safety Conference in November was a key event to raise the profile of road safety and to brief politicians who attended the Conference on the good practice solutions that should be implemented to reduce road traffic deaths and injuries. These solutions were the focus of discussions in Minsk and Halkida, however, there will need to be follow-up activity and technical assistance will be required by many countries if they are to achieve the potential road safety improvements that adoption of best practice could bring. Most importantly, road safety management organization and clarification of responsibilities and accountability will need to be addressed. Road assessment programmes could make significant contributions to effective infrastructure measures by providing information on high risk roads and the measures needed to save lives.

Participants in the two events organized by the UNECE under the project expressed the need to receive more practical training on specific road safety issues. To answer this request and in recognition of the benefits of knowledge transfer from countries with a good road safety record, a seminar-cum-study tour in Sweden was arranged on 25-27 November 2009, in cooperation with the Swedish Road Administration (SRA), which is a Government Agency.

The Ministry of Transport of the Kyrgyz Republic requested UNECE to assist Kyrgyz authorities in organizing a national road safety seminar under the project; this event took place on 1-3 December 2009, in Bishkek.

2.8 The seminar-cum-study tour in Sweden

The seminar-cum-study tour aimed at transferring practical know-how to experts involved in road safety from the nine UNECE low and middle income countries which they represented: Albania, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, the Former Yugoslav Republic of Macedonia, Turkey and Ukraine. The participants were representing Ministries of Interior, of Transport, road administrations and, for the first time, two non-governmental organizations were present from Georgia and the Republic of Moldova.

The programme included comprehensive presentations from the hosts, the Swedish Road Administration, which is the Lead Agency on road safety in Sweden. They have introduced the basis of the well-known *Vision Zero* and the importance of the holistic approach in improving road safety. Reliable statistical data are available from the 1930ies and the creation of a road safety culture has started very early in the middle of the 20th Century. One important aspect is the collaboration with the private sector to determine the companies to be road safety champions; road safety is a pre-condition for the contracts concluded by the SRA (for example, if SRA hired a bus for the field visits, they would include in the contract that the bus must have alcolock, seat belts etc.)

The seminar-cum-study tour included visits to the Swedish Motor Vehicle Inspection Company, Traffic Management Centre and some infrastructure objectives. Representatives of SENSYS and of Volvo gave comprehensive presentations of the traffic control devices and the *Volvo 2020 Vision* respectively. In this vision, no one will be killed in a Volvo car by 2020, thanks to innovative technologies and devices the cars will be equipped with.

Apart the increased understanding by the participants of the practicalities of road safety ("how to do" instead of "what to do") the most important achievement of the seminar-cum-study tour was that SRA decided to continue assisting some of the participating countries in a bilateral framework. Participants also agreed to continue exchanging information on good practices between them.

2.9 The national seminar in Kyrgyzstan

An advisory mission to Bishkek, Kyrgyzstan, was undertaken on the request of the Ministry of Transport and Communications, to assist in organizing a national seminar and advise on development and enforcement of national road safety strategy, on 1-3 December2009.

The seminar was organized at the Ministry of Transport and Communications, Kyrgyzstan, for more than 30 participants representing 11 agencies related to the road safety, both public and private. Concerning the subjects UNECE had an innovative approach and cooperated with the Turkish Government and the Global Road Safety Partnership (GRSP), which contributed, each, with a highly qualified speaker on vehicle technical inspections and on data collection respectively. UNECE acted as moderator and made presentations on the Conventions on Road Traffic and on Road Signs and Signals, 1968, and on global and regional road safety initiatives, goals, targets and indicators.

The representatives of Kyrgyzstan briefed on road safety situation and it appeared that they have elaborated a national strategy, have established a multi-disciplinary agency under the Prime-Minister, the National Commission for the Prevention of Traffic Accidents. The road accident fatality in Kyrgyzstan is increasing at a rate of 19% annually. There are no non-governmental organizations active in road safety in Kyrgyzstan.

The main problems mentioned by the Kyrgyz experts in enforcing the strategy are common to all low and middle income countries: lack of funds and coordination, bad infrastructure conditions worsened by specific harsh climate, lack of specialized training.

Apart of the very active participation of the experts, one of the main achievements of the seminar was that the representative of Turkey invited five Kyrgyz senior experts involved in road safety to Turkey for a training focusing on issues which are within the competencies of the Ministry of Transport: infrastructure, training of professional drivers, and technical inspection of vehicles. The representative of GRSP also offered the support of her organization in setting a non-governmental organization to complement public efforts in road safety.

2.10 The Eurobasket declaration on road safety

As a follow-up to the cooperation with the Hellenic Basketball Federation and the declaration signed by the Greek basketball champions in Halkida, this initiative was taken up at the European level by the International Basketball Federation (FIBA) and FIBA Europe, and was supported by the Polish Authorities. As a result, the "Respect of the rules" declaration was endorsed and signed by FIBA, UNECE and the Polish

Government during a joint press conference held in Katowice, Poland, on 17 September 2009, on the occasion of the Eurobasket 2009 tournament.

The Eurobasket 2009 Declaration for Road Safety – "because a true champion respects the rules of the game!" – draws a parallel between basketball and road safety stating that non-respect for rules results in unfairness, on the road as on the court. The consequences of not following the rules on the road are, however, much more severe and sadly, many people do not play by the rules when they get behind the wheel.

In an effort to reach out to people's everyday lives, the Declaration offers a new perspective on road rules. It tries to counter the "avoid getting caught" attitude with one of respect for fellow road-users. It also summarises seven simple rules which have proven beyond any doubt, time and time again, that they save lives:

- Do NOT use mobile phones while driving
- Do NOT drive whilst under the influence of alcohol and/or drugs
- Stay within the speed limit
- Share the road safely with pedestrians and cyclists
- Wear seatbelts - every day, every time, both in the front and back of the vehicle
- Use approved child restraint systems
- Wear approved helmets while riding two-wheelers

SECTION 3 ACTIVITIES IN OTHER UNITED NATIONS REGIONAL COMMISSIONS

All the United Nations regional commissions have held regional seminars to encourage target setting. They have resulted in clear support for targeted action, demonstrated by agreed Declarations for future progress. Two regions have produced detailed checklists as an aid to implementation of measures to achieve the targets.

3.1 Implementation of the targets project in the UNECLAC region

UNECLAC, which is headquartered in Santiago, Chile, is one of the five regional commissions of the United Nations. It was founded with the purpose of contributing to the economic development of Latin America, coordinating actions directed towards this end, and reinforcing economic ties among countries and with other nations of the world. The promotion of the region's social development was later included among its primary objectives.

The 33 regional countries of Latin America and the Caribbean are member States of UNECLAC, together with several North American, Asian and European nations that have historical, economic and cultural ties with the region, reaching a total of 44 member States. Nine non-independent territories in the Caribbean are associate members of the Commission.

Table 9 UNECLAC countries[1] fatalities and fatality rates 2007

Country	Population	Reported[2] Fatalities	Fatality Rate	Adjusted fatalities[3]	Fatality Rate	Income Group
Argentina	39,531,115	5,281	134	5,427	137	M
Bahamas	331,278	48	145	48	145	H

Barbados	293,891	36	122	36	122	M
Belize	287,699	65	226	65	226	M
Bolivia	9,524,568	1,394	146	1,594	167	M
Brazil	191,790,929	35,155	183	35,155	183	M
Br Virgin Is	23,000	5	217	5	217	H
Chile	16,634,760	2,280	137	2,280	137	M
Colombia	46,155,958	5,409	117	5,409	117	M
Costa Rica	4,467,625	688	154	688	154	M
Cuba	11,267,883	964	86	964	86	M
Dominican Republic	9,759,664	1,838	188	1,838	188	M
Ecuador	13,341,197	2,341	175	2,341	175	M
El Salvador	6,857,328	1,493	218	1,493	218	M
Guatemala	13,353,911	755	56	1,968	147	M
Guyana	737,906	207	280	207	280	M
Honduras	7,106,001	1,266	178	1,266	178	M
Jamaica	10,029,683	350	35	350	35	M
Mexico	106,534,880	22,103	207	22,103	207	M
Nicaragua	5,603,190	506	90	797	142	M
Panama	3,343,374	425	127	425	127	M
Paraguay	6,127,077	854	139	1,206	197	M
Peru	27,902,760	3,510	126	6,001	215	M
Puerto Rico	3,991,000	452	113	511	128	H
St Lucia	164,924	29	175	29	176	M
St Vincent & Grenadines	120,402	8	66	8	66	M
Suriname	457,964	90	197	90	197	M
Trinidad & Tobago	1,333,272	207	155	207	155	H
Uruguay	3,339,700	145	43	145	43	M
Venezuela	27,656,832	6,031	218	6,031	218	M

Total	568,069,771	93,935	165	98,687	174	

Source: WHO Global Status Report on Road Safety, 2009. Data are unavailable from the Global Status Report for some countries in UNECLAC.
1. Excludes countries outside Latin America and Caribbean areas. 2. Adjusted for 30 day definition of a fatality. 3. WHO modelled figures

3.1.1 Seminars in the UNECLAC region

Three seminars were arranged under the UNDA Targets project for different geographical areas within the region. The first Seminar was held in Buenos Aires on 26-27 November 2008 for the countries of the Southern Cone of South America. It was sponsored by the Pan American Health Organization (PAHO)/WHO, the Inter American Development Bank (IADB) and the French Cooperation. The meeting was attended by the Chiefs of the national agencies of Argentina, Chile, Paraguay and Uruguay, and representatives of the Ministries of Transport from Brazil and Ecuador, and attendance was open to the sub-national government of Argentina, which has its own institutions and regulations, and to the NGOs and private sector. More than 50 people participated, with representatives of the national road safety agencies of the South American Cone, six national governments, ten sub-national governments (autonomous provinces of Argentina), two NGOs (one Argentinean and one Uruguayan), and the Chairman of the FIA Foundation.

The *Buenos Aires Declaration* was signed as a result of this first sub-regional seminar organized by UNECLAC; the declaration is attached to the present report as see Annex III. This document recognizes the importance of road safety for the countries, willingness to collaborate with the United Nations initiatives (including the efforts made by the PAHO/WHO), and establishes the necessity to coordinate concrete actions in road safety among these nations and to increase awareness among the population. The primary measures that the document recommends are: the creation of a sub-regional network for the discussion and interchange of information and best practice, a coordinated campaign for the MERCOSUR countries, a united operational control at the frontiers during the holiday season, and the framework for the horizontal technical cooperation (South-South cooperation). This declaration was signed by the 6 governments that attended the meeting: Argentina, Brazil, Chile, Ecuador, Paraguay and Uruguay.

The second Seminar was held in Panama City, on 27-28 May 2009 for Central American countries. The event was a joint effort of UNECLAC and the Mesoamerican Project, a regional initiative for the integration of nations of Central America, Mexico and Colombia. The seminar provided an opportunity for national agencies and officials of Ministries of Infrastructure, Transport and Health to analyze the road safety situation in this sub-region and to share experience and best practice. The meeting was also sponsored by the IADB with the support of the French Cooperation, PAHO/WHO and the Government of Chile.

The event was attended by representatives of the governments of Belize, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama. UNECLAC's recommendation about the importance of setting road traffic casualty reduction targets and the necessity to implement cross-disciplinary measures to solve the road safety problems was discussed. At the end of the seminar, these governments under the Mesoamerican Project umbrella, signed the Panama City Declaration (see Annex IV), where they manifested their willingness to implement the project's recommendations and to follow-up the cooperation in the future, sharing information and best practice among the countries in the sub-region, under a cross-disciplinary approach.

The third and last seminar was held in Georgetown, Guyana from 2-4 September 2009 for countries of the Caribbean and was organized jointly by UNECLAC and CARICOM

(Caribbean Community), CAR (Caribbean Association of Roads) with the support of the Caribbean Development Bank, IADB, PAHO, and the French Government. The seminar was attended by representatives of Governments and civil society from Bahamas, Barbados, Belize, Guyana, Jamaica, Saint Lucia, Suriname and Trinidad & Tobago. The outcome of the seminar was a regional Road Safety Declaration for the Caribbean sub-region (see Annex V).

The Declaration recognized that road traffic injuries and fatalities are a very serious problem affecting all sectors of the Caribbean region, and that they have enormous health, social and economic impacts on the whole community. The key points in the Declaration are:

- Strong support for setting targets and applying best practice measures.
- Establish a process between Government and Civil Society to set targets to reduce casualties.
- Coordinated action based on a multi-sectoral approach.
- Strong political advocacy is needed and an ongoing Road Safety Action Plan is needed and must be monitored.
- Members of CARICOM, the Secretariat and international institutions should share resources, build partnerships and encourage collaboration between various sectors to build capacity and improve data collection methods.

3.2 Implementation of the targets project in the UNESCWA region

UNESCWA comprises fourteen Arab countries in Western Asia: Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Sudan, the Syrian Arab Republic, the United Arab Emirates and Yemen. Its headquarters are in Beirut, Lebanon. UNESCWA provides a framework for the formulation and harmonization of sectoral policies for member countries, a platform for congress and coordination, a home for expertise and knowledge, and an information observatory. UNESCWA activities are coordinated with the divisions and main offices of the Headquarters of the United Nations, specialized agencies, and international and regional organizations, including the League of Arab States, the Organisation of the Islamic Conference, and the Gulf Cooperation Council.

Table 10 UNESCWA member States population, road crash fatalities and fatality rates per million population 2007

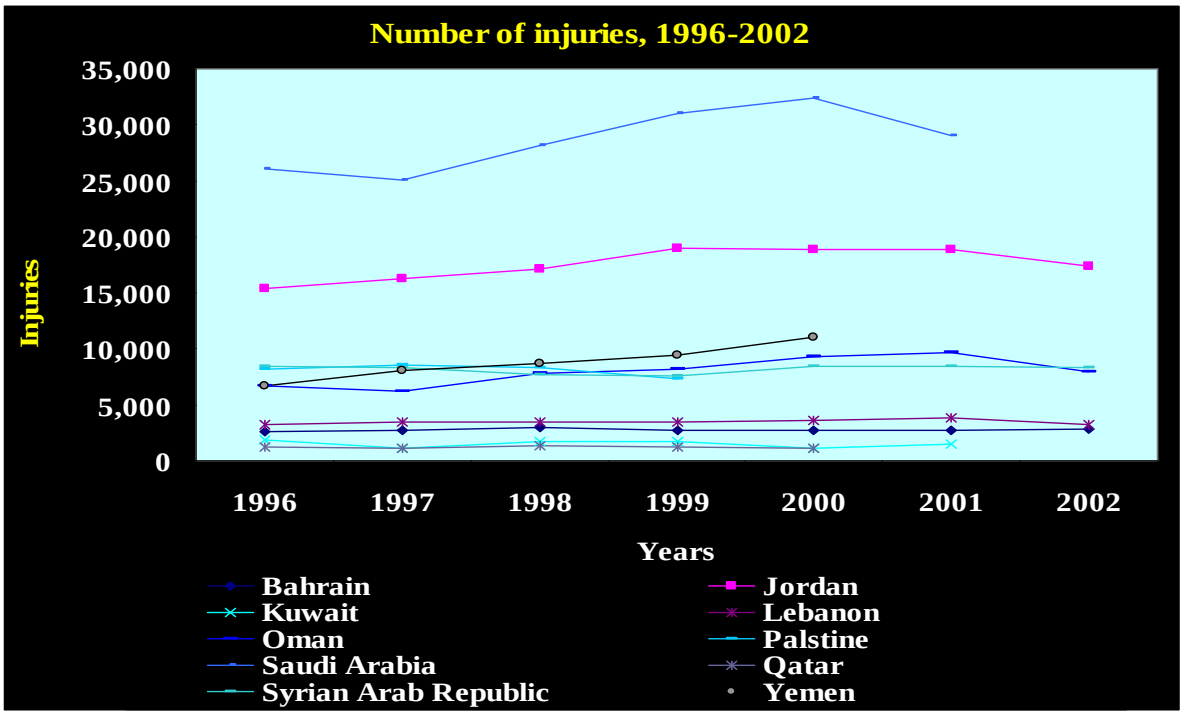
Country	Population	Reported Fatalities[1]	Fatality rate	Adjusted Fatalities[2]	Fatality Rate	IG
Bahrain	752,648	91	121	91	121	H
Egypt	75,497,913	15,983	212	31,439	416	M
Iraq	28,993,374	1,932*	67	11,059	381	M
Jordan	5,924,245	992	167	2,027	342	M
Kuwait	2,851,144	482**	169	482	169	H
Lebanon	4,099,115	536	133	1,170	285	M
Oman	2,595,133	798	307	798	307	M

Palestine	4,018,000	188*	47	896	223	M
Qatar	840,635	199	237	199	237	H
Saudi Arabia	24,734,533	6,358	257	7,166	290	H
Sudan	38,560,488	2,227	58	13,362	347	M
Syria	19,928,516	3,663	184	6,552	329	M
United Arab Emirates	4,380,439	1,056	241	1,626	371	H
Yemen	22,389,169	3,003	134	6,553	293	L
UNESCWA total	235,565,352	37,508	159	83,420	354	

Source: WHO Global Status Report on Road Safety, 2009, UNESCWA Transport and Trade Section
1. Adjusted for 30 day definition of a fatality; 2. WHO modelled number;
*: Data of 2005
**: Data of 2006

For several countries in the region the effect of the WHO modelling is to raise the number of fatalities and the fatality rates substantially, and the overall effect is to double them.

Figure 1: Selected UNESCWA member countries road safety indicators



Source: UNESCWA Assessment of Questionnaire on Road Safety sent to Member States, 2005

UNESCWA has played, with other partners, a key role in raising awareness about road safety, helping governments to design policy frameworks, publishing evidence on what works best in different settings, and putting the issue of road safety high on international political and developmental agendas. Knowing that improving road safety is a very complex phenomenon, the UNDA project seeks to make countries able to set road safety

targets and improve the existing ones. In Bahrain they already set some targets. Several countries have established road safety councils such as KSA, Jordan and Syria. The good practice measures that many developed countries have applied are needed in the UNESCWA region where some very high rates of traffic crashes occur, and to facilitate this exchange of experience is essential.

3.2.1 Workshops in the UNESCWA region

UNESCWA, in collaboration with the National Transport Authority of the United Arab Emirates (UAE), organized a two-day workshop for representatives from member States to discuss the implementation of road safety targets and review the increase in regional collaboration in this field and support road safety initiatives.

This workshop was the fourth to deal with road safety issues held in recent years in the UNESCWA region. The three other workshops dealt with the Implementation of Good Practices in Road Safety (Muscat, 28-29 November 2005), Capacity-Building of the National Focal Points of the First United Nations Global Road Safety Week (Cairo, 20-21 December 2006), and Building the Arab Mashreq Road Safety Partnership (Doha, 21-22 October 2008).

The meeting in Doha resulted in the establishment of the Middle East North Africa Partnership and the adoption of the Doha Declaration:

1. A regional road safety partnership will be established for countries in the Middle East and North African region with members from Governments, businesses, and non-governmental organisations.
2. A task force representing the different sectors will be formed to review the proposed details of the Partnership within six months. UNESCWA, GRSP, and Shell will support and facilitate the work of the task force through a secretariat.
3. The task force will validate a name for the Partnership and communicate with those interested regularly through the secretariat.
4. Suggested potential projects will be prioritised and members will be invited to partner in preferred projects.
5. Members are invited to initiate national road safety partnerships.

The targets workshop was held on 16-17 June 2009 in Abu Dhabi, the UAE. More than 75 participants from 13 UNESCWA member countries attended. Participants included Government delegates, and representatives from private sector companies and NGOs. Country Representatives came from Bahrain, Egypt, Jordan, Kuwait, Lebanon, Oman, Qatar, Palestine, Saudi Arabia, Sudan, Syria, United Arab Emirates, and Yemen. Participants also included the UNECE, UNESCAP, WHO, Educating New Zealand, the European Transport Safety Council, the FIA Foundation, the International Road Federation, the Middle East and North Africa Road Safety Partnership, the Emirates Foundation, Shell, and the Transport Research Laboratory, as well as private enterprises and academic institutions.

The objectives of the workshop were to assist low and middle income countries to develop and set ambitious but achievable regional and national road traffic casualty reduction targets for reducing road traffic deaths and injuries; to provide them with examples of good road safety practices that could help them to achieve the targets selected by 2015; to review current road safety statistics; to take appropriate measures to meet their targets, and to discuss the intervention in road safety management in member States, especially in developing countries, to achieve such goals.

In opening the workshop Mr. Nasser Saif Al Mansouri, general manager of the National Transport Authority, on behalf of Sheikh Hamdan Bin Mubarak, Minister of Public Works

and Chairman of the Board of Directors of the National Transport, welcomed all the participants and highlighted the efforts of the United Arab Emirates in the field of raising the level of traffic safety. He indicated that their objectives are to ensure the highest levels of traffic safety, to provide the best health standards, and the development of laws regulating the rights and duties of road users. These objectives will be accomplished in cooperation with strategic partners to reduce accidents and mortality rates and match with the United Arab Emirates standards.

Mr. Nabil Safwat, the Chief of the Economic Development and Globalization Division, delivered a statement on behalf of Mr. Bader Al-Dafa the Executive Secretary of UNESCWA. Mr. Safwat reviewed the regional efforts of UNESCWA to reduce losses from road traffic accidents in the region. He indicated that the developing countries are the most vulnerable to traffic accidents. UNESCWA previously issued reports and awareness programs and supervised the activities, workshops, and conferences, but the major responsibility remains on the member countries that should take the initiative and provide efforts to effectively reduce the devastating effects of road traffic accidents, and the preparation of national strategies to reduce these accidents. This requires concerted efforts of many institutions and governmental and non-governmental organizations at the national, regional and international level.

Two sessions were held on the first day to discuss issues related to the progress in setting targets and strategies in the region and to review the current data and figures. The first session on "Road Safety Management: Plans and Strategies" included presentations from UNESCWA and from representatives of the participating countries on the implementation of road safety plans. In Bahrain, there is a target to reduce fatal and serious injuries by 30% by 2016 compared with 2006, but other countries are yet to set targets. New Zealand's experience in setting targets was described as an example of good practice. A discussion followed on the assessment of progress in road safety management, and the challenges facing the implementation of road safety strategies. The importance of reliable data was emphasized since it is the backbone to setting targets and evaluating them.

On the second day, two other sessions took place to review the progress in the UNDA project and the role of the non-governmental organizations. The work of UNECE and UNESCAP on road safety and the value of harmonization through the adoption of the United Nations legal instruments on road traffic and signs and signals were presented. The European Union's ambitious target of halving the number of road casualties between 2001 and 2010 was described, and it was pointed out that although the target had led to large savings through improving road safety management in member States, only five countries are likely to meet it. The FIA Foundation representative discussed the Campaign for Global Road Safety that is calling for a decade of action to be launched in 2010.

Representatives from NGOs including the International Road Federation, and the Middle East and North Africa Road Safety Partnership, described their roles in promoting road safety.

After the presentations a discussion took place on the need to adopt road safety strategies in the region. The discussion focused on the need to involve electronic tools to monitor crashes and link directly to the database.

A round table discussion with regard to the emerging issues and recommendations was concluded, which resulted in a list of recommendations and main conclusions being presented (see Annex VI).

The meeting adopted the following **key recommendations**:

- Disseminate good practice in achieving road safety targets to the government authorities involved in road safety in the UNESCWA region.
- Ensure that member states in the UNESCWA region maintain a reliable database for road crashes.
- Set a regional (UNESCWA) target of 30% reduction on road crash fatalities for the year 2015.
- Encourage Member states to start up/activate national road safety councils and implement appropriate interventions.
- Encourage member states that have not yet set road safety targets to make efforts in order to produce evidence/based casualty reduction targets for 2015 and onwards;
- Member states should provide UNESCWA with national reports including their road safety management programmes and their plans for setting targets, for UNESCWA to prepare a report outlining regional progress and achievements in road safety to be introduced in the First Global Ministerial Conference on Road Safety to be held in Moscow during 19-20 November 2009 at which all member states should participate.
- Encourage member states to become contracting parties to the UN legal instruments related to road safety and properly implement them.
- Request UNESCWA Secretariat to continue to provide capacity building and technical support to the member states on issues in road safety and all other related subjects.

3.3 Implementation of the targets project in the UNECA region

UNECA has 56 member States; its mandate is to promote the economic and social development of its member States, foster intra-regional integration, and promote international cooperation for Africa's development.

Table 12 below shows population, reported fatalities and fatality rates, and adjusted fatalities and rates taken from the WHO Global Status Report on Road Safety. The adjusted fatalities are derived from modelled estimates that correct for under-reporting. For most African countries the difference between reported and adjusted numbers and rates is very large, reflecting the prevalence of under-reporting. Overall the effect is to increase the fatality rate almost fourfold.

Table 11 UNECA countries population, fatalities and fatality rates 2007

Country	Population	Reported fatalities*	Fatality rate	Adjusted fatalities	Fatality rate	Income group
Angola	17,024,084	2358	138	6,425	377	M
Benin	9,032,787	653	72	2,815	312	L
Botswana	1,881,504	482	256	636	338	M
Burkina Faso	14,784,291	804	54	4,595	311	L
Burundi	8,508,232	63	7	1,989	234	L
Cameroon	18,549,176	1069	58	5,206	281	M

Cap Verde	530,437	49	92	133	251	M
Central African Rep	4,342,735	565	130	1,399	322	L
Chad	10,780,571	814	75	3,696	343	L
Comoros	839,187	15	18	254	303	L
Congo	3,768,086	207	55	1,084	288	M
Dem Rep Congo	62,635,723	365	6	20,183	322	L
Egypt	75,497,913	15,983	211	31,439	416	M
Eritrea	4,850,763	81	17	2,350	484	L
Ethiopia	83,099,190	2,441	29	29,114	350	L
Gambia	1,708,681	54	32	625	366	L
Ghana	2,3478,394	1,856	79	6,942	296	L
Guinea-Bissau	1,695,043	152	90	583	344	L
Kenya	37,537,716	3,760	100	12,918	344	L
Lesotho	2,007,833	402	200	537	267	M
Liberia	3,750,261	N/A	N/A	1,235	329	L
Libya	6,160,483	2,138	347	2,497	405	M
Madagascar	19,683,358	594	30	6,641	337	L
Malawi	13,925,070	839	60	3,614	259	L
Mali	12,336,799	711	58	3,959	321	L
Mauritania	3,123,813	262	84	1,109	355	L
Mauritius	1,261,641	140	111	140	111	M
Morocco	31,224,137	3,838	123	8,850	283	M
Mozambique	21,396,916	1,952	91	7,432	347	L
Namibia	2,074,146	368	177	594	286	M
Niger	14,225,521	570	40	5,357	377	L
Nigeria	148,092,542	4,532	31	47,865	323	L
Rwanda	9,724,577	308	32	3,077	316	L
Sao Tome & Principe	157,638	20	127	52	330	L

Senegal	12,378,532	345	28	4,023	325	L
Seychelles	86,606	16	185	16	185	M
Sierra Leone	5,865,872	68	12	1,661	283	L
S Africa	48,576,763	16,113	332	16,113	332	M
Sudan	38,560,488	2,227	58	13,362	347	M
Swaziland	1,141,427	235	206	300	263	M
Togo	6,585,147	613	93	1,851	281	L
Tunisia	10,327,285	1,497	145	3,568	345	M
Uganda	30,883,805	2,838	92	7,634	247	L
United Rep Tanzania	40,453,513	2,595	64	13,886	343	L
Zambia	11,921,999	1,645	138	3,056	256	L
Zimbabwe	13,349,434	1,348	101	3,669	275	L
Total	889,820,119	77,985	88	294,484	331	

Source: WHO Global Status Report on Road Safety, 2009
*Adjusted to 30 day definition of a road traffic casualty

3.3.1 The conference and seminar in Dar es Salaam, Tanzania

UNECA organized their seminar in conjunction with the Make Roads Safe Africa pan-African conference that was held in Dar es Salaam, Tanzania, on 8 July 2009, to review the growing epidemic of road injury on the continent and to pledge support for a push to secure the proposal for a United Nations Decade of Action for Road Safety. The conference was organised by the Make Roads Safe campaign, the World Bank Global Road Safety Facility, the AA of Tanzania and the UNECA. Ministers, high level government officials and road safety activists from across Africa at the conference pledged support for a UN Decade of Action for Road Safety on their continent and around the world.

Following the conference, the UNECA, in collaboration with the FIA Foundation, convened the African Regional Road Safety seminar from 9 to 10 July 2009 on the theme "Setting Road Safety Targets: A Way Forward for Reducing Accident Fatalities by Half by 2015". The overarching objective of the seminar was to assist African countries to develop regional and national road traffic casualty reduction targets and provide them with examples of good road safety practice in setting up and monitoring these targets.

The conference and seminar were a follow-up to the African Road Safety Conference in Accra in 2007 that UNECA jointly organized with WHO, which highlighted the vital link between the promotion of road safety and the overall development objectives. The Accra Declaration (see Annex VII) that was adopted by Ministers clearly stressed the need to set measurable national targets for road safety and traffic-injury prevention, and set a target for African countries of a reduction in road traffic deaths by 50% by 2015.

More than 100 delegates attended the seminar, including the Minister of Transport of South Africa and representatives of various other ministries, private sector and the civil

society from the following African countries: Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Congo, Cote d'Ivoire, Democratic Republic of Congo, Djibouti, Ethiopia, Ghana, Kenya, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. The African Union Commission (AUC), the African Development Bank (ADB) and the following Regional Economic Communities' (RECs) secretariats took part: Southern Africa Development Community (SADC) and Economic Community for Central African States (ECCAS). A representative of the Government of the Russian Federation was also present.

In addition, the following international organizations and regional bodies participated: United Nations Economic Commission for Europe (UNECE), United Nations Environment Programme (UNEP), The World Bank, Sub Saharan Africa Transport Policy Programme (SSATP), FIA Foundation for the Automobile and society, International Road Assessment Programme (iRAP), International Forum for Rural Transport Development (IFRTD), LASER International, Global Road Safety Partnership (GRSP), Global Road Safety Facility (GRSF), Commission for Global Road Safety, Global Transport Knowledge Partnership (gTKP), Abidjan-Lagos Corridor Organisation (ALCO), , Central Corridor, Walvis-Bay Corridor Group, Fleet Forum, Arrive Alive, Monash University (South Africa) and Total.

Participants shared best practices on a wide range of topics including: speed control, driving while under the influence of alcohol, pre-hospital and emergency trauma care, rural road safety, infrastructure, education, use of manuals etc. The main objective is to set time-bound and achievable targets to be mainstreamed in development programmes, with legal backing, and adequate and sustainable financial resources. This requires a multi-sectoral approach that brings together all stakeholders including professionals from the transport, health, law enforcement and education sectors, as well as the private sector and civil society.

The seminar was organised in six plenary sessions and two breakout sessions. Four topics were on the agenda:

(i) Follow up to the Accra Conference

After a presentation of the Accra Road Safety Conference recommendations by UNECA, representatives of South Africa and Burkina Faso shared with the participants, the implementation status in their respective countries. It emerged from the discussion that some countries had made progress towards implementing some of the recommendations. In particular, participants noted the systematic approach adopted by South Africa as well as efforts by Burkina Faso that were yielding positive results. However, it appeared that many countries on the continent have not adequately developed performance indicators to enable them measure the progress made in a quantifiable manner. In addition, while some countries have legislations establishing lead road safety agencies, many others have not completed the process of putting such agencies in place.

(ii) Case Studies

The six case studies undertaken by UNECA in Cameroon, Ethiopia, Morocco, Niger, Tanzania and Zambia on the road safety situation were presented. Kenya also made a presentation on the Northern Corridor. The presentations provided an opportunity for participants to share experience and good practices which could be duplicated in other countries. Issues presented included: the road safety situation of the countries with an analysis of the strengths and weaknesses of different aspects such as national policies, institutions, funding, human capacity, and health issues like post-accident care (first aid). Some national road safety targets and indicators together with recommendations were proposed by the presenters with the view to improving the road safety situation.

(iii) Setting road safety targets

Under this agenda item, presentations were made by representatives of AUC, UNECA, and UNECE. The AUC presented its vision on road safety in Africa and UNECA presented a framework for proposed performance indicators to measure progress towards achieving the recommendations of the Accra Road Safety Conference. UNECE presented the road safety situation in general and experiences in setting targets. A presentation was also made on the OECD report on setting and achieving ambitious road safety targets.

In the discussion that followed, it was noted that, with the exception of a few countries, progress in implementing the recommendations of the Accra Declaration has generally been slow. However, it was difficult to quantify the progress that has been made because of lack of verifiable performance indicators. In that regard, participants recommended that the framework provided by UNECA be adopted by member States as a tool for assessing the status of their implementation of the Accra Recommendations. It could also serve as a tool to assess improvements in the road safety situation of member States, notably towards achieving the target of reducing fatalities by half by 2015. It was noted that the framework is adaptable to the specificities of member States and provides the flexibility for them to develop additional indicators as necessary.

(iv) Breakout Sessions

Two breakout sessions discussed the performance indicators proposed by UNECA to monitor progress in implementing the recommendations of the Accra Declaration. In that regard, proposals were made on ways of improving the framework including amendments to some of the indicators and suggestions of new ones. The first session covered the following issues: road safety management; data management; road safety strategies and targets; road user behaviour; use of WHO manuals; road safety education; fleet safety and fleet management; driver training and testing; and law enforcement. The second breakout session focused on infrastructure; vulnerable road user safety; rural road safety; vehicle safety; and emergency care.

The key message from the sessions was that the recommended indicators were not exhaustive, and countries could consider developing further indicators in line with their specific requirements. It was also noted that the outcome of the sessions should contribute to Africa's common position for the Moscow Ministerial Conference. In addition, it was stressed that the targets set at Accra should lay the foundation for Africa's contribution to the proposed Decade of Action (2010-2020) and in setting the agenda for action towards the Decade.

Information on preparations for the Moscow Conference was shared with participants, and South Africa proposed a framework for Africa's preparations for the conference, including the development of a framework and road map. Participants were urged to encourage their Ministers to participate actively in the conference.

The following **recommendations** were adopted:

1. The UN Global Ministerial Conference on Road Safety to be held in Moscow from 19-20 November 2009 will debate the proposed "Decade of Action" on road safety. For Africa's needs to be taken into consideration it is necessary to put in place a framework for effective participation. In that regard, there is need to establish a Working Group comprised of UNECA, AU, and AfDB in collaboration with member States and RECs.
2. The framework provided by UNECA, (see Annex VIII), should be adopted as a

tool for assessing the status of implementation of the Accra Recommendations, as well as improvements in the road safety situation of member States, notably towards achieving the target of reducing fatalities by half by 2015. UNECA was requested to take the lead role in further developing the framework and in monitoring and evaluating the progress made.

3. Member States should undertake surveys to establish their baseline situation in relation to performance targets. They should also organize mid-term reviews to ensure effective monitoring of progress in the implementation of the Accra Declaration.

4. Member States and RECs should harmonise their road safety data to ensure comparability.

3.4 Implementation of the targets project in the UNESCAP region

There are 53 member States and 9 Associate members of UNESCAP, a highly diverse group of countries. It is estimated that the number of deaths from road accidents in Asia is about 700,000 per year, accounting for more than half of the world's road fatalities.

By 2020 it is estimated that two thirds of the world's road fatalities will occur in this region. Together, China and India accounted for more than half of the reported number of road fatalities in the UNESCAP region in 2007.[8] In China, however, the number of road fatalities has been decreasing since 2004.

Since the 1990s, concern has mounted over the rapid increase in the number of road deaths, particularly as many developing countries have entered a phase of rapid motorization. Today, more than 90 per cent of road traffic deaths occur in low- and middle-income countries. It has been recognized that many road accidents can be avoided and that road safety is essentially a development issue for many countries. The average economic cost of road accidents has been estimated at between 1 and 3 per cent of gross national product.[9]

Motorization rates range widely in the UNESCAP region (the number of private cars per 1,000 persons ranges from 3 to 618). Two- and three-wheelers constitute more than two thirds of all motorized vehicles in Bangladesh, Cambodia, Indonesia, the Lao People's Democratic Republic, Myanmar, Nepal, Sri Lanka, Thailand and Viet Nam. However, the comparatively larger impact of road accidents on vulnerable groups in UNESCAP developing countries is not due merely to a different vehicle mix; it is also a systemic issue in which accidents disproportionately impact on lower income groups and younger people.

The global vehicle population has topped 1.3 billion; in Asia, the total was 569 million (43 per cent of the global population) in 2007. The vehicle population in China reached 160 million in 2007, and China has become the second largest automobile market and third largest automobile manufacturing country in the world.[10]

In many parts of developing Asia, encroachment onto the right-of-way is a common problem. After a road is developed, many people move in looking for business opportunities, thereby creating ribbon development along the roads. Pedestrians,

[8] Based on data from the World Health Organization (WHO), *Global Status Report on Road Safety: Time for Action* (Geneva, WHO, 2009), table A2.

[9] Ibid., p. 2.

[10] Wei Zhang and others, "Road safety in China: challenges and opportunities", Report No. UMTRI-2008-1, Transportation Research Institute, University of Michigan, 2008.

bicycles, pushcarts, motorcycles, cars and trucks compete for road space and thus create serious safety problems.

The nature of road safety issues in UNESCAP developing countries differs significantly from that in developed countries. In Asia, most of those killed or injured in road accidents are vulnerable road users, such as pedestrians and motorcyclists. In South Asian countries, typically more than 50 per cent of all road fatalities are pedestrians. In East Asian and South-East Asian countries, more than two thirds of the victims are motorcyclists. In contrast, in North and Central Asia the mix in terms of casualties is similar to that of members of the Organization for Economic Cooperation and Development (OECD). All the developing UNESCAP countries have higher fatality rates than OECD countries.

According to the most recent updates in the Asian Highway Database, which contains data for 20 countries, a total of 6,284 fatalities and 35,131 accidents were reported on the Asian Highway (for 2008), indicating approximately one fatality per six reported accidents. Among the countries included in the database, India, Uzbekistan and the Islamic Republic of Iran (in descending order) have the highest number of reported fatalities.

Overall, in terms of numbers of deaths, Asia has the worst road safety record in the world with over half a million deaths each year. In support of the UN General Assembly Resolutions on Global Road Safety, the UNESCAP Ministerial Declaration on improving Road Safety in Asia and the Pacific was adopted in Busan in November 2006 (see Annex IX). The Resolution recognized that road safety is a policy issue of major concern and resolved to save 600,000 lives over the period 2007 to 2015, and invited members to develop the Asian Highway as a model of road safety. UNESCAP Secretariat aims to promote regional cooperation for improving road safety, in particular building capacity for setting and achieving ambitious road safety goals and targets, in line with the Ministerial declaration of 2006.

Table 12 UNESCAP countries population, income, and number of registered vehicles

Country	Population	GNI per capita 2007 US$	Income group	Registered vehicles
Afghanistan	27,145,275	319	L	731,607
Australia	20,743,179	35,960	H	14,774,921
Bangladesh	158,664,959	470	L	1,054,057
Bhutan	658,479	1,770	M	35,703
Brunei Darussalam	390,056	30,580	H	304,432
Cambodia	14,443,679	540	L	154,389
China	1,336,317,116	2,360	M	145,228,994
Cook Islands	13,325	13,098	H	10,692
Fiji	838,698	3,800	M	78,833

India	1,169,015,509	950	M	72,718,000
Indonesia	231,626,978	1,650	M	63,318,522
Iran (IR of)	71,208,384	3,470	M	17,000,000
Japan	127,966,709	37,670	H	91,378,636
Kiribati	95,067	1,170	M	16,000
Lao PDR	5,859,393	580	L	641,081
Malaysia	26,571,879	6,540	M	16,825,150
Maldives	305,556	3,200	M	33,807
Marshall Islands	59,286	3,070	M	2,487
Micronesia	111,117	2,470	M	4,217
Mongolia	2,628,840	1,290	M	161,989
Myanmar	48,798,212	281	L	1,045,105
Nauru	10,152	7,842	M	—
Nepal	28,195,994	340	L	617,305
New Zealand	4,178,525	28,780	H	3,189,131
Pakistan	163,902,405	870	L	5,287,152
Palau	20,314	8,210	M	5,530
Papua New Guinea	6,331,010	850	L	59,645
Philippines (the)	87,960,117	1,620	M	5,515,576
Republic of Korea	48,223,853	19,690	H	18,213,228
Samoa	187,023	2,430	M	15,903
Singapore	4,436,281	32,470	H	851,336
Solomon Islands	495,662	730	L	10,000
Sri Lanka	19,299,190	1,540	M	3,125,794
Thailand	63,883,662	3,400	M	25,618,447
Timor-Leste	1,154,775	1,510	M	26,649

Tonga	100,336	2,320	M	2,226
Tuvalu	10,530	2,441	M	906
Vanuatu	226,180	1,840	M	15,461
Viet Nam	87,375,196	790	L	22,926,230

Source: WHO Global Status on Road Safety, 2009; common member countries of UNECE and UNESCAP are excluded

Table 13: UNESCAP Countries road traffic fatalities and rates per million population 2007

Country	Reported Fatalities[1]	Fatality rate	Adjusted Fatalities[2]	Fatality Rate
Afghanistan	1,779	390	10,593	390
Australia	1,616	780	1,616	78
Bangladesh	4,108	126	20,038	126
Bhutan	111	144	111	169
Brunei Darussalam	54	138	54	138
Cambodia	1,668	121	1,749	121
China	96,611	165	220,783	165
Cook Islands	6	450	6	450
Fiji	59	70	59	70
India	105,725	168	196,445	168
Indonesia	16,548	162	37,438	162
Iran (IR of)	22,918	358	25,491	358
Japan	6,639	50	6,639	52
Kiribati	7	74	7	74
Lao PDR	656	183	1,075	183
Malaysia	6,282	236	6,282	236
Maldives	10	183	56	183
Marshall Islands	1	17	1	17
Micronesia	2	144	16	144
Mongolia	562	193	562	214
Myanmar	1,638	234	11,422	234

Nauru	1	99	1	98
Nepal	962	151	4,245	150
New Zealand	423	101	423	101
Pakistan	7,234	253	41,494	253
Palau	3	148	3	148
Papua New Guinea	308	142	901	142
Philippines (the)	1,185	200	17,557	200
Republic of Korea	6,166	128	6,166	128
Samoa	19	128	24	128
Singapore	214	48	214	48
Solomon Islands	19	169	84	169
Sri Lanka	2,334	135	2,603	135
Thailand	12,492	196	12,492	196
Timor-Leste	49	161	186	161
Tonga	7	70	7	70
Tuvalu	1	95	1	95
Vanuatu	7	186	42	186
Viet Nam	12,800	161	14,104	161
TOTAL	311,224	83	640,990	170

Source: WHO Global Status on Road Safety, 2009; common member countries of UNECE and UNESCAP are excluded

1. 30 day definition; 2. WHO modelled figures

The WHO modelled figures significantly increase the number of fatalities in several countries in this region, resulting in the overall total being doubled.

3.4.1 Road safety meetings in the UNESCAP region

There have been five Expert Group meetings in Bangkok on improving road safety on the Asian Highway in May 2006, June 2007, October 2007, October 2008 and September 2009. The meeting in June 2007 drew up a list of Road Safety goals, targets and indicators for 2007-2015 that included seven goals directed towards achieving the target that was agreed by Ministers in Busan. The 2008 meeting focused on targets and engineering and agreed a comprehensive list of conclusions and recommendations.

3.4.2 Major conclusions and recommendations

The main conclusions and recommendations of the September 2009 Expert Group Meeting are:

1. The Meeting encouraged UNESCAP members to include adequate road safety components in all road projects, and to initiate dedicated road safety projects where

appropriate. The Meeting encouraged delegates to consider the existing best practices in terms of separation of different types of traffic, such as exclusive motorcycles lanes and use of physical centre dividers.
2. The Meeting called on UNESCAP members to consider improving their data collection and reporting systems and noted the important examples of progress reported by some countries.
3. The Meeting suggested systematic sharing of experiences with regard to the safe systems approach and special engineering measures to improve road safety as suggested in the Vision Zero approach of the Swedish road administration.
4. The Meeting noted with interest the successful Helmet for Kids programme of the Asian Injury Prevention Foundation in Viet Nam.
5. The Meeting agreed that UNESCAP road safety goals, targets and indicators would provide useful guidelines for member countries in considering and developing their national road safety strategy, policy, goals and targets.
6. The Meeting acknowledged that harmonized definitions of various terms including fatality, injury, serious injury related to road safety may enhance quality and comparability of road safety data among member countries.
7. The Meeting suggested that experts from developed countries be invited to future expert group meetings on road safety to share their experiences on successful implementation of road safety programmes.
8. The Expert Group Meeting on Improving Road Safety, held in Bangkok from 2 to 4 September 2009, recommended that the UNESCAP road safety goals, targets and indicators, as contained in the table below, be considered by the first session of the Forum of Asian Ministers of Transport to be held in Bangkok in December 2009.

3.4.3 Road Safety goals, targets and indicators

The Road Safety goals, targets and indicators that were drawn up in 2007 were refined through two Expert Group Meetings held under the UNDA project in Bangkok, on 27-29 October 2008 and 2-4 September 2009. For each of the eight goals, measurable targets and indicators have been developed in consultation with member countries. The expert group meeting in September 2009 recommended that this set of goals, targets and indicators be considered by the Forum of Asian Ministers of Transport to be held in December 2009. The overall objective to reduce road deaths by 600,000 between 2007 and 2015 is supported by eight broad goals together with specific indicators for monitoring their achievement. These goals are:

- Making road safety a policy priority.
- Making roads safer for vulnerable road users.
- Making roads safer and reducing severity of crashes.
- Making vehicles safer.
- Improving national and regional road safety systems, management and enforcement.
- Improving cooperation and fostering partnerships.
- Developing the Asian Highway as a model of road safety.
- Providing effective education on road safety awareness.

Table 14 UNESCAP road safety goals, targets and indicators

Goals and targets	*Indicators for monitoring achievements*

Overall objective: *Saving 600,000 lives and preventing a commensurate number of serious injuries on the roads of Asia and the Pacific over the period 2007 to 2015*.	
a) Reduce fatality rates by 20 per cent from 2007 to 2015 (or reduce it to less than 10 per 10,000 motor vehicles by 2015).	1) Number of road fatalities (and fatality rates per 10,000 motor vehicles, per motor vehicle-km and per passenger-km). 2) Number of road crashes.
b) Reduce the rates of serious road injuries by 20 per cent from 2007 to 2015.	3) Number of serious road injuries (as well as injury rate per 10,000 motor vehicles and per motor vehicle-km).
Goal 1: *Making road safety a policy priority*	
a) Create a road safety policy/strategy, designate a lead agency and implement a plan of action, by 2010.	4) Information on existing national road safety policy, strategy, and plan of action. 5) Name of designated lead agency. Description of responsibilities of local, regional and national government organizations. 6) National road safety reports or impact evaluation reports of government programmes.
b) Allocate sufficient financial and human resources to improving road safety.	7) Amount of funding allocated to road safety programmes (public, private and donors).
Goal 2: *Making roads safer for vulnerable road users, including children, senior citizens, pedestrians, non-motorized vehicle users, motorcyclists and persons with disabilities*	
a) Reduce by one third the pedestrian death rate in road crashes (or reduce it to less than 1 per 10,000 motor vehicles).	8) Number of pedestrian deaths or pedestrian deaths per 10,000 motor vehicles.
b) Increase the number of safe crossings for pedestrians (e.g., with subway, overhead crossings or traffic signals).	9) Information on programmes for the construction of new safe crossings or the improvement of crossings.
c) Make the wearing of helmets the norm and ensure minimum helmet quality, in order to reduce the motorcyclist death rate by one third (or reduce it to below the average motorcyclist death rate of the UNESCAP region).	10) Number of motorcyclist deaths and motorcyclist deaths per 10,000 motorcycles. 11) Existing law or administrative rule for mandatory use of helmets and specifying minimum helmet quality standards. Information on helmet use (percentage).
d) Ensure minimum child safety measures, in order to reduce the child death rate by one third (or reduce it to less than 0.01 per 10,000 motor vehicles).	12) Number of child fatalities in road crashes. 13) Existing law or administrative rule on measures for child safety in cars (child restraints) and on motorcycles (child helmets). 14) Information on use of child seat restraints and child helmets.
e) Equip all school children with basic road safety knowledge.	15) Existing or planned education programmes on road safety in schools, information on class level

	at which programmes start and their coverage.
Goal 3: *Making roads safer and reducing the severity of road crashes (building "forgiving roads")*	
a) Integrate a road safety audit at all stages of road development starting at the design stage, carry out necessary improvement works, and improve hazardous locations.	16) Extent to which road safety audits are carried out for new road construction and major improvements. 17) Number of improvement programmes carried out to make roads "forgiving" (e.g., improving blackspots, removing or cushioning roadside obstacles).
b) Increase separate/secure road space for pedestrians and cyclists in urban and suburban areas (where space permits).	18) Existing length of pedestrian and bicycle paths in kilometres per 100,000 people or per 10,000 km of roads (along highways and city roads). Programme to construct pedestrian and bicycle paths.
Goal 4: *Making vehicles safer and encouraging responsible vehicle advertising*	
a) Make regular inspections of road vehicles mandatory and ensure enforcement of inspection (starting in urban areas).	19) Existing law or administrative rule on vehicle inspection, frequency of inspection (annual), number of vehicle inspection facilities and organizations.
b) Ensure safety requirements for new vehicles are in line with international standards.	20) Existing law and regulation specifying vehicle safety standards and implementation.
Goal 5: *Improving national and regional road safety systems, management and enforcement*	
a) Implement a national (computerized) database that provides information on road crashes.	21) Information on existing road safety database and responsible organizations.
b) Significantly increase compliance, e.g., with mandatory helmet and seat-belt use, drinking and driving rules, use of mobile phone and speed limits.	22) Information on compliance on helmet wearing (percentage). 23) Information on rules and compliance on seat-belt use, use of mobile phone (percentage use). 24) Information on rules and compliance related to drinking and driving and speed limits.
c) Allow alcohol tests for prosecution (either breathalyser and/or behavioural tests).	25) Existing alcohol-level-testing rules, types of tests and alcohol limits used and allowed for prosecution.
d) Make it the norm to keep motorcycle headlight on at all times.	26) Information on existing law or administrative rule on keeping motorcycle headlight on while driving.
e) Increase coverage of emergency assistance systems for road victims, to cover at least all urban areas and trunk roads.	27) Kilometres of road (by type) on which emergency services are provided. 28) Average emergency response time.

	29) Number of emergency service centres per length of highways (except city roads).
Goal 6: *Improving cooperation and fostering partnerships*	
a) Encourage and recognize private-sector sponsored initiatives.	30) Number of major partnerships in the area on road safety, funding (private sector, public-private initiatives).
b) Create new and deepen existing partnerships with non-governmental organizations.	31) Number of major partnerships with non-governmental organizations, scope and funding.
Goal 7: *Developing the Asian Highway as a model of road safety*	
a) Reduce the total number of fatalities and road crashes on the Asian Highway.	32) Total number road fatalities and road crashes on the Asian Highway in each country per year.
b) Reduce the number of fatalities on *all* Asian Highway segments to below 100 per billion vehicle-km.	33) Number of fatalities per billion vehicle-km for each Asian Highway segment per year.
c) Increase resource allocation for road safety-related measures along the Asian Highway.	34) Amount of resources allocated to safety-related works for the Asian Highway segments from governments and donors.
d) Improve Asian Highway road segments to be forgiving to road users if a crash occurs. Demonstrate best practice.	35) Information on road safety assessment and rating programme for the Asian Highway.
Goal 8: *Providing effective education on road safety awareness to the public, young people and drivers*	
a) Carry out targeted awareness campaigns and training programmes.	36) Information on the number of awareness campaigns and training programmes carried out.

3.4.4 Advisory missions and seminars under the project

Under the UNDA project UNESCAP provided advisory services to Nepal and Kyrgyzstan. The advisory Mission to Kathmandu was undertaken on the request of the Ministry of Physical Planning and Works, Nepal to assist and advise on development of national road safety strategy, goals, targets and indicators. A stakeholder consultation meeting was held in the Ministry of Physical Planning and Works on 8 October 2009 representatives of various agencies involved in road safety participated in the consultation meeting. As a follow-up to the advisory mission a workshop on developing national road safety strategy, goals, targets and indicators is being organized by UNESCAP and the Ministry of Physical Planning and Works in Kathmandu on 25-26 November 2009.
The advisory mission to Bishkek was undertaken on the request of the Ministry of Transport and Communications, Kyrgyzstan on 6 November 2009 to assist and advise on development of national road safety strategy, goals, targets and indicators. A workshop was organized on 6 November 2009 at the Ministry of Transport and Communications, Kyrgyzstan. Various stakeholders representing 11 agencies related to the road safety

participated in the workshop. UNESCAP made presentations on global and regional road safety initiatives and UNESCAP road safety goals, targets and indicators.

3.4.5 Implementation of targets and indicators by UNESCAP member countries

Table 15 Overall road safety goals and recent actions in UNESCAP member States

UNESCAP member States	Overall goals and targets
Armenia	The target is to reduce the number of road fatalities by 10 per cent over the next five years (from 2008), as outlined in the country's five-year action plan.
Australia	The target is to reduce the annual number of road fatalities per 100,000 population by 40 per cent, from 9.3 in 1999 to no more than 5.6 in 2010.
Bangladesh	Under the Fifth National Action Plan 2008-2010, the goal is to reduce the number of road fatalities by 10 to 12 per cent by 2010.
Bhutan	In 2007, a road safety action plan was prepared with technical assistance from ADB; however, the Government requires resources to implement the proposed plan.
Brunei Darussalam	The target is to save more than 56 lives over a five-year period, as described in a five-year action plan (2005-2010).
Cambodia	ADB-ASEAN target is to save 1,800 lives and prevent 36,000 injuries during 2005-2010. The number of fatalities per 10,000 vehicles is to be brought down to seven and two in 2010 and 2020, respectively. The strategy to reduce the number of road fatalities includes educating people on road safety programmes through posters, television spots and radio.
Georgia	The road safety action plan for 2009-2013 has been prepared and is being adopted by the Government. The overall goal in the plan is to reduce road accidents: (a) by 20 per cent; or (b) to 12 deaths per 10,000 registered vehicles.
India	The Ministry of Road Transport and Highways is in the process of setting up a national road safety and traffic management board through an Act of Parliament.
Indonesia	For 2005-2010, the target is to save 20,411 lives, reduce the anticipated annual increase in deaths from 5.8 per cent to 3.4 per cent over the next five years, and increase seat-belt and helmet wearing to 90 per cent. ADB-ASEAN target is to save 12,000 lives and prevent 996,000 injuries during 2005-2010. The Indonesia Road Safety Plan for 2008-2012 was developed, with eight strategies addressing 47 action plans.
Iran (Islamic Republic of)	An agreement has been signed with the World Bank for $104 million to fund road safety projects; the allocation of the funds is in progress. In 2008, the Iran Road Maintenance and Transportation Organization allocated about $25 million for road safety.
Japan	The goal for Japan during the period 2006-2010 is to make Japan's roads the "safest in the world" by reducing the annual number of victims who die within 24 hours of a traffic accident to less than 5,500 by 2010 and by reducing injuries and deaths to

	less than 1 million.
Kazakhstan	The goal is to reduce the number and severity of accidents.
Lao People's Democratic Republic	The target is to save 917 lives and prevent 21,000 injuries by 2010 by halving the anticipated increase in deaths and injuries, and to increase the helmet-wearing rate to 90 per cent.
Malaysia	The target is to reduce, by 2010, the fatality rate to 2 per 10,000 vehicles, 10 per 100,000 people and 10 per billion vehicle-km. ADB-ASEAN target is to save 3,000 lives and prevent 21,900 injuries during 2005-2010. In the Ninth Malaysian Plan, RM 200 million was allocated to improve hazardous locations along state and municipal roads.
Mongolia	Action plans for improving road traffic safety are being included in project implementation plans. Road safety audits are being undertaken during the design of the country's road network.
Myanmar	ADB-ASEAN target is to save 940 lives and prevent 32,900 injuries during 2005-2010. One national target, set in 2008, is aimed at saving more than 1,000 lives over a five-year period by halving the anticipated increase in deaths per year, from 6.4 per cent per year (the present rate of increase) to 3.2 per cent per year, over the next five years.
Nepal	To date there is no long-term strategy for road safety outlined for Nepal.
New Zealand	To reduce the road toll to no more than 300 deaths and fewer than 4,500 hospitalizations per year by 2010 (down from 404 fatalities and 6,670 hospitalizations in 2002).
Pakistan	Road safety is ensured through modern traffic policing activities. In 2008 the country reported a reduction in accidents and increased awareness and discipline.
Philippines	ADB-ASEAN target is to save 3,000 lives and prevent 258,000 injuries during 2005-2010. Many road safety initiatives have been implemented, including the Road Safety Design Manual by the Department of Public Works and Highways.
Republic of Korea	The National Transport Safety Master Plan (2008-2012) includes a target to reduce by 50 per cent the number of fatalities (2008 to 2012).
Russian Federation	A targeted federal programme for improving road safety was adopted in 2006 for the period 2006-2012.
Singapore	ADB-ASEAN target is to save 100 lives and prevent 4,300 injuries during 2005-2010.
Thailand	ADB-ASEAN target is to save 13,000 lives and prevent 1,508,000 injuries during 2005-2010.
Turkey	The target is to reduce the accident rate on highways by 40 per cent within five years (from 2006).
Viet Nam	ADB-ASEAN target is to save 7,000 lives and prevent 16,100 injuries during 2005-2010. The national safety target is aimed at reducing accidents by 5 to 7 per cent per

	year, to 4.5 deaths per 10,000 vehicles, and to 12.6-12.8 deaths per 100,000 population.

SECTION 4 CONCLUSIONS FROM THE UNDA PROJECT

4.1 Current situation on target setting

The importance of road safety targets is widely accepted in all United Nations regions. The objective of the UNDA project to encourage the setting of targets was endorsed in all the regional meetings. Regional targets have been adopted by Ministers in the UNECE (for EU and ECMT countries), UNECA and UNESCAP regions, and have been recommended recently for UNESCWA.

The Global Status Report on Road Safety asked countries whether they had a strategy and measurable national targets and Table 9 below shows the numbers of countries in each region that responded that they had a target. The greatest prevalence of targets was in the UNECE region where 36 out of 56 Member States were found to have targets. However, it is encouraging that several countries in other regions have set national targets although regional targets have only been set recently or do not yet exist.

The Global Status Report does not give details of the national targets that have been set, so it is not known whether they are empirically based or aspirational, or how likely they are to be achieved by the national strategies to deliver them.

Despite this, the growth of targets in a diverse group of countries, including some low and middle-income countries, is a welcome indication that road safety is beginning to receive political priority.

Table 16 Regional and national targets for reduction in road deaths by region

Region	Regional target	Status	Target period	Countries with targets*
UNECE	-50%**	Adopted	2000-2012 2001-2010	36/56
UNESCAP	-600,000	Adopted	2007-2015	16/40
UNECLAC	No			10/33
UNECA	-50%	Adopted	2007-2015	13/54
UNESCWA	-30%	Recommended	By 2015	1/13

Source: Global Report on Road Safety. Where countries are members of more than one region they are only counted once in their geographic region e.g. UK is only counted in UNECE and not in UNECLAC and UNESCAP.
** Target for 2010 for EU and 2012 for ECMT. No target for whole UNECE region.

4.2 Implementation of the project

The main focus of the project was to hold regional seminars to encourage countries to set road safety targets. Seminars took place in all the UN regions. In UNECE and UNECLAC the seminars were sub-regionally based and focused on geographically homogeneous groups of countries. In UNECE the events concentrated on the areas with the highest road safety risk in the south east and east of the region. In UNECLAC there

were three seminars, for the Southern Cone countries, Central America, and the Caribbean. In the other regions all Member States were invited to the same seminar.

All the seminars had the common themes of promoting national and regional target setting, and sharing of best practice, and other common themes were data quality, preparation for the Global Ministerial Conference in Moscow, and contracting to and implementing the UN legal instruments in the Vienna Conventions on Road Traffic and Signs and Signals. There were also some differences in the aims as well as similarities.

In UNECE, the focus was on best practice including the recommendations of the "Towards Zero" report, and the experience of successful countries. The seminars and the conference also gave participating countries the opportunity to share problems and solutions with their neighbours. The recommendations included the importance of good data, the need for political will and commitment, and the development of targets and indicators. There was also a recommendation for the seminars to be followed up with advisory missions to assist with assessment of road safety problems and development of targets. This is an important recommendation that emphasises the action that is needed to ensure that the UNDA project will have real impact.

The UNECA seminar had as its main focus the implementation of the Accra Declaration's target for 2015. A key output was the schedule of indicators for monitoring countries' progress towards meeting this target. Case studies were presented and discussed as examples of road safety problems and programmes. It was recommended that a working group should be formed to establish Africa's input to the Moscow Ministerial conference, and that effort should be made to improve data and harmonise definitions in order to facilitate effective monitoring.

The UNECLAC Seminars produced Declarations for future action that focused on sub-regional cooperation and sharing of best practice, as well as the need to set targets. The UNESCWA seminar made an important recommendation for a regional target as well as promoting national target setting. The recommendations also covered data requirements, and the need to produce country reports on road safety as an input to a regional report for the Ministerial Conference in Moscow.

A series of meetings was held in the UNESCAP region in support of the implementation of regional target that had been agreed in 2006. The final output from the most recent meeting was a detailed schedule of "Goals, targets and indicators" for achieving a set of policy goals that are directed towards achieving the overall target.

4.3 Discussion

The UNDA project has been both timely and effective in setting the need for road safety targets firmly on the global road safety policy agenda. Its implementation has been taken seriously in all the United Nations regions, and the seminars have resulted in increased recognition of the value of targets, as well as being fora for exchange of information and discussion of common problems and best practice solutions. The *Towards Zero* Report has been used as a framework for promoting target setting and Vision and the benefits of the Safe System Approach in several of the seminars. The project has also been timely in the context of preparation for the First Global Ministerial Conference on Road Safety in Moscow in November 2009.

Target setting is now becoming mainstream in road safety policy, and recognized as a necessary step towards casualty reduction and a means of prioritizing road safety. This is good news and the UNDA project has helped to promote and reinforce the principle of target setting as a road safety tool.

However, this is not the end of the story. Setting a target, particularly if it is aspirational rather than empirically based, is not sufficient in itself, and the UNDA project can only be a first step. Laudable as it is that there should be political endorsement of regional or national targets, and the value of this should not be underestimated, the real benefits in terms of casualty reduction will only be realised through concrete action. It is very encouraging that in two regions, UNECA and UNESCAP, schedules have been drawn for monitoring of progress in achieving the targets. These will be of great assistance to countries and should be used to support the development of programmes for implementation of measures.

Targets should be firmly linked to a strategy for delivery that contains the programme for implementation of policy through legislation, enforcement, infrastructure improvements and a focus on road safety measures to address the key risk factors. The *Towards Zero* Report has shown how targets are an integral part of a new approach to road safety, incorporating an ambitious vision within a Safe System approach. Such an approach builds on proven effective measures, but goes further than traditional road safety programmes by concentrating on recognition of human frailty and the need to accommodate it through injury prevention and reduction systems. This approach is relevant to countries at all stages of development rather than something that can only be considered by countries at an advanced stage of road safety performance.

The recommendations of the *Towards Zero* report are indeed of great relevance to countries that are at the early stages of developing road safety policy. Using the methods that are recommended should enable effective mechanisms to be established at an early stage and should ensure that limited resources can be used in the most effective way. The importance of good road safety management systems to ensure effective planning and delivery is a key recommendation of the report.

Road safety targets are a vital component of any country's road safety programme, but they are tools not an end in themselves. Countries that set targets tend to have good road safety performance not just because the targets exist, but because their existence leads to effective action to reduce casualties. The schedules of indicators for monitoring progress towards achieving the road safety targets that have been drawn up for UNECA and UNESCAP countries are a positive step towards this.

SECTION 5 RECOMMENDATIONS

5.1 Follow-up action to the UNDA project

The need for further action to assist low and middle-income countries in setting targets was recognized in the recommendations from the UNECE seminars and conference. It was proposed that "a number of advisory missions should be conducted after the seminar upon request of countries in order to assess their road safety problems and help them develop targets in a bilateral setting". It is essential that such missions should concentrate on capacity building as well as knowledge transfer. Extending such bilateral action across all the UN regions would be a large and costly exercise.

An alternative approach would be a series of regional training events that would bring together groups of countries with similar problems for an intensive workshop. This would have the advantage of limiting resource demand, and also affording countries the benefit of discussion of problems and solutions with similar countries. The seminar-cum-study tour to Sweden for selected low and middle-income countries in the UNECE region is an example of how this could be achieved.

These workshops would be greatly facilitated by the provision of guidance based on the *Towards Zero* report and the series of existing manuals. These are lengthy documents and have not been widely translated, so a more concise and practical guide that could be

made available in several languages would be of great assistance to low and middle-income countries. Consideration should also be given to further development of web-based information such as the Toolkit that has been developed by iRAP and gTKP.

It is **recommended** that:

- **Consideration should be given to a series of regional workshops with practical training and capacity building as their aim to assist countries in setting targets and developing strategies for their achievement.**
- **A practical guidance manual and web-based materials should be prepared as a workbook for the workshops, drawing on the Towards Zero report and the existing manuals.**

The UNDA project has generated and focused regional activity on target setting. It is important that this momentum should continue. Whilst there are aspirational regional targets it is unlikely that they will be achieved unless they are supported by national targets and strategies. Ideally these should be empirically based taking account of the existing road safety situation and the policy framework necessary to deliver casualty reduction measures. Monitoring of progress is vital and this will require good data systems with harmonised definitions, and the use of indicators such as those developed for UNECA and UNESCAP countries.

It is **recommended** that:

- **A monitoring system should be established in each United Nations region to track progress towards meeting regional and national targets.**
- **A consistent set of indicators should be drawn up based on the sets developed by UNECA and UNESCAP.**
- **Countries should endeavour to improve road safety data collection and should harmonize definitions on internationally accepted standards such as death in a road crash within 30 days.**

All the regional events discussed preparations for the First Global Ministerial Conference on Road Safety and countries were encouraged to send delegations and to take the opportunity to raise the profile of road safety. The Conference took place in Moscow in November 2009 and was attended by Ministers responsible for road safety from 150 countries, as well as leaders from international, regional, governmental and non-governmental organizations. A summary of this report was made available to delegates at the conference.

It is **recommended** that:

- **Regional commissions should encourage activity to build on the momentum established by the First Global Ministerial Conference on Road Safety.**

The Global Status Report on Road Safety includes information on whether countries have set targets but does not give details of the targets. It would be useful to have such information for those countries that have set targets, including type of target, time period, consistency with regional target if relevant, and what systems are in place to deliver the target.

It is **recommended** that:

- **Regional commissions should collect further information on the targets that have been set by countries.**
-

The United Nations legal instruments related to road safety were discussed in several of the seminars. Countries were encouraged to become Contracting Parties to the Conventions on Road Traffic and on Road Signs and Signals, 1968, and to implement their provisions.

It is **recommended** that:

- **Member States should be encouraged to become Contracting Parties to the United Nations legal instruments related to road safety and to properly implement them.**

5.2 Key steps for implementation of a targeted approach to road casualty reduction

5.2.1 Type of target

Several regions have agreed regional targets to reduce road deaths. These are aspirational targets that have been adopted by countries without a foundation of empirical analysis. Although the lack of analysis is a disadvantage, and there is the risk that such a target may be over-challenging, the momentum that has been achieved by regional targets has raised the profile of road safety and this should act as a spur to increased activity. What is lacking at present is the link to specific interventions for delivery of the targets.

In the worst case scenario, if the regional targets fail to be backed up by the necessary level of activity, the credibility of target setting and road safety programmes generally may be undermined. Where countries are signed up to a regional target it is essential for them to develop a strategy for achieving the target. The question that must be answered is what needs to be done to ensure that the target will be achieved within the specified timeframe?

Where countries have not already committed to a regional target it is more appropriate that an empirically based target is developed that is based on analysis of problems and priorities and the measures that are available to reduce casualties.

However, either an aspirational or an empirically based target will not be achieved unless countries adopt a results focused strategy, preferably within a Safe Systems approach. This will require that countries improve their road safety management capacity in order to link delivery of interventions with the required outcomes to meet the target.

The recommendations of the OECD *Towards Zero* report provide a useful framework for the action that is necessary.

5.2.2 Recommendations for action

The recommendations contained in section 1.2.1 of the *Towards Zero* report provide a framework for setting and delivering ambitious road safety targets. For Governments seeking to implement a target based approach these recommendations can be grouped into three sub-sets:

- **Creating the political climate for action**

- Adopt a highly ambitious vision for road safety
- Foster commitment at the highest levels of government

- **Understanding and targeting the problem**
  - Conduct sufficient data collection and analysis to understand crash risks and current performance
  - Accelerate knowledge transfer
  - Set interim targets to move systematically towards the vision
- **Delivering measures to achieve the target**
  - Develop a safe system approach, essential for achieving ambitious targets
  - Strengthen the road safety management system
  - Invest in road safety
  - Exploit proven interventions for early gains

5.2.3 Creating the political climate for action

Adopt a highly ambitious vision for road safety

Adopting a vision that seeks in the long term to eliminate road deaths and serious injury will alter the community's view of the inevitability and acceptability of the human consequences of road crashes. This vision is designed to change the traditional way of thinking that road deaths and injuries are the inevitable consequence of mobility and are acceptable in a way that injury in other modes such as air and rail are not. Adopting an ambitious long term vision requires a strong commitment to innovation. This challenges road safety professionals, stakeholders and government to develop the institutional capacity to achieve the desired results through new partnerships and new effective approaches.

Ambitious vision indicates that the road safety situation requires serious attention and should receive priority for government action.

Foster commitment at the highest levels of government

High-level commitment to crash reduction is essential. Government needs to take the lead in raising societal awareness of the unacceptable human and economic cost of road crashes. Government commitment also requires road safety policy makers and advocates to provide sound advice to support what may be seen at first as unpopular policies. Politicians need to be engaged in the process of developing a vision for road safety and informed of the need for legislative changes and regulatory action. Public opinion can be a stimulus to political will if informed by an understanding of crash risks and the measures that are available to reduce risk. Public information campaigns and consultation on strategy development can mobilise public and political support for road safety.

Support for road safety from a high level "champion" has been very effective in some countries in raising the political profile of road safety and providing an impetus for policy change.

- **High-level commitment from government for road safety measures based on sound advice can generate political and public support if backed by awareness raising and consultation processes.**
- **Real progress requires that road safety is raised up the political agenda and given higher priority in government policy. There is a two-way process: governments can lead public opinion but also require support from the community in order to strengthen resolve and to stand firm in the face of opposition.**

5.2.4 Understanding and targeting the problem

Conduct sufficient data collection and analysis to understand crash risks and current performance

Comprehensive data collection and analysis are essential for designing effective safety strategies and for setting achievable targets. Intervention measures and priorities need to be evidence based in order to address the key risks in the most effective way. Good data are also essential for monitoring programme effectiveness. In addition to monitoring progress towards the headline casualty reduction target, monitoring should also include intermediate output indicators.

Crash data should be complemented by demographic data and traffic volume data by traffic mode. Traffic data are of particular value when there is rapidly increasing motorisation in a country in order to monitor crash rates as well as absolute numbers. Data reliability is a key issue and police collision reports should be supplemented by use of hospital data. The internationally recommended definition of death within thirty days of a crash should be adopted to ensure international consistency of data.

Availability of good data enables analysis of trends and understanding of the results of interventions in order to set targets that are based on empirical analysis of expected trends and effectiveness of interventions.

Sound data underpin evidence based policy and are essential for setting realistic targets, developing a strategy and monitoring results.

Accelerate knowledge transfer

Research and development will continue to be necessary to increase understanding of how and why crashes occur. The adoption of long term vision and a Safe Systems approach requires innovation. Low and middle-income countries will benefit from advances made in high-income countries where the capacity for research and innovation exist.

International cooperation is needed to ensure that knowledge transfer takes place, and that innovative measures can be adapted to the needs of low and middle-income countries. Within countries, national governments should increase awareness of measures that have proven effectiveness and disseminate such information to stakeholders at all levels who are responsible for implementation of safety programmes.

Strong and sustained international cooperation is needed to support knowledge transfer.

Set interim targets to move systematically towards the vision

Whilst the ultimate goal of a level of ambition that seeks to eliminate death and serious injury is a long term aspiration, it needs to be complemented with interim targets for specific planning periods, usually for about a decade. Targets should be ambitious, achievable, and empirically based. Final outcome targets for reductions in numbers of deaths and serious injuries should relate to outputs (e.g. level of enforcement), and intermediate outcome indicators (e.g. seatbelt wearing rates), and be linked to a strategy for implementing a programme of interventions.

Empirically derived targets are based on analysis of past trends and effectiveness of interventions and on expected levels of achievement from the adopted road safety strategy. Such targets help to secure political and community support.

Targets are the stepping stones to achievement of long-term vision. They should be ambitious, achievable and empirically based with a clear strategy for delivery.

Summary of checklist of actions towards building a Safe System approach

- Adopt the elimination of death and serious injury from use of the road transport system as the level of ambition for long term road safety achievement.
- Conduct a review of the road safety management systems and structures that are currently in place.
- Address institutional management issues.
- Foster continuously increasing levels of knowledge within key agencies of good and emerging practice.
- Arrange for different agencies to lead in addressing different challenges.
- Ensure the move to a safe system approach is fully understood, embraced and actively advocated by central and local government professionals.
- Recognise that setting an ambitious target in an interim strategy period (for example, 10 years) on the path towards zero in the long term requires a strong management capacity to be applied to the adopted safe system thinking and approach to drive development of innovative and comprehensive potential interventions.
- Plan for potential redesign of much of the existing road transport system over time to achieve lowered risk over the whole system using innovative and emerging improvements in available interventions, to be applied together as appropriate.
- Legislative standards, the enforcement of these standards, and the interface of this enforcement with the justice system need to be regularly reviewed to achieve very high levels of road user compliance.
- Assess opportunities to improve road safety quality of controls over the entry to and exit from the system for drivers and for vehicles.
- Set effective road safety strategies and intermediate road safety targets using a comprehensive process.
- Give considerable attention to the implementation, monitoring and review of road safety strategies and targets.
- Build upon the public awareness of safe system thinking to align long term elimination of road trauma with occupational safety, environmental, social responsibility and other values within a society.
- Foster social norms which affirm that loss of life on the roads is unacceptable. Promote public endorsement and understanding of the safe system approach, and the nature and interdependence of the separate crash risks.

Source: *Towards Zero* Report

5.2.5 Delivering measures to achieve the target

Develop a safe system approach, essential for achieving ambitious targets

The Safe System approach was described in Section 1.2.4, and the Box above summarises the key actions for implementation. The main characteristics of a Safe System approach are:

- Considers safety as an ethical imperative.
- Means to achieve ambitious vision of elimination of deaths and serious injuries.
- Takes a different view of risk on the network - works towards a system which is safe.
- Accommodates human error: rather than 'blaming the victim' for causing crashes, the risk of human error should be anticipated and 'tolerated' by a 'forgiving' system that has been designed to ensure that the consequences of human error are non fatal as far as possible.
- The design challenge is to manage loss of control of kinetic energy within tolerances survivable by the human body.

Effective injury prevention within a Safe System approach requires action across three areas that make up a dynamic system: the road user, the motor vehicle, the road infrastructure. Safety decisions should be aligned with with broader community values – economic, human & environmental health, and consumer goals. Although error is to be accommodated within system design, individuals are responsible for abiding by rules, and continued efforts to improve user compliance are needed. System designers are responsible for building in safety and redesigning the system to accommodate human failings through design of licensing policy, fleet operating policies, roads and roadsides, vehicles, speed limits, new road rules, and land use planning requirements.

Implementing a Safe System approach requires a new approach to system design that accommodates human error and compensates for human frailty.

Strengthen the road safety management system

A road safety management system that is committed to delivery of results is essential for determining a country's capacity to implement the programme of road safety measures that is needed to achieve the target. The World Bank has developed a Capacity Review Checklist (see Annex X and Bliss and Breen 2009) that is recommended for conducting a review of the road safety management systems and structures that are in place in a country. Such a review will assess the adequacy of current systems and identify where strengthening is needed across the three levels of the road safety management system:

- Institutional management functions: directed to achieving results.
- Interventions: produced by the institutional management functions to produce results.
- Results: final outcomes, intermediate outcomes, and outputs.

The key institutional management functions are:

- Results focus – a strategic focus that links the delivery of interventions with subsequent intermediate and final outcomes. This requires government to designate a lead agency to work with other agencies to:
    - Develop management capacity to understand a country's road safety issues.
    - Provide a comprehensive strategy with intermediate and outcome targets.
    - Deliver interventions and target achievements.
    - Review performance.
- Coordination of the key agencies to develop and deliver road safety policy and strategy.
- Effective legislation to enable desired results to be delivered.
- Adequate funding and well targeted resource allocation for interventions and related institutional management functions.

- Promotion of road safety within government and the broader community.
- Robust and systematic monitoring and evaluation to measure progress.
- Proactive research and development and knowledge transfer programmes which actively influence improvement in interventions, institutional management functions and performance monitoring.

Countries should review their road safety management capacity and address management issues in order to build a safe system approach that will achieve interim targets and move towards the achievement of long-term vision.

Invest in road safety

Adequate resources for investment in safer transport systems will be needed to achieve ambitious targets. This is likely to require an increase in road safety budgets and reallocation of resources into the most cost-effective measures. Support for this is more likely to be obtained if based on financial and economic analysis of the costs and effectiveness of proposed interventions. In order to compete for limited resources with other government programmes, the road safety case needs to be based on sound economic arguments and a strong business case for investment. Reducing road crashes can produce significant economic savings for society since crash costs account for between 1% and 3% of a country's GDP and are a burden for health and other public services. There is good evidence from cost-benefit analysis in various countries on the positive investment returns from road safety measures.

Public expenditure budgets for road safety should be supplemented by seeking private sector contributions e.g. from insurance companies.

Achievement of ambitious targets will require making an economic case for more resources and harnessing non-government sources of finance.

Exploit proven interventions for early gains

Particularly in countries with lower existing levels of road safety, short term improvements can be achieved by implementing a range of proven measures. The key areas of risk and the measures to address them were identified in *"Towards Zero"* as:

Speed management: setting and enforcing speed limits that are appropriate the type of road and its function can provide immediate safety benefits in terms of both crash reduction and injury severity reduction. Infrastructure improvement that is designed to manage speed choice and affect behaviour is also valuable.

Reduced drink-driving: in many countries driver impairment through alcohol and drug use is a major crash causation factor. Most countries have laws that specify alcohol limits but unless they are backed by highly visible police enforcement such as random breath testing, with suitable penalties, and publicity programmes, they are likely to be ineffective.

Seatbelt use: legislation making seatbelt use for all vehicle occupants is an essential safety measure. As with drink-driving, enforcement, penalties and publicity programmes are all needed to support programmes to increase seatbelt usage.

Safer roads and roadsides: the first priority is the identification and treatment of high risk sites and road sections. Road assessment such as the iRAP system is a valuable tool

for identifying where action is required and which measures are most appropriate. In the longer term a systematic approach to road infrastructure design and renewal is needed.

Enhanced vehicle safety: technological improvement of passive (crash protection) and active (crash avoidance) systems has increased the safety of vehicles. There is a need to ensure that these improvements are available in low and middle-income countries.

Reduced young driver risk: young and inexperienced drivers are over-represented in crash statistics in all countries. Well regulated driver training, testing and licensing regimes, together with systems of graduated licensing, should be introduced.

Whilst governments should be the initiators of policy to implement road safety measures, a Safe Systems approach demands that all sections of society should take responsibility for improving safety within their own sphere of influence. Road safety objectives need to be incorporated into all relevant decision making processes beyond the narrow confines of road transport. For instance land-use planning decisions such as the siting of a school should take account of the safety of users by ensuring that safe access is built into the planning system. The ISO 39001 that is currently being developed will provide international standards for the implementation of safe systems.

Road users have the responsibility to obey the rules and take action to reduce risk by such actions as wearing seatbelts and helmets and adhering to speed limits. The private sector has a corporate responsibility to examine its activities and to build in road safety as a key objective. Too often safety is seen as something only relevant to the workplace and the wider transport operations and decisions are not seen as safety critical.

- **Proven interventions if implemented efficiently and matched to the individual circumstances of each country can deliver rapid improvements in road safety.**
- **Government activity needs to be complemented by a community and private sector based approach to safety.**

Developing concerted actions by the five UN regional commissions: As a follow up of the first global conference on road safety, held in Moscow, the Moscow Declaration, which invites UN General Assembly to declare a Decade of Action for Road Safety 2011-2020, and the expected endorsement of the Declaration by the General Assembly in March 2010, the regional commissions may explore further contribution through coordinated actions in their respective regions.

United Nations regional commissions may consider proposing a joint project to be implemented in their respective regions aimed at providing technical assistance to one country from each region in addressing the road safety problems to be used as a pilot for other countries with similar problems and share best existing practices.

5.3 Conclusions

The UNDA project has focused on target setting as a highly effective mechanism for improving the road safety situation in all countries. The emphasis has been on knowledge transfer from high income countries where progress has already been made, to low and middle-income countries where the effects of increased motorization on safety performance has not yet been mitigated by effective action to reduce risk.

Ambitious road safety targets are at the heart of an effective road safety management system. They are integral to the achievement of long term vision within a Safe System

approach. Targets need to be based on analysis of results from interventions within a strategic programme for delivery of road safety measures.

An effective road safety management system is essential for the delivery of results. A review of capacity using the World Bank checklist (Bliss and Breen 2009) will highlight where systems are deficient and need to be improved to strengthen delivery.

Good data systems are essential for identifying and understanding priority areas for action, and for monitoring progress.

Target setting should be approached as a component of the process of building a Safe System approach. Targets on their own do not save lives. They are effective through their activity raising potential within a programme of interventions to achieve them.

The First Global Ministerial Conference on Road Safety has raised the profile of road safety and has called for a decade of action to address the growing problem of road traffic deaths and injuries. The momentum created by this conference must be built on in all countries, and setting targets within the context of the Safe Systems approach for implementation of safety measures is an essential step.

References

WHO (2004), *World Report on road traffic injury prevention,* World Health Organisation, Geneva.

WHO (2009) Global Status Report on Road Safety

OECD (1994), *Targeted Road Safety Programmes*, Road Transport Research Series, OECD, Paris.

Elvik, R. (1993), *Quantified road safety targets: a useful tool for policy making.* Accident Analysis and Prevention, 25, 569-583.

OECD (2002), *Safety on the Roads: What's the Vision?*, Road Transport Research Series, OECD, Paris.

Wong, S.C., N.N. Sze, H.F. Yip, Becky P.Y. Loo, W.T. Hung and Hong K. Lo, *Association between setting quantified road safety targets and road fatality reduction,* Accident Analysis and Prevention, 2006, 38,997-1005.

OECD (2008), *Towards Zero: Ambitious road safety Targets and the Safe system Approach,* Joint OECD/ITF Transport Research Centre, Paris.

Wegman F., V. Eksler, S. Hayes, D. Lynam, P. Morsink and S. Oppe (2006), *SUNflower+6: a comparative study of the development of road safety in European countries,* SWOV, Leidschendam.

Bliss, T. and J. Breen (2009*), Implementing the Recommendations of The World Report on Road Traffic Injury Prevention, Operational guidelines for the conduct of country road safety management capacity reviews and the related specification of lead agency reforms, investment strategies and safety programs and projects,* Global Road Safety Facility, World Bank, Washington DC.

Annex I

United Nations Economic Commission for Europe

UNITED NATIONS

Conference on Improving Road Traffic Safety in South-Eastern Europe
Setting Regional and National Road Traffic Casualty Reduction Targets

Hosted by Evia Chamber of Commerce and Industry and the Hellenic Chambers Transport Association with the support of the Ministry of Transport and Communications of Greece

25-26 June 2009, Halkida, Greece

"Team Work and Fair Play on Basketball Courts and on Our Roads"
- Statement by the Greek National Basketball Champions -

*As champion basketball players, we know it is only through **team work** that we can be successful.*

*As professionals, we understand the importance of **fair play** to maintain integrity.*

*As a team, we have experienced that by **setting targets** we can achieve our goals.*

While basketball only holds significance for some, road traffic safety is an issue which affects us all. We therefore call for team work and fair play in maintaining safe roads both across Greece and elsewhere. We ask that strategic targets be set to achieve tangible results.

1.2 million people die in road traffic crashes every year worldwide. Millions more are injured and disabled. But these are **not** accidents. They are events that can be prevented through daily action and awareness. Our aim is to engage society in this struggle and to encourage respect for the rules of the road.

Regulations exit to help road users avoid the loss of life, health and property. Individuals often do not recognize the importance of complying with road rules, thinking a mistake, a minor "bending" of the rules or a lapse in judgment affects only them. Sadly, this is rarely the case.

What can we do to help make roads safer?

- Use seatbelts - every day, every time, both in the front and back of the car
- Use approved child restraint systems
- Wear approved helmets while riding two-wheelers
- Respect speed limits – they exist for a reason
- Do not use mobile phones while driving
- Do not drive whilst under the influence of alcohol and/or drugs
- Share the road safely with pedestrians and cyclists

By keeping these things in mind, by being a good citizen and fellow road user, we can reduce the high rate of accidents which dominate our roads.

Foul play always ends up hurting someone. Let us start now to work as a team and play fair in traffic. As athletes, it is up to us to enforce it on the court. But it is up to all of us to practice it on the road.

Annex II

United Nations Economic Commission for Europe

UNITED NATIONS

Conference on Improving Road Traffic Safety in South-Eastern Europe
Setting Regional and National Road Traffic Casualty Reduction Targets

Hosted by Evia Chamber of Commerce and Industry and the Hellenic Chambers Transport Association with the support of the Ministry of Transport and Communications of Greece

25-26 June 2009, Halkida, Greece

The Hellenic Chambers of Commerce and Industry

DECLARATION

We, the representatives of the Hellenic Chambers of Commerce and Industry (CCIs) participating in the United Nations Economic Commission for Europe (UNECE) Conference on improving road safety in South-Eastern Europe,

Aware that road traffic injuries are a major social, economic, development and public health problem and a leading cause of death and injury around the world responsible for the death of 1.2 million people a year and injury and disability of millions (more that 80% of all these casualties taking place in the developing countries), and that in spite recent improvement, the number of human casualties remains at unacceptable levels in our country and in Europe as a whole,

Also aware that road traffic injuries lie at the root of not only human suffering, but also overwhelming costs, running into hundreds of billions of dollars annually (estimated at 2% of world GDP), which may overtake the total development aid budget in low and middle income countries,

Underlining that the risks of road accidents are known and can be prevented and that these risks include excessive speeding, driving under the influence of alcohol and/or drugs, failure to use seat-belts and helmets, poorly designed or insufficiently maintained road infrastructure, and the use of vehicles that are substandard, poorly maintained or lacking safety devices,

Acknowledging the conclusions of the Conference, the work and the continuing commitment of the UNECE to global action in the elaboration of global safety-related legal instruments, technical regulations and amendments to the international Vienna Conventions on Road Traffic and Road Signs and Signals,

Encouraged by the United Nations General Assembly resolutions related to road safety and in particular resolution 62/244 of 31 March 2008 on improving global road safety reaffirming the importance of addressing global road safety issues, as well as the need for further international cooperation, and inviting States to strengthen commitment through multi-sectoral collaboration,
Understanding the far-reaching implications of the present situation of road safety on many social, economic and health aspects, as well as the significance of partnerships between the public and private sectors in order to improve this situation,

Hereby resolve to:

1. Support the work of the UNECE in increasing its road safety activities and advocating for higher global political commitment to road safety;
2. Use our network in Greece to collaborate with competent authorities and key stakeholders to support promotional campaigns and raising awareness aimed at sensitizing road users to improve their behaviour, reminding them their responsibilities as members of the society and calling them not to drive with excessive speed, not to drink and drive, use safety belts, child restraints and helmets and respect the vulnerable road users, such as cyclist and pedestrians;
3. Encourage the improvement of road infrastructure by identifying and supporting efforts aimed at eliminating of accident black spots, introducing audit methods, urban safety management and speed-moderation techniques, and good practice guidelines for level-crossings;
4. Advocate for specific measures improving road safety, namely, new methods and continuous training for private and commercial drivers, improved police checks and road user awareness campaigns and continuous road safety education;
5. Support proper implementation and oversight of road safety regulations and best practices, done so by introduction of a road safety data collection, analysis and dissemination to understand the causes, circumstances and consequences of road accidents that may aid prevention or mitigation;
6. Consider establishing a funding mechanism designed to support efforts for improved road safety in Greece and our regions, especially actions concerning the main risk factors;
7. Encourage competent authorities and key stakeholders in Greece and other South East European Countries to take actions and agree on setting common road safety goals, targets and indicators;
8. Partner with UNECE to support it as the international Road Safety Forum for regulatory work and for exchange of best practices and development of road safety policy
9. Invite South Eastern European Governments to fully implement the UNECE road safety related legal instruments and to participate in monitoring activities initiated by UNECE.

And call upon authorities and other stakeholders at national and regional level to build and maintain a high level of awareness, as well as increase cooperation with established campaigns aimed at greater visibility of road safety activities in our country.

Adopted in Halkida, Greece, on 25 June 2009

Annex III

Buenos Aires Declaration

The representatives of the road safety national agencies of Argentina, Chile, Paraguay and Uruguay, and the Brazil and Equator delegations, assistants to the first Road Safety Seminar aimed at National Technical Organizations, NGOs and road safety sectors from the south cone, carried out on November 27th and 28th of 2008 in the city of Buenos Aires, within the workshop of setting targets to reduce the road traffic crashes toll in the countries of the South Cone, called by UNECLAC.

CONSIDERING:

- The **World Report on Road Traffic Injury Prevention**, published by the World Health Organization and the World Bank, which states that road traffic crashes result in at least 1.2 million deaths and over 50 million injuries each year, that road traffic deaths and injuries are forecast to increase by more than 65% by 2020, and that the Latin America and the Caribbean region is expected to have the highest road traffic fatality rate in the world by that year.
- The resolution A/RES 62/244 on improving global road safety of the General Assembly of United Nations, where it reaffirms the need for the further strengthening of international cooperation and knowledge-sharing in road safety, and it takes into account the needs of developing countries and invites all Member States to participate in the projects to be implemented by the United Nations regional commissions to assist low- and middle-income countries in setting their own **national road traffic casualty reduction targets**, as well as regional targets.
- That road safety is a topic that requires the effort and participation of different governmental and civil society actors, as United Nations recommends.

FULLY AWARE OF:

- The Economic Commission for Latin American and the Caribbean's (UNECLAC) support to setting national and regional road traffic casualty reduction targets developed to promote a multi-disciplinary and integrating road safety approach.

- The Pan-American Health Organization (PAHO)'s continuous work on improving and disseminating comparable methodologies and measures, defining and using a fundamental set of road safety indicators, and reporting of its application regularly, through the publishing of the World Report on Road Traffic Injury Prevention.

- The Inter-American Development Bank's (IADB) interest on road safety and other multilateral and cooperation organisms and regional coordinating and cooperating initiatives such as the Regional Committee for Road Safety of Latin America and the Caribbean.

DECLARE:

1.Their support to United Nations initiative of setting targets to reduce the road traffic toll in the world, by applying best proven road safety practices according to worldwide or regional experiences. These guidelines are very useful, even in the case some countries

may have their own targets because it will be possible to analyze each planned measure and/or add new ones.

2.That it is critical to carry out common regional road safety actions, and therefore the proposal of UNASEV (Uruguay) of coordinating a public campaign of disseminating effective road safety actions for reducing road crashes during the summer vacation period in all the countries of MERCOSUR is welcome. In the same way it is proposed to coordinate a speed enforcement plan throughout the borders of Argentina and Chile during last year festivities.

3.That it is advocated the need of coordinating wider and more sustainable actions, which allow regional level activities in order to reduce the effects of road crashes and their prevention.

4.That road safety is a very important issue for the undersigned and the need of increasing the information on the matter, it is necessary to promote exchange of experiences between national agencies, therefore declaring their interest in following the best practices presented at the seminar in order to implement some of them shortly.

5.That acknowledging the need of having comparable and objective statistical information, the undersigned will collaborate actively with the UNECLAC's project of setting road traffic casualty reduction target, by supplying the necessary statistical information in order to develop a regional road traffic casualty reduction target. Likewise, it is declared as the baseline for each country PAHO's results of its 2008 Global Report which will be presented during the first semester of 2009.

BUENOS AIRES'S DECLARATION SIGNERS

Felipe Rodríguez Laguens
Executive Director
Road Safety Nacional Agency (ANSV)
Argentina

Edson Dias Gonçalves
General Coordinator of Transport Policy Evaluation DPAPT/SPNT – MT
Brazil

Emilio Oñate Vera
Executive Secretary
Nacional Commission of Road Safety (CONASET)
Chile

Luz Marina de la Torre Pérez
Program Coordinator
National Commission of Traffic and Transport
Equator

Manuel Ángel Guzmán
Main Advisor
Road Safety Council
Paraguay

Gerardo Barrios
President
Road Safety Nacional Unit (UNASEV)
Uruguay

Annex IV

Panama Declaration

SETTING NATIONAL AND REGIONAL ROAD TRAFFIC CASUALTY REDUCTION TARGETS WORKSHOP ASSISTANTS DECLARATION.

The "Regional Seminar: Setting National and Regional Road Traffic Casualty Reduction in Mesoamerica" at the Panama City Hotel Crowne Plaza facilities, carried out on May 27th and 28th of 2009, finalizes. Here representatives from Belize, Costa Rica, Colombia, El Salvador, Guatemala, Honduras, Nicaragua, Panama y Mexico, members of the Mesoamerica Integration and Development Project, representatives from the Dominican Republican, Chilean and French governments, officers from international organizations such IDB, UNECLAC, PAHO/WHO, SIECA and the Executive Secretariat of Mesoamerica Project gathered**.**

This event is called within the frame of the X Presidential Summit Agreements of the Tuxtla Dialogue and Gathering, celebrated in Villahermosa city, Tabasco, Mexico, on June 28th, specifically to discuss the Mesoamerica Project and the Mesoamerica Transport Ministers Meeting Agreements of May 2008.

On behalf of UNECLAC, this event is conceived as part of the "Improving Global Road Safety: Setting National and Regional Traffic Casualty Reduction" Project funded by United Nations Development Account (UNDA), which is implemented by UNECLAC's Infrastructure and Transports Division along with the other 4 United Nations regional commissions.

The foregoing, by following the United Nations General Assembly April's 2008 resolution on improving global road safety, where it reaffirms the need for the further strengthening of international cooperation and knowledge-sharing in road safety, and it takes into account the needs of developing countries and invites all Member States to participate in the projects to be implemented by the United Nations regional commissions and requests the World Health Organization and the United Nations regional commissions, that in cooperation with other organisms promote multi-sectoral collaboration.

On behalf of the Inter-American Development Bank, this forum is part of the Bank activities in order to reinforce national institutions capacities related to road safety.

CONSIDERING:

- The World Report on Road Traffic Injury Prevention, published by the World Health Organization and the World Bank, which states that road traffic crashes result in at least 1.2 million deaths and over 50 million injuries each year, that road traffic deaths and injuries are forecast to increase by more than 65% by 2020, and that the Latin America and the Caribbean region is expected to have the highest road traffic fatality rate in the world by that year.
- The resolution A/RES 62/244 on improving global road safety of the General Assembly of United Nations, where it reaffirms the need for the further strengthening of international cooperation and knowledge-sharing in road safety, and it takes into account the needs of developing countries and invites all Member States to participate in the projects to be implemented by the United Nations regional commissions to assist low- and middle-income countries in setting their own national road traffic casualty reduction targets, as well as regional targets.
- That on March 2008, Health Ministers of the Americas, gathered at the First Ministerial Meeting of the Americas on Violence and Injuries Prevention,

subscribed the "Americas' Health Ministers Declaration on Violence and Injuries, where they committed to improve road safety at the Americas.
- That on May 2008, Public Works and Transports Ministers from Mesoamerica instructed the Technical and Regional Transport Commission to incorporate road safety within the Transport agenda.
- That road safety is a topic that requires the effort and participation of different governmental and civil society actors, as United Nations recommends.

FULLY AWARE OF:

- The Economic Commission for Latin American and the Caribbean's (UNECLAC) support to setting national and regional road traffic casualty reduction targets developed to promote a multi-disciplinary and integrated road safety approach.
- The importance of road safety for the Mesoamerica Project given the high road crashes victims number within this part of the Latin America and Caribbean region
- The Inter-American Development Bank's (IADB) interest on road safety and other multilateral and cooperation organisms and regional coordinating and cooperating initiatives.
- The Pan-American Health Organization (PAHO)'s continues to work on improving and disseminating comparable methodologies and measures, defining and using a fundamental set of road safety indicators, and reporting its application regularly, through the publishing of the World Report on Road Traffic Injury Prevention.
- The improvements reached by Central American countries (Guatemala, El Salvador, Honduras, Nicaragua y Costa Rica) with the recent approval of the Central American Road Safety Guidelines.

DECLARE:

1. Their support to the United Nations initiative of setting targets to reduce the road traffic toll in the world.
2. To agree to request the Chief of States and Governments country members of the Tuxtla Dialogue and Gathering Mechanism the creation of a Road Safety Mesoamerica System within the Mesoamerica Project framework.
3. Likewise, to propose the Chief of the States to adopt Road Safety as a State Policy.
4. The assistants of the seminar recommend the authorities to either set or strengthen a Road Safety National Entity, with inter-sectoral participation, and committed to report and raise awareness to specific authorities about the extreme need of implementing road safety coordinated measures.
5. To agree to request under the consideration of the Ministers of Transports of Mesoamerica, to institutionalize a Regional Multi-sectoral Working Group which informs different Mesoamerica Project Forums a proposal, management, adoption and monitoring of the Road Safety Mesoamerica System activities.
6. This working group will be integrated in an "ad-hoc" manner to the national links who sign this Declaration, and it will be called by the Technical Transport Commission Coordination, with the support of the Executive Secretariat in order to prepare a proposal which will be considered at the Presidential Top Meeting.
7. That by acknowledging the need of having comparable and objective statistical information, the undersigned will collaborate actively with the UNECLAC's project of setting road traffic casualty reduction target, by supplying the necessary statistical information in order to develop a regional road traffic casualty reduction target. This information will also be sent to the Technical and Regional Transport Commission of the Mesoamerica Project.
8. Likewise, every country's baseline will be determined from PAHO's results of its 2009 Road Safety Global Report and also other sources of information.

9. That the national organisms commit to start the necessary actions which will allow them to reach a considerable road traffic casualty reduction target at the countries here represented. These targets will be compatible with the actions and targets to be discussed and reached at the next worldwide ministerial conference to be held in Moscow, in November 2009.
10. To request IADB to support, in coordination with the International Road Assessment Program (IRAP), the implementation of a technical evaluation of the Pacific Road of the Mesoamerica International Highway Network (RICAM) as pilot project within the Mesoamerican region.
11. To thank the Government of Panama, for its collaboration in carry out this event, and the attention received during the seminar.
12. To thank the Economic Commission for Latin American and the Caribbean and the Inter-American Development Bank for their technical and funding support to carry out this event, and at the same time the Executive Secretariat of the Mesoamerica Project and the Working Team, lead by the Minister of Public Works of Panama, to offer logistical support in order to carry out a successful event. To also thank SIECA, PAHO/OMS, CONASET and the government of France for the support offered to develop this event.

Panama City, May 28th, 2009

Annex V

Caribbean Declaration

Road Safety Declaration of the Caribbean Countries Delegates

In Georgetown, Guyana, from September 2nd to 4th, 2009, representatives of Governments and Civil Society from Bahamas, Barbados, Belize, Guyana, Jamaica, Saint Lucia, Suriname and Trinidad & Tobago attended to the meeting called by UNECLAC in collaboration with PAHO (Pan American Health Organization), CARICOM (Caribbean Community) and CAR (Caribbean Association of Roads), entitled: Setting Regional and National Road Traffic Casualty Reduction Targets for Caribbean Countries.

Considering

Road traffic injuries and fatalities have enormous health, social and economic impacts on individuals, families, and the Caribbean community. Road traffic injuries and fatalities are a very serious problem affecting all sectors of the Caribbean region.

That road safety problem requires the coordination of efforts and the active participation of different actors and institutions of Governments, private sector and the Civil Society.

The recommendation of the United Nations in order to find cross-sectoral solutions, the importance of set up a reduction target of road safety casualties, and to monitoring the progress of the reduction process.

Declare:

- The strong support to the United Nations initiative for setting reduced targets on road traffic injuries and fatalities, by applying best practices based on proved interventions and measures, according to the world experience.
- The willingness to establish a process of awareness and consensus within the context of the Government and the Civil Society in order to set rational targets to reduce road traffic fatalities and injuries, both at national and regional levels.
- The commitment to coordinate actions for joining efforts and resources in order to set up sustainable road safety plans, based on a multi-sectoral approach, to allow a complete application of measures and interventions in benefit of the Caribbean Community as a whole.
- For these commitments, it is important to consider the following: a. political authorities and technicians need to work hand in hand when tackling this issue; b. strong political advocacy is required; c. to consider the Road Safety Plan of Actions as ongoing processes, that must be both monitored and enhanced.
- Members of the CARICOM, the Secretariat and international institutions can share resources; building ad-hoc partnerships; promoting and facilitating research that will build capacity and improve data collection methods; and encouraging collaboration between various sectors so that effective surveillance, data management and evaluation can be enhanced.
- The attendants thanks to CARICOM Secretariat, UNECLAC, PAHO, and CAR for the organization of this seminar, and the participation of the IADB and other institutions.

Annex VI

Conclusions and recommendations of UNESCWA seminar 16-17 June 2009

(a) Disseminate to the government authorities involved in road safety in the UNESCWA region the lessons and good practices by developing countries in achieving road safety targets relatively at low cost and within a short period of time especially for those cases presented during the meeting;

(b) Ensure that member states in the UNESCWA region maintain a reliable database for road crashes. Countries should, therefore, adopt/improve methodology for data collection and set up/improve the existing national computerized data bases on road crashes. Member states are encouraged to become members of the International Road Traffic and Accident Database (IRTAD) or to use UNECE Glossary and database on road traffic accidents as a basis;

(c) Set a regional (UNESCWA) target of 30% reduction on road crash fatalities for the year 2015. Member states are encouraged to start up/activate national road safety councils and implement appropriate interventions (including speed enforcement, usage of seatbelts and helmets, treatment of high accidents locations, improved drivers' training and licensing, proper emergency and first aid services, etc.;

(d) Encourage member states that have not yet set road safety targets to make efforts in order to produce evidence/based casualty reduction targets for 2015 and onwards;

(e) Invite member states to provide UNESCWA with national reports including their road safety management programmes and their plans for setting targets to reduce their traffic fatalities, and all the activities/actions/legislation taken since 2005; the year which UNESCWA initiated road safety activities in the region. Contributions should reach UNESCWA before 30 August 2009, for UNESCWA to prepare a report outlining regional progress and achievements in road safety to be introduced in the First Global Ministerial Conference on Road Safety to be held at the Kremlin Palace in Moscow during 19-20 November 2009.

(f) Encourage member states to become contracting parties to the UN legal instruments related to road safety and properly implement them.

(g) Request UNESCWA Secretariat to continue to provide capacity building and technical support to the member states on issues in road safety and all other related subjects.

(h) Request UNESCWA Secretariat to consider participating in working structures in other regional commissions and other regional, interregional, and international fora (events, activities, etc.) to represent the interest of member states, as needed.

(i) Advise member states to participate with high-level representation in the First Global Ministerial Conference on Road Safety (Moscow, 19-20 November 2009) as it will be the First Global UN decade Ministerial meeting on road safety issue.

Annex VII

Accra Declaration and Recommendations

Declaration of African Ministers responsible for Transport and Health

We the Ministers responsible for Transport and Health, meeting at the African Road Safety Conference in Accra, Ghana on 8th February 2007 on the importance of road safety;

Reaffirming the declaration by the African Ministers responsible for Transport and infrastructure adopted in Addis Ababa, in April 2005, on the importance of the role of transport in achieving the Millennium Development Goals (MDGs);

Cognizant of the high rate of road accidents and their adverse social and economic impact on the continent;

Recalling UN resolution A/58/289, which endorsed the *World Report on Road Traffic Injury Prevention*;

Further Recalling UN resolution A/60/5, which recognizes the need for continuous awareness-raising and invites the UN regional commissions and the World Health Organization to jointly organize the first United Nations Global Road Safety Week;

Encouraging the member States to use the WHO/World Bank *World Report on Road Traffic Injury Prevention* as a framework for road safety and implement its recommendations to substantially reduce the causes and risk factors associated with road accidents, namely the non-use of safety belts and child restraints; driving under the influence of alcohol and drugs; the non-use of helmets; inappropriate and excessive speed; the lack of safe infrastructure; the use of mobile phones among others;

Commending the African Union Commission, Economic Commission for Africa, World Health Organization, Regional Economic Communities, African countries and Sub-Saharan African Transport Policy Programme for their efforts to strengthen road safety initiatives in Africa;

Recognizing the importance and the role of global partners, including the World Bank Global Road Safety Facility, UN Road Safety Collaboration, Department for International Development (DFID), Government of Netherlands, Swedish International Development Agency (SIDA), the FIA Foundation, and Global Road Safety Partnership (GRSP), in advancing the global road safety agenda ;

Noting the deteriorating condition of the quality of transport infrastructure and the need for sustainable management and financing to support road maintenance;

Welcomes the report of the Commission for Global Road Safety and endorses its principal recommendations for a $300 million ten year global road safety action plan, the commitment of 10% of all road sector projects to road safety initiatives including rating assessment, design and systems management and to hold a global United Nations ministerial meeting on road safety in 2009;

Further Welcomes the commitment made at the Gleneagles summit of the G8 Group of leading industrialised countries to substantially increase investment in Africa's infrastructure and to establish the Africa Infrastructure Consortium;
Calls upon the G8-Summit, in Heligendamm, Germany, in June 2007, to: recognize the urgent need to improve road safety in Africa, particularly in Sub-Saharan Africa; systematically include road safety in the work of the Africa Infrastructure Consortium; the Sub Saharan Africa Transport Policy Programme; and in the development assistance

programmes of the G8 nations to ensure that new and improved roads in Africa do not increase road traffic death and injuries;

Convinced of the need for good transport polices in preventing road deaths and injuries on the continent; creating socio-economic opportunities and, hence, contributing significantly to poverty reduction;

Aware of the importance of international treaties and conventions related to road safety of which few African countries are signatories;

Further calls upon African Union Commission to present this Declaration and attached recommendations from the African Road Safety Conference, held in Accra, Ghana, from 5-7 February 2007, to the next meeting of African Ministers responsible for Transport and that of Ministers of Health for consideration as a basis for the formulation of an action programme by Member States and regional economic communities;

Committed to improving transport infrastructure and health services in Africa so as to prevent road accidents;

HEREBY RESOLVE **to undertake the following:**

1. Work together to stop the growing epidemic of deaths and injuries on our roads.

2. Promote road safety as a health, transportation, law enforcement, education, and development priority for our nations.

3. Set and achieve measurable national targets for road safety and traffic-injury prevention in all Member States to contribute to the achievement of Africa's overall targets to reduce accidents fatalities by half by 2015. In this regard, Member States should designate a lead agency, with legal backing and adequate and sustainable financial resources, to ensure the achievement of the targets.

4. Take necessary steps to source sustainable funding for development and management of transport infrastructure and services and work with multilateral and bilateral donors to develop road safety projects and programmes to build national road safety management capacity.

5. Strengthen pre-hospital and emergency services in order to provide timely and appropriate care to road traffic-injured patients to minimize their effects and long-term disability.

6. Mainstream road safety into new and existing road infrastructure development programmes. In this regard, convince governments to devote a percentage of their investment in infrastructure development to road safety programmes.

7. Improve the collection, management and use of data on road deaths and injuries so as to formulate evidence-based policies. In this regard, efforts would be made to address the non-reporting of accidents, and to harmonise data that originate from different sources.

8. Ensure the enactment and enforcement of laws associated with driving under the influence of alcohol and drugs; inappropriate and excessive speeding; non-use of helmets; driver licensing; roadworthy vehicles; and the use of mobile phones.

9. Implement specific education programmes among drivers with regard to safe driving, particularly with issues associated with speed. In this regard, promote road safety initiatives at the local, municipal and national levels, for children and other road users.

10. Urge African countries to pay special attention to rural transport. In this regard, ensure that adequate resources are provided for studies on rural dimensions of road safety and the implementation of their outcome.

11. Encourage African countries to ratify and adhere to international treaties and conventions such as the Vienna Conventions on road traffic and road signs and signals.

Done in Accra on 8 February 2007

RECOMMENDATIONS

The following recommendations were made at the end of the African Road Safety Conference. Member States should:

• Establish lead agency that has proper legal backing, and is empowered and supported by adequate financial resources to ensure that it is well equipped and staffed with appropriately trained personnel
• Improve the collection, management and use of data on road deaths and injuries so as to formulate evidence-based policies. In this regard, efforts would be made to address the nonreporting of accidents, and to harmonise data that originate from different sources.
• Make the necessary effort to improve road safety management on the continent. In this regard, good practices example from within the continent should be recognized, widely disseminated and emulated.
• Harmonise national actions plans at sub-regional level (databases, regulations, infrastructure and equipment standards,
• Encourage African countries to enforce road safety legislation, particularly those related to speed control, use of helmet, and enhancing visibility
• Strengthen partnership and collaboration at sub-regional, regional and global level in advancing the road safety agenda
• Mainstream road safety in national transport policies, with particular attention to rural transport safety
• Commit to educating the general public on road safety matters • Set and achieve measurable targets to contribute to achieving the goal of reducing accident fatalities by half by 2015.

Annex VIII

UNECA Framework for Monitoring

Framework for Monitoring and Evaluating Progress in Implementing the Recommendations of the Accra Road Safety Conference.

Expected Accomplishment	Performance Indicator	Baselines and Targets
Established lead agencies	-Legislation creating Road Safety Agency established	2007: 2015:
	-Road Safety Agency operational and functional (Core professional staff recruited; Funding source clearly identified)	2007: 2015:
Improved Management of Data	-Computerised data management system established	2007: 2015:
	-Structured data reporting and collection system in place	2007: 2015:
	-Harmonised data collection system and definition of data attributes adopted	2007: 2015:
	-Lead academic institution identified to manage database	2007: 2015:
	-Standardised format for data collection in used	2007: 2015:
Educated General Public (Road Users)	-% of Schools with Road Safety Clubs	2007: 2015:
	-Road safety campaigns established	2007: 2015:
	-% of schools implementing road safety education as part of syllabus	2007: 2015:
	- Training programme for drivers and school children implemented	2007: 2015:
	- Curricula for schools Harmonised	2007: 2015:
	- Mandatory formal training accessed by drivers	2007: 2015:
	-Trained and accredited driving instructors mandatory and available	2007: 2015:
	-Rigorous and corruption-free driving test implemented	2007: 2015:

Speed Control and Use of Seatbelts	-Legislation established	2007: 2015:
	-Speed management and control system in place	2007: 2015:
	-% of drivers and passengers using seat belts increased	2007: 2015:
	-Prosecutions for non-compliance reduced	2007: 2015:
	% of vehicles equipped with seatbelts increased	2007: 2015:
Use of Helmets	-Legislation established	2007: 2015:
	- % of countries with legislation on helmets	2007: 2015:
	-% of riders complying (cyclists wearing helmets) increased	2007: 2015:
Harmonized National Plans at Sub-regional Level	-No of RECS with harmonised plans increased	2007: 2015:
	-No of countries within RECs with harmonized plans increased	2007: 2015:
Strengthened Partnerships and Collaboration	-Membership in partnership arrangements increased	2007: 2015:
	-Number of partners supporting national road safety activities increased	2007: 2015:
	-% of eligible partners supporting programmes	2007: 2015:
	-Resources from partners increased	
	-Collaboration with key NGO's and disadvantaged groups increased	2007: 2015:
Safer Road Infrastructure for all road users	-% of road projects cost dedicated and spent on road safety infrastructure	2007: 2015:
	- % of existing road km audited/inspected and implemented in urban areas	2007: 2015:
	- % of existing road km audited/inspected and implemented in inter-urban roads	2007: 2015:
	-% of new/rehabilitated roads with safety impact assessment at all stages	2007: 2015:
	- Road safety audit guideline	2007: 2015:

	- % of segregated facilities along the roads in urban areas	2007: 2015:
	- % of segregated facilities across the roads	2007: 2015:
Rural transport safety	- % reduction of rural road users involved in fatalities	2007: 2015:
	-% reduction in animal strikes	2007: 2015:
	- % of countries with Regulation of mixed transportation	2007 : 2015:
	- % of countries with Regulation on minimum standard of safety	2007 : 2015:
	- % of countries with community data collection system	2007 : 2015:
	- % of intermediary means of transport with light reflective materials	2007: 2015:
Road Worthiness of Vehicles (Vehicle safety)	- Number of countries with minimum of standards set for imported and modified vehicles	2007: 2015:
	-Ratio of No. Automated Inspection Centres to No. of vehicles	2007: 2015:
	- % vehicles complying with standards	2007: 2015:
	- Maximum age of imported vehicles (replacement of old fleet)	2007: 2015:
	- % of public and freight transport vehicles with speed governors	2007: 2015:
Emergency Care	- Number of dedicated emergency rescue units in ratio of population	2007: 2015:
	- % calls attended to by Ambulance Services	2007: 2015:
	- % of countries with emergency call services	2007: 2015:
	- % victims receiving medical care within 1hr of accident	2007: 2015:
	- % of upgraded emergency care facilities	2007: 2015:
	- % of standardized ambulances	2007: 2015:
	- % of skilled emergency personnel in ratio of population	2007: 2015:
	- Coverage of community first aid units along corridors	2007: 2015:

The baseline of 2007 corresponds to the year of the Accra Road Safety Conference and the target date of 2015 corresponds to the year by which African countries have committed to reduce road accident fatalities by half. However, countries are at different levels in relation to the proposed performance indicators in the framework and may therefore set different targets for the various indicators. Similarly countries could develop other indicators as they deem necessary and in line with their specificities.

Annex IX

Busan Ministerial Declaration

MINISTERIAL DECLARATION ON IMPROVING ROAD SAFETY IN ASIA AND THE PACIFIC

We, the Ministers of transport of the members and associate members of the Economic and Social Commission for Asia and the Pacific attending the Ministerial Conference on Transport, held in Busan, Republic of Korea, from 6 to 11 November 2006,

Recalling General Assembly resolutions 57/309 of 22 May 2003 and 58/9 of 5 November 2003 on the global road safety crisis, and 58/289 of 14 April 2004 and 60/5 of 26 October 2005 on improving global road safety,

Recalling that the General Assembly, in its resolution 58/289, invited the World Health Organization, working in close cooperation with the United Nations regional commissions, to act as a coordinator on road safety issues within the United Nations system,

Taking note of the *World Report on Road Traffic Injury Prevention*, which estimated that 1.2 million people are killed in road accidents and as many as 50 million are injured worldwide annually,

Also noting that the Report projected that, without a new commitment to prevention, these figures could increase by about 65 per cent over the next 20 years, making road traffic injuries one of the top three causes of the global burden of disease,

Concerned that about half of all road traffic fatalities and injuries worldwide occur in the Asian and Pacific region, most of which are vulnerable road users, such as pedestrians, children and motorcyclists,

Observing the rapid growth of road transport infrastructure development and motorization in the region, which implies concomitant growth in road traffic fatalities and injuries,

Deeply concerned about the human suffering, social implications and heavy burden on the poor of road accidents as well as their impact on national economic development, with the costs being estimated to be in the range of 1 to 3 per cent of a country's annual gross national product,

Cognizant of the significant progress already achieved in this respect,

Recognizing that the Parties to the Intergovernmental Agreement on the Asian Highway Network shall give full consideration to the issues of road safety while developing the network,

Also recognizing that road safety is a public policy issue of major concern that requires a strong political commitment and effective interventions if road traffic fatalities, injuries and related human suffering are to be reduced significantly,

Resolve to save 600,000 lives and to prevent a commensurate number of serious injuries on the roads of Asia and the Pacific over the period 2007 to 2015,

Invite the members and associate members of the Commission, in this regard, to implement the recommendations contained in the *World Report on Road Traffic Injury*

Prevention, in line with General Assembly resolution 60/5 of 26 October 2005 on improving global road safety,

Also invite the members and associate members of the Commission to address road safety in the following areas:

(a) Making road safety a policy priority;

(b) Making roads safer for vulnerable road users, including children, senior citizens, pedestrians, non-motorized vehicle users, motorcyclists, and persons with disabilities;

(c) Making roads safer and reducing the severity of accidents (building "forgiving roads");

(d) Making vehicles safer and encourage responsible vehicle advertising;

(e) Improving national and regional road safety systems, management and enforcement;

(f) Improving cooperation and fostering partnerships;

(g) Developing the Asian Highway as a model of road safety;

(h) Providing effective education on road safety awareness to the public, young people and drivers.

Request the Executive Secretary:

(a) To accord priority to mobilizing resources from domestic and international sources for the implementation of the present Declaration;

(b) To strengthen existing road safety initiatives affirmed at the regional and international levels and to take new ones, in particular to improve road safety along the Asian Highway network;

(c) To work closely with the World Health Organization, the other regional commissions, and other relevant international and multilateral organizations in the implementation of the present Declaration and to continue to promote cooperation in a synergistic manner with the various intergovernmental, non-governmental and subregional organizations that are playing an increasingly important role in improving road safety and, in particular, the private sector;

(d) To develop, in consultation with the members and associate members of the Commission, a set of goals, targets and indicators, to be achieved by 2015, in order to assess and evaluate road safety progress;

(e) To promote networking among the national and subregional organizations that support the implementation of the present Declaration.

Annex X

World Bank Country Capacity Checklists*

(i) Checklist 1: Results focus at system level

Questions	Yes	Partial	Pending	No
Are estimates of the social costs of crashes available?				
Are data on road deaths and injuries readily available?				
Have the risks faced by road users been identified? • Drivers? • Passengers? • Motor cyclists? • Pedestrians? • Cyclists? • Children? • Others?				
Has a national vision for improved road safety performance in the longer-term been officially set?				
Have national and regional targets been set for improved safety performance? • Social cost targets? • Final outcomes targets? • Intermediate outcomes targets? • Intervention output targets? • At risk group targets? • Industry targets? • Other targets?				
Have all agencies responsible for improved safety performance been identified and are they formally held to account for performance achieved to achieve the desired focus on results? • Highways? • Police? • Transport? • Planning? • Justice? • Health? • Education? • Others?				
Have industry, community and business responsibilities for improved roads safety performance been clearly defined to achieve the desired focus on results?				
Are regular performance reviews conducted to assess progress and make improvements to achieve the desired focus on results?				
Has a lead agency been formally established to direct the national road safety effort to achieve the desired focus on results?				
Is the lead agency role defined in legislation and/or policy documents and annual performance agreements to achieve the desired focus on results?				

(ii) Checklists 2 – 5: Results Focus at Intervention Level

Checklist 2: Planning, design, operation and use of the road network

Questions	Yes	Partial	Pending	No
Have comprehensive safety standards and rules and associated performance targets been set for the planning, design, operation and use of roads to achieve the desired focus on results? • National roads?				

• Regional roads? • Provincial roads? • City roads?				
For each category of roads (national, regional, provincial, city) are compliance regimes in place to ensure adherence to specified safety standards and rules to achieve the desired focus on results? • Road safety impact assessment? • Road safety audit? • Road safety inspection? • Black spot management? • Network safety management? • Speed management? • Alcohol management? • Safety belts management? • Helmets management? • Fatigue management?				
Do the specified safety standards and rules and related compliance regimes clearly address the safety priorities of high-risk road user groups to achieve the desired focus on results?				
Do the specified safety standards and rules and related compliance regimes compare favourably with international good practice?				

Checklist 3: Entry and exit of vehicles to and from the road network

Questions	Yes	Partial	Pending	No
Have comprehensive safety standards and rules and associated performance targets been set to govern the entry and exit of vehicles and related safety equipment to and from the road network to achieve the desired focus on results? • Private vehicles? • Commercial vehicles? • Public transport vehicles? • Motor cycle helmets? • Cycle helmets?				
For each category of vehicles and safety equipment (private, commercial, public, helmets) are compliance regimes in place to ensure adherence to the specified safety standards and rules to achieve the desired focus on results? • Vehicle certification? • Vehicle inspection? • Helmet certification?				
Do the specified safety standards and rules and related compliance regimes and safety rating surveys clearly address the safety priorities of high-risk road user groups to achieve the desired focus on results?				
Do the specified safety standards and rules and related compliance regimes and safety rating surveys compare favourably with international good practice?				

Checklist 4: Entry and exit of road users to and from the road network

Questions	Yes	Partial	Pending	No
Have comprehensive safety standards and rules and associated performance targets been set to govern the entry and exit of road users to and from the road network to achieve the desired focus on results? • Private drivers and passengers? o Cars? o Heavy vehicles? o Mopeds? o Motor cycles • Commercial drivers?				

• Public transport drivers? o Taxis? o Buses? o Non-motorised vehicles?				
For each category of driver (private, commercial, public) are compliance regimes in place to ensure adherence to the specified safety standards and rules to achieve the desired focus on results? • Driver testing? • Roadside checks?				
Do the specified safety standards and rules and related compliance regimes clearly address the safety priorities of high-risk road user groups to achieve the desired focus on results? • Young drivers? • Older drivers? • Commercial drivers? • Public transport drivers?				
Do the specified safety standards and rules and related compliance regimes compare favourably with international good practice?				

Checklist 5: Recovery and rehabilitation of crash victims from the road network

Questions	Yes	Partial	Pending	No
Have comprehensive safety standards and rules and associated performance targets been set to govern the recovery and rehabilitation of crash victims from the road network to achieve the desired focus on results? • Pre-hospital? • Hospital? • Long-term care?				
For each category of post-crash service (pre-hospital, hospital, and long-term care) are compliance regimes in place to ensure adherence to the specified safety standards and rules to achieve the desired focus on results?				
Do the specified safety standards and rules and related compliance regimes clearly address the safety priorities of high-risk road user groups to achieve the desired focus on results?				
Do the specified safety standards and rules and related compliance regimes compare favourably with international good practice?				

(iii) Checklists 6 – 11: Results Focus at Institutional Management Function Level

Checklist 6: Coordination

Questions	Yes	Partial	Pending	No
Are interventions being coordinated horizontally across agencies to achieve the desired focus on results?				
Are interventions being coordinated vertically between national, regional, provincial and city agencies to achieve the desired focus on results?				
Have robust intervention delivery partnerships between agencies, industry, communities and the business sector been established to achieve the desired focus on results?				
Have Parliamentary committees and procedures supporting the coordination process been established to achieve the desired focus on results?				

Checklist 7: Legislation

Questions	Yes	Partial	Pending	No
Are legislative instruments and procedures supporting interventions and institutional management functions sufficient to achieve the desired focus on				

results?				
Are legislative instruments and procedures supporting interventions and institutional management functions regularly reviewed and reformed to achieve the desired focus on results?				

Checklist 8: Funding and resource allocation

Questions	Yes	Partial	Pending	No
Are sustainable funding mechanisms supporting interventions and institutional management functions in place to achieve the desired focus on results? • Central budget? • Road fund? • Fees? • Other sources?				
Are formal resource allocation procedures supporting interventions and institutional management functions in place to achieve the desired focus on results? • Cost effectiveness? • Cost benefit?				
Is there an official value of statistical life and related value for injuries to guide resource allocation decisions?				
Are funding mechanisms and resource allocation procedures supporting interventions and institutional management functions sufficient to achieve the desired focus on results?				

Checklist 9: Promotion

Questions	Yes	Partial	Pending	No
Are government, industry, community and business responsibilities for safety actively and regularly promoted to achieve the desired focus on results? • Communications objectives? • Target audiences? • Key messages? • Media? • Frequency and reach?				

Checklist 10: Monitoring and evaluation

Questions	Yes	Partial	Pending	No
For each category of roads (national, regional, provincial, city) are sustainable systems in place to collect and manage data on road crashes, fatality and injury outcomes, and all related road environment/vehicle/road user factors, to achieve the desired focus on results?				
For each category of roads (national, regional, provincial, city) are sustainable systems in place to collect and manage data on road network traffic, vehicle speeds, safety belt and helmet wearing rates, to achieve the desired focus on results?				
For each category of roads (national, regional, provincial, city) are regular safety rating surveys undertaken to quality assure adherence to specified safety standards and rules, to achieve the desired focus on results? • Risk ratings? • Road protection scores?				
For each category of roads (national, regional, provincial, city) are systems in place to collect and manage data on the output quantities of safety interventions implemented to achieve the desired focus on results? • Safety engineering treatments? • Police operations?				

• Educational activities? • Promotional activities? • Driver training? • Vehicle testing? • Emergency medical services?				
For each category of vehicles and safety equipment (private, commercial, public, helmets) are systematic and regular safety rating surveys undertaken to quality assure adherence to the specified safety standards and rules to achieve the desired focus on results? • Crash testing? • Helmet testing?				
For each category of post-crash service (pre-hospital, hospital, long-term care) are systematic and regular surveys undertaken to quality assure adherence to the specified standards and rules to achieve the desired focus on result?				
Are systems in place to monitor and evaluate safety performance against targets regularly to achieve the desired focus on results?				
Do all participating agencies and external partners and stakeholders have open access to all data collected?				

Checklist 11: Research and development and knowledge transfer

Questions	Yes	Partial	Pending	No
Has a national road safety research and development strategy been established to achieve the desired focus on results? • Vehicle factors? • Highway factors? • Human factors? • Institutional factors? • Other factors?				
Has an independent national road safety research organization been established to achieve the desired focus on results? • Vehicle factors? • Highway factors? • Human factors? • Institutional factors? • Other factors?				
Have demonstration and pilot programs been conducted to achieve the desired focus on results? • Vehicle factors? • Highway factors? • Human factors? • Institutional factors? • Other factors?				
Are mechanisms and media in place to disseminate the findings of national road safety research and development to achieve the desired focus on results? • Conferences? • Seminars? • Training? • Journals? • Other?				

(iv) Checklist 12: Lead agency role and institutional management functions

Questions	Yes	Partial	Pending	No
Does the lead agency (or de facto lead agency/agencies) effectively contribute to the 'results focus' management function? • Appraising current road safety performance through high-level strategic review? • Adopting a far-reaching road safety vision for the longer term? • Analysing what could be achieved in the shorter term? • Setting appropriate quantitative targets by mutual consent across the road safety partnership and building an evidence-based strategy around these desired outcomes and outputs? • Establishing mechanisms to ensure stakeholder accountability for results?				
Does the lead agency (or de facto lead agency/agencies) effectively contribute to the 'coordination' management function? • Horizontal coordination across central government? • Vertical coordination from central to regional and local levels of government? • Specific delivery partnerships between government, non government, community and business at the central, regional and local levels? • Parliamentary relations?				
Does the lead agency (or de facto lead agency/agencies) effectively contribute to the 'legislation' management function? • Reviewing legislative needs to achieve results in relation to other alternatives and carrying out impact assessments of costs and benefits? • Consulting on and developing/updating enforceable standards and rules? • Consolidating key safety rules? • Finding legislative slots in Government and Parliamentary programs?				
Does the lead agency (or de facto lead agency/agencies) effectively contribute to the 'funding and resource allocation' management function? • Securing access to sustainable, annual sources of road safety funding? • Establishing procedures to guide allocation of resources across safety programs?				
Does the lead agency (or de facto lead agency/agencies) effectively contribute to the 'promotion' management function? • Promotion of a far-reaching road safety vision? • Championing and promotion at high level? • Multi-sectoral promotion of effective intervention? • Leading by example with in-house road safety policies? • Developing and supporting safety rating programs? • Carrying out national advertising? • Encouraging promotion at local level?				
Does the lead agency (or de facto lead agency/agencies) effectively contribute to the 'monitoring and evaluation' management function? • Ensuring that appropriate data systems, linkages and management capacity are established to set and monitor targets and strategies? • Transparent review of the national road safety strategy and its performance? • Making any necessary adjustments to ensure that results are achieved?				
Does the lead agency (or de facto lead agency/agencies) effectively contribute to the 'research and development and knowledge transfer' management function? • Developing capacity for multi-disciplinary research and knowledge transfer? • Creating a national road safety research strategy and annual program? • Securing sources of sustainable funding for road safety research? • Training and professional exchange? • Establishing best practice guidelines? • Setting up demonstration projects?				

** Bliss and Breen, 2009*

With growing global recognition that setting concrete targets can help improve road traffic safety, the United Nations regional commissions embarked on a project entitled "Improving global road safety: setting regional and national road traffic casualty reduction targets". The project provided guidelines to low and middle income countries on developing regional and national road safety targets and offered an exchange on good practices to achieve the targets by a deadline set to 2015.

The present report describes the objectives of the project, its regional activities, and the key issues for successfully setting and achieving road safety targets. Amongst other things, it explains the different levels of target setting - final outcome targets, intermediate outcome targets, and output targets – and how to apply them in a given context.

The project was funded by the United Nations Development Account (UNDA).

United Nations Economic Commission for Europe
Palais des Nations, CH-1211 Geneva 10, Switzerland
www.unece.org

UNITED NATIONS

United Nations Publication. Printed in France. GE.09-0267- March 2010 - 1000. ECE/TRANS/217