

REACHING THE TARGET OF REDUCING ROAD FATALITIES BY 50% BY 2012

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1. Introduction

This document outlines the measures that could be taken by governments to reach the ECMT's target of reducing road fatalities in Member states by 50% in the period 2000-2012. It is based on the work of the Road Safety Policy Group, takes into account advice from Member countries on progress towards their targets, and builds on the findings of Joint Transport Research Centre projects on *Achieving Ambitious Road Safety Targets*, *Speed Management*, and *Young Driver Risks and Effective Countermeasures*.

Since its creation in 1953, the ECMT has worked intensively not only to define political orientations in the field of Road Safety, but also to develop, promote and facilitate the implementation of measures improving safety on the roads. Its work has focussed on concrete topics, such as seatbelt wearing, drink driving, speed limitation and its enforcement, ways to influence human behaviour, and advertising that conflicts with road safety, as well as on specific target groups, such as cyclists, children, older people, young drivers and pedestrians.

In 2002, at their Council in Bucharest, ECMT Ministers reaffirmed their will to combat death on the road, and agreed on the objective noted above. Although there have been favourable developments and substantial improvements in road safety in many Member States, the total reductions to date across ECMT Member countries are less than needed. If current trends prevail, the overall 50% reduction target by 2012 is unreachable. Indeed, the target translates into saving an additional 50 000 lives per year until 2012.

The ECMT strongly encourages Member States to take bold action both jointly and at the national level to address the road safety problem. With only six years left to reach the target, this work should begin immediately, focusing on two parallel areas of action:

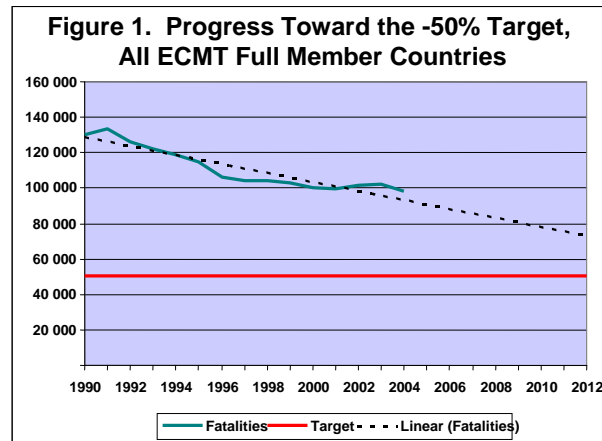
Addressing the core elements of road safety, meaning those issues that are known to be the major causes of traffic fatalities but where much progress remains to be achieved. Unless many countries take action in implementing known countermeasures, the 50% target will not be reached.

- A. **Establishing the framework for long-term and sustainable high levels of traffic safety**, focusing on increasing awareness among society and within key groups regarding the problem and need to act; creating a sound organizational and institutional framework for work on road safety; and ensuring efficient financing and management of road safety efforts.

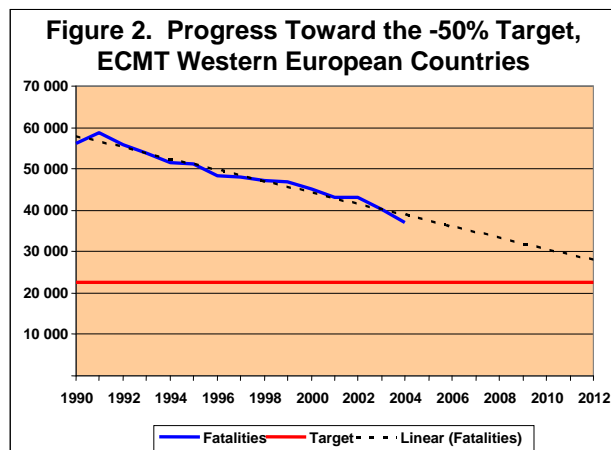
While the specifics of the action undertaken may be different depending on countries' current road safety levels, all countries would benefit from this common approach. Furthermore, these initiatives would be equally relevant to Associate Member countries in helping them reach their national targets.

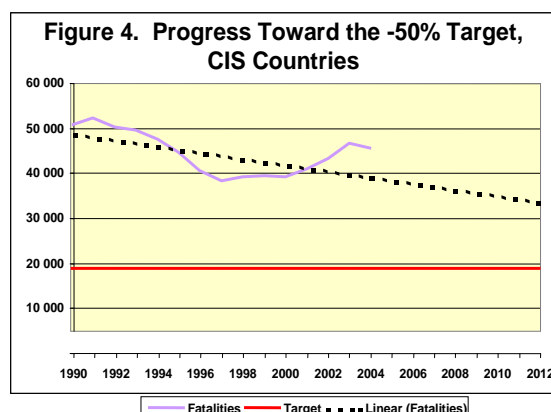
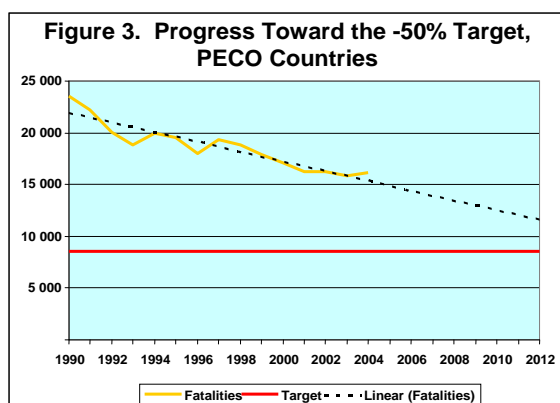
2. The Problem

Collectively, ECMT countries are not on track for meeting the -50% target. This is demonstrated in Figure 1.



The developments in different regions of the ECMT vary quite significantly. Whereas fatality counts in the Western countries are on a constant decrease, trends for Central and Eastern European (PECO) countries are stagnant, and those for the Community of Independent States (CIS), and particularly for Russia, are increasing. The overall trends for each of these regions are shown in Figures 2, 3 and 4.





While ECMT Associate Members are not signatories to the -50% target, they are working towards their own targets, which are listed as follows:

Australia:	No more than 5.6 road traffic deaths per 100 000 population in 2010.
Canada:	30% decrease in the average number of road users killed or seriously injured in 2008-2010, compared to 1996-2001, as well as sub-targets for specific road users.
Japan:	40% fewer fatalities in 2012 compared to 2002.
Korea:	34.9% reduction in road user deaths by 2006 over 2002, as well as sub-targets for specific road users.
Mexico:	27% reduction in fatalities by 2015, compared to 2002.
New Zealand:	Not exceeding 300 fatalities in 2010, as well as also, sub-targets for specific road users, social costs, regions, and causation factors (e.g. less than 48 driver fatalities with excess alcohol in 2010).
US:	1 passenger vehicle occupant highway fatality per 100 million passenger vehicle miles travelled (VMT) by 2008, compared to 1.1 in 1996; as well as sub-targets for specific road users (e.g. 46 motorcycle fatalities per 100 million VMT by 2006) and for crash causation factors (e.g. 82% safety belt use in 2006 compared to 73% in 2001).

Apart from the ECMT's goals, many countries are not on track to achieve their own national targets, and current trends indicate that the European Union's target will also be difficult to attain.

Figure 5 provides a picture of road safety across the ECMT, including Associate members, in terms of fatalities per 100 000 population. Again, the figures vary greatly across different countries and regions.

These differences reflect the distinct circumstances in different parts of the ECMT in terms of the number of vehicle miles travelled, levels and growth of motorisation, infrastructure development, legal and regulatory frameworks, and resources available to manage the road safety problem. They also indicate the relevance of exchanging information among the various Members in the pursuit of the highest possible road safety standards.

**Figure 5. Road Fatalities per 100 000 Population
ECMT Members, 2004**

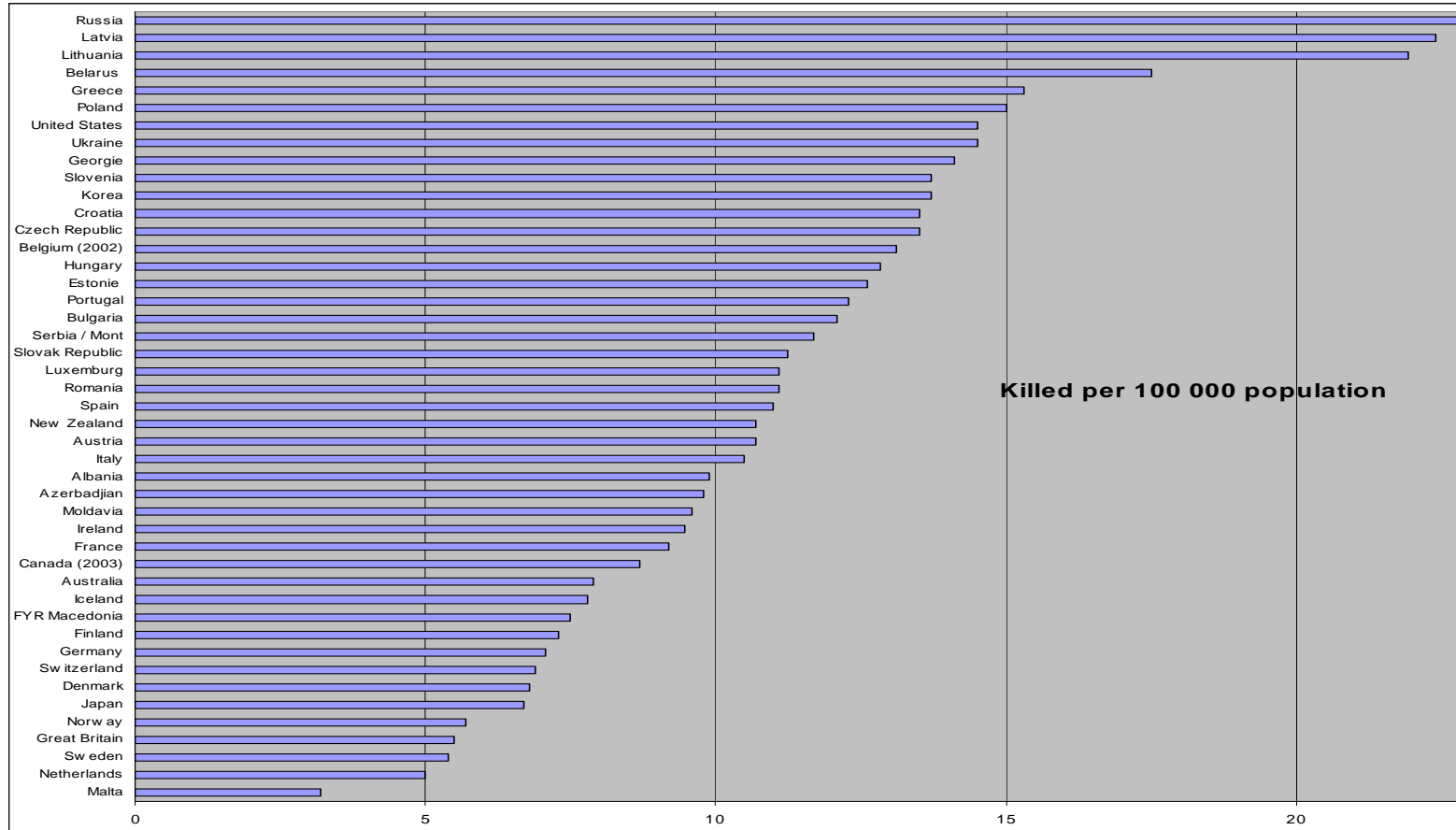
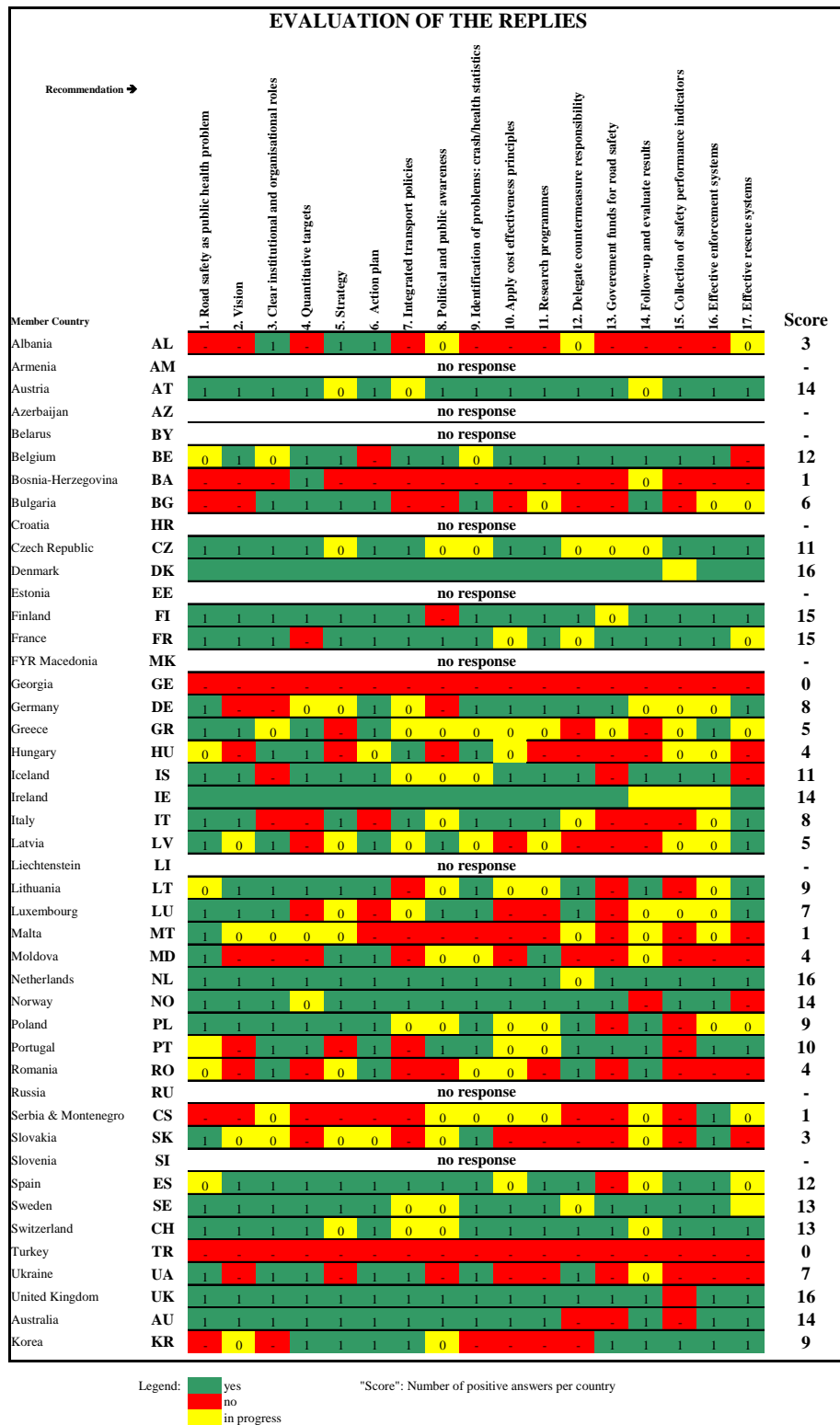


Figure 6. Progress in Implementing the Framework for Road Safety



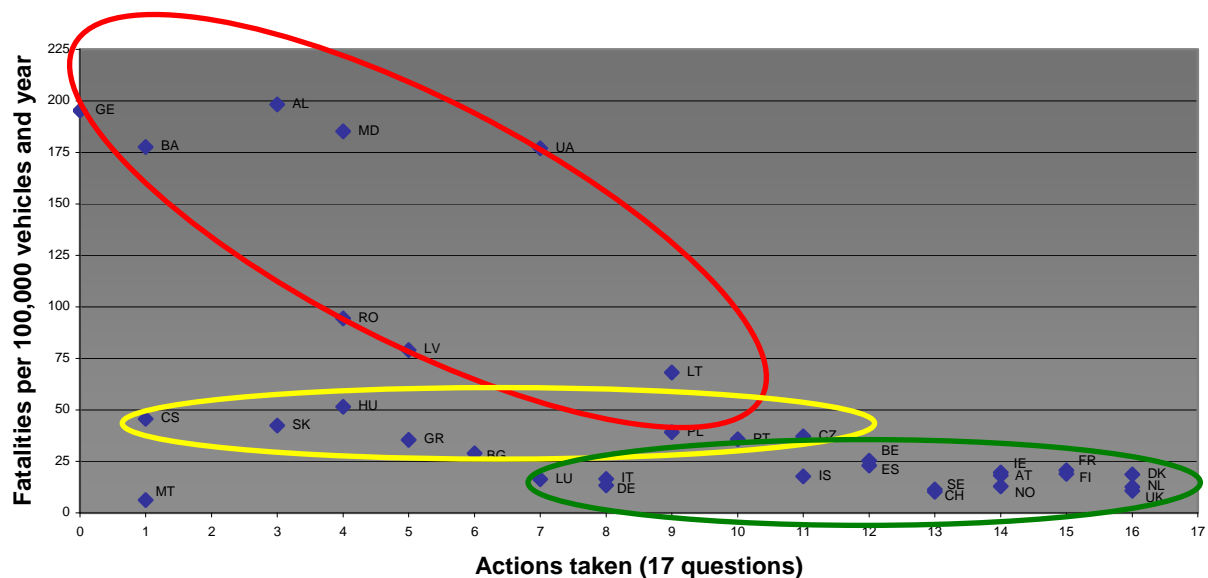
The figures also reflect the extent to which different countries have made progress in establishing the basic groundwork necessary to achieve high levels of road safety performance. For example,

following the establishment of the -50% target, in order to help each Member State to define and implement its own road map towards meeting that target, the ECMT drew up an extensive framework of 17 elements that provides a broad outline of how successful road safety work should be managed. Figure 6, based on a questionnaire survey of ECMT Members, reveals that progress in implementing these elements is highly varied.

Responses to the questionnaire show a wide variety in institutional and organisational settings for road safety work across the Member States. It is obvious that several Member States have a substantial task ahead of them in terms of enhancing their road safety management systems in order to improve their performance. In many countries there is still little awareness among political decision-makers and the public about the size and the urgency of the problem. Roles and responsibilities between the Ministries, as well as between national, regional and local levels, are often not explicitly set. Although safety action plans and quantified reduction targets exist in many countries, there is often no proper funding of measures, or monitoring of results. Enforcement systems, including the legal, administrative and technical apparatus involved, lack efficiency and funding. The size and nature of the problem cannot be thoroughly assessed in many countries due to inadequate crash data collection and the inaccessibility of crash and hospital data to safety experts. Only a few countries have safety performance indicators, such as on speed levels, alcohol abuse and seatbelt wearing rates, meaning that many countries do not have clear evidence about the size and character of their road safety problem.

Given this overall situation, it is not surprising that developments of road fatalities in many Member States do not contribute sufficiently to reaching the ECMT reduction target. On the contrary, given the lack of adequate remedial measures and growing vehicle ownership, many countries show stagnation or even upward trends. Figure 7 shows a direct correlation between the extent to which the 17 elements of the ECMT Framework have been implemented, and the number of fatalities per vehicle in any given country.

Figure 7. Correlation between Implementation of Road Safety Elements and Fatality Levels



Viewed in another way, Table 1 summarises the annual reductions in road traffic fatalities in ECMT members since 2000, as well as the average annual reduction that will be required from 2005 to reach the -50% target at the national level.

This information does not indicate that the targets cannot be reached. Rather, this listing indicates that extensive work remains to be done throughout the ECMT region, requiring exceptional efforts over the next few years. The following sections describe two parallel areas of action where work can begin immediately with a view to meeting the target. At the same time, the initiatives described must be considered as essential elements of any government's efforts to establish high overall levels of road safety.

Table 1. Road Fatality Reductions since 2000, and those Required in order to Reach the 2012 Target of -50%

Average ECMT annual reduction to reach -50% target between 2000 and 2012: -5.60%

Country	Fatalities in 2000	Fatalities in 2004	Average annual reduction (or increase) achieved in 2000-2004	Average annual reduction from 2005 required to reach the -50% target in 2012
Azerbaijan	596	811	8.0%	-11.8%
Ukraine	5 200	6 966	7.6%	-11.6%
Georgia	500	637	6.2%	-11.0%
Lithuania	641	752	4.1%	-10.1%
Russia	29 594	34 506	3.9%	-10.0%
Albania	280	315	3.0%	-9.6%
Turkey*	3 941	4 428	3.0%	-9.6%
Hungary	1 200	1 296	1.9%	-9.2%
Belarus	1 594	1 718	1.9%	-9.2%
Moldova	406	405	-0.1%	-8.3%
Slovakia	628	608	-0.8%	-7.9%
Romania	2 499	2 418	-0.8%	-7.9%
FYR Macedonia	162	155	-1.1%	-7.8%
Finland	396	375	-1.4%	-7.7%
Great Britain	3 409	3 221	-1.4%	-7.6%
Bulgaria	1 012	943	-1.7%	-7.5%
Czech Republic	1 486	1 382	-1.8%	-7.5%
Croatia	655	608	-1.8%	-7.4%
Serbia	1 048	953	-2.3%	-7.2%
Poland	6 294	5 712	-2.4%	-7.2%
Ireland	415	374	-2.6%	-7.1%
Austria	976	878	-2.6%	-7.1%
Latvia	588	516	-3.2%	-6.8%
Slovenia	313	274	-3.3%	-6.8%
Switzerland	592	510	-3.7%	-6.6%
Italy	6 649	5 625	-4.1%	-6.4%
Estonia	204	170	-4.5%	-6.2%
Spain	5 776	4 741	-4.8%	-6.0%
Sweden	591	480	-5.1%	-5.9%
Belgium	1 470	1 163	-5.7%	-5.6%

Greece	2 037	1 619	-5.6%	-5.6%
Germany	7 503	5 842	-6.1%	-5.4%
Norway	341	259	-6.6%	-5.1%
Netherlands	1 082	804	-7.2%	-4.8%
Denmark	498	369	-7.2%	-4.8%
Portugal	1 860	1 294	-8.7%	-4.0%
Belgium	1 470	1 009	-9.0%	-3.9%
France	8 079	5 530	-9.0%	-3.8%
Luxembourg	76	49	-10.4%	-3.1%
Armenia	214		No data	
Bosnia	No data			
Iceland	32	23	Figures too small	
Liechtenstein	3	1	Figures too small	
Malta	15	13	Figures too small	

Source: ECMT statistics and IRTAD.

* For Turkey, fatalities data for the road network managed by EGM only.

3. The Core Elements of Road Safety

Road traffic crashes do not result from fate or destiny — they are the product of circumstances and behaviour, and thus lend themselves to prevention and mitigation. Fundamental changes in approaches to road safety require many years of concerted effort, involving the creation and implementation of legislation and regulations, and consultation and communication to achieve common acceptance of these. But this does not mean that actions cannot be taken in the short term. Immediate reductions in traffic fatalities can be achieved within the scope of existing frameworks by focusing on those factors that are well known to be primary causes or aggravating factors in traffic crashes. Aggressive enforcement may be necessary, as well as some new regulations and changes to infrastructure, which can occur based on current legislation and levels of public awareness.

To begin with, every effort should be taken to address the “Big 3” of road safety — speeding, alcohol and seat belts. These factors continue to be a major problem, even in those countries where traffic safety levels are relatively high, and they should be subject to strict and proactive enforcement. Similarly, legislation regarding the wearing of helmets by motorcyclists should be enforced. These are the “low hanging fruit”, where immediate gains can be seen in terms of lives saved.

As speed is a contributing factor in about one third of total crashes, and an aggravating factor in all crashes, reductions of excessive and inappropriate speed will immediately lower the number of fatalities and injuries on the roads. There is a variety of measures to reduce speeds, including credible speed limits, infrastructure improvements, enforcement, education and new technologies. Human tolerance to speed impact should be a central element in determining laws, regulations and infrastructure. In the short term, reviewing speed limits, enforcement and the progressive introduction of new technologies can bring significant improvements. Speed limits of no more than 50 km/h in urban areas and 30 km/h in high pedestrian zones have proven very effective in reducing crash risk and severity. Blood alcohol limits should be no more than 0.5 g/l, and breath testing should be random, highly visible, and admissible as evidence. Seatbelt use should be mandatory in the front and back, with wearing rates over 90% the target. There should be effective legislation regarding helmet use by motorcyclists. With all these issues, enforcement should be proactive, and backed by safety performance indicators.

Young drivers are also a key factor in high traffic fatalities. Again, immediate gains in this area could be achieved by way of action on the issues noted above. Countermeasures could also be introduced in the short term through the existing licensing system, such as protective restrictions that limit novice drivers' exposure to risk while they progressively gain experience. Examples include accompanied driving prior to licensing, more difficult tests, and additional limitations immediately after driving, such as higher minimum restrictions on alcohol use by novice drivers.

Other areas where immediate action could occur include improving infrastructure, stringent application of vehicle safety rules, and strict treatment of repeat offenders. Obviously, all aspects of the road safety licensing and enforcement system must be viewed as legitimate by the general public, meaning that any corruption in licensing and enforcement should be dealt with using the greatest severity.

In addition, countries could collaborate and support one another in pursuing road safety objectives, by sharing best practices and participating in peer reviews.

Finally, other emerging and growing problems will need to be addressed before they become major sources of traffic risk, such as drugs, mobile telephone use and other in-vehicle technology. Particular consideration should be given to vulnerable road users, including young and older pedestrians.

Annex A contains a more detailed description of some of the measures that could be pursued by way of short term efforts to address core elements of road safety¹.

4. Establishing the Framework for Sustainable High Levels of Traffic Safety

Achieving sustainable high levels of road safety in the longer term is not easy. Road safety initiatives are based on pursuit of the common good, and often conflict with individuals' perceived self interest, in that they are seen to restrict highly prized mobility and independence. With this in mind, increasing overall road safety needs to be conducted in a manner that is methodical and well managed, and above all effective and efficient. This requires that governments' action occurs within a framework comprised of three fundamental areas, described in Figure 8.

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The reasoning behind these three elements is as follows:

- A. *Increasing awareness among society and within key groups of the problem and need to act:* Acceptance by the public and key stakeholders of the importance of road safety measures cannot be taken as a given, yet this acceptance, based on a understanding of the seriousness of the problem, is ultimately required for the success of any initiative.
- B. *Creating a sound organisational and institutional framework for road safety work:* The implementation of road safety measures should occur in a methodical manner, with clear objectives, and a clear definition of the responsibilities of the various parties involved.

1. Extensive research reports on *Speed Management* and *Young Driver Risks and Effective Countermeasures* are being finalised by the Joint OECD/ECMT Transport Research Centre (JTRC), and should be available later in 2006. A further report on *Achieving Ambitious Road Safety Targets* will be published next year. Materials setting out the key findings of these projects are available separately, in the reference documents.

- C. *Ensuring efficient financing and management of road safety efforts:* As with any initiative, road safety measures require adequate funding to be successful, although there will likely be substantial savings in the longer term. Successes and failures must be noted and measures altered accordingly. Action should be taken in an efficient manner that makes best use of resources.

It is essential that work in creating this framework begin immediately, in order to allow the gains to be experienced as soon as possible, and to establish the groundwork for further future action. Timely development and implementation of the framework will allow it to build on and consolidate the gains achieved by way of the immediate action in the areas described above. Furthermore, actions undertaken with regard to this framework will yield short-term gains as a result of increased consciousness of road safety issues among the public as well as among decision-makers and government officials.

Many countries have already made substantial strides in implementing this framework, and each will have to consider where it needs to take action to complete this process. Others may be just beginning. For this reason, in order to meet the ECMT -50% target, as well as national-level targets, it is important that countries co-operate, with a view to ensuring the highest possible levels of road safety at the international level. This implies the sharing of best practices with other Member States and identifying areas where additional work is needed, for example by way of a regular national and international reviews of road safety achievements.

The three elements of the framework are described in greater detail, as follows:

A. *Increasing awareness*

1. *Increase political awareness and political leadership*

Political leadership at the highest levels is essential to successful road safety work. Presidents, Prime Ministers and Parliaments, as well as Transport Ministers, need to place priority on road safety action and resources.

However, many factors mitigate against a leadership position being readily taken at the political and administrative levels, including a crowded policy agenda, the likely unpopularity of countermeasures, the long timeframes required before many interventions produce benefits, the low levels of public awareness of road safety risks and potentially effective measures, the substantial resources required to implement measures, the existence of commercial interests without a strong commitment to road safety, and the possibility that political opponents and the media will seek to capitalise on the unpopularity of measures proposed.

Against this background, a government's willingness to act will depend on the political saliency of road safety, the personal commitment of the responsible Minister(s) and leaders, and the existence of a capable bureaucracy in which the government has confidence.

The bureaucracy, for its part, needs to understand the practical realities and requirements of political decision-making, foster community awareness of risks and solutions through extensive stakeholder involvement and input, seek win-win solutions in concert with other policy objectives, such as reducing greenhouse gas emissions and reducing congestion, implement thoughtful and relevant public information campaigns, develop sound business cases for road safety investment based upon proven research; effectively support the political level on a day-to-day basis with high quality and proactive advice, and foster the development of skilled human resources in road safety.

Examples of political leadership in road safety include:

- The dedication of the 2004 United Nations' World Health Day to road safety, including the direct participation of UN Secretary General Kofi Annan, various world leaders and heads of international institutions, and Transport Ministers from around the world.
- French President Jacques Chirac's declaration on July 14th, 2001, making road safety one of three major points of focus of the President's current term of office.
- Russian President Vladimir Putin's address to the State Council in 2005, in which he noted that "...in Russia about 100 people die in road traffic crashes every day. The causes of this are commonly acknowledged and we have to implement system-wide measures enabling us to overcome this terrible situation".
- Finnish President Kekkonen's New Year speech in 1973, triggering the first substantial road safety efforts in that country.
- The emphasis placed on road safety both nationally and internationally by US Secretary of Transportation Norman Mineta.
- The Resolutions adopted by UN General Assembly, including A/RES/60/5 of 26 October 2005 on improving global road safety.

2. *Proactively raise public awareness*

Road safety thinking must make its way to the citizen, through problem-specific and target group-oriented safety campaigns. Successful initiatives require adequate stakeholder and community consultation, timeframes for implementation that are long enough to be effective and win political interest, targets that are possible to achieve, strategies that are based on research evidence, and political and bureaucratic accountability.

The most effective strategies are often developed in an open, consultative manner, including by way of public discussion papers seeking comment. When actions are implemented, the active monitoring of countermeasure effectiveness, public reactions and crash trends, and a preparedness by government to move quickly to address any failures, are important indicators to the public of accountability and commitment to the strategy.

Relevant private sector organisations, such as the auto and insurance industries, should be fully engaged in the task of reducing road traffic injuries. The establishment and participation of active non-governmental organizations representing vulnerable road users, victims and society in general should be encouraged to play a key role in maintaining political and media attention on road safety.

Examples of this include, among others:

- In the UK, the all-party Parliamentary Advisory Council on Transport Safety (PACTS), comprised of Members of Parliament, experts, and organizations with an interest in road safety, promotes evidence-based measures and has helped to expedite the introduction of key road safety measures, such as compulsory seat belt use and speed management (www.pacts.org.uk). Also, the UK's *Think!* campaign comprehensively provides safety advice to road users (www.thinkroadsafety.gov.uk).

- Mothers Against Drunk Driving (MADD), an organisation of people determined to stop drunk driving and support the victims of drunk driving crashes, is very active in the US and Canada (www.madd.org).
- Also in the US, private organisations representing the auto and insurance industries and drivers have collaborated with the federal government and MADD in developing the “Road Ready Teens” initiative focussed on young drivers (www.roadreadyteens.org).
- Belgium’s “BOB” campaign to raise awareness of the dangers of driving under the influence of alcohol, using the designated driver approach. This has now been adapted to the circumstances of several other EU Member States. (www.bob.be/index.htm).

B. *Creating a sound framework for road safety measures*

3. *Give clear political directions and assignment of responsibilities*

Road safety programmes are characterised by the number and diversity of institutions involved in their implementation. The inadequate involvement of relevant government agencies and stakeholders in a co-ordinated effort will reduce the effectiveness of countermeasures.

In order to work effectively and efficiently, it is essential to identify clear institutional and organisational roles and responsibilities and set up appropriate structures to co-ordinate them at national, regional and local levels. It is advisable that a senior-level intergovernmental body be created, representing all key agencies, in order to co-ordinate road safety activities, and advise, and seek decisions from relevant Ministers. Furthermore, a lead agency must be identified to play the critical role of co-ordinating actions and the involvement of stakeholders.

Examples of this include, among others:

- France’s Inter-ministerial Road Safety Committee (CISR), chaired by the Prime Minister, which brings together the Transport, Interior, Defence, Justice, Health, Education, Research and Finance Ministries. The Committee meets several times per year and the secretary is the Interministerial Delegate for Road Safety, Director of Road Safety and Traffic within the Ministry of Transport.
- Mechanisms exist in the Netherlands, Sweden, and UK to ensure the sharing of road safety responsibilities among different levels of government, including sub-targets for regions.

4. *Develop a vision and set up a road safety strategy*

A clearly stated, formal “vision” and well defined strategy for road safety confirm government’s commitment and thus assist in establishing specific goals and assigning resources. Such a vision and strategy should make road safety a precondition for sustainable mobility and provide all stakeholders with a common philosophy towards increasing safety. Road safety should be part of a country’s general transport plan, including the definition of broad lines of action.

Examples of this include, among others:

- Sweden’s “Vision Zero”, which combines ethics, biomechanics, environmental management and pragmatism in its approach.

- “Sustainable Safety”, in the Netherlands, has a similar approach. Parliamentary scrutiny and approval has stimulated public debate and prepared the way for future successful work.
- Australia’s “Safe System” approach, which is consistent with the Swedish and Dutch approaches.
- Canada’s “Road Safety Vision 2010”, which calls for Canada to have the safest roads in the world.

5. *Set quantitative targets*

To guide concrete action and gain public, political and administrative support, long-term and intermediate safety targets should be established. These should be ambitious yet realistic, in order to address the concerns of, and stimulate action among stakeholders. Targets should include concrete numbers for the reduction of fatalities and injuries and, if possible, focus on specific road user groups. Timeframes should be adequate to enable longer-term actions to be implemented, but this should be balanced by actions that will deliver early benefits.

Examples of this include:

- “Reduction of fatalities by 50% between 2000 and 2010” (e.g. European Commission, Austria and several Member States of the EU).
- “50% reduction in children killed or seriously injured by 2010 (compared with the average for 1994-98)” (UK).
- 10% reduction in the casualty rate (slight injuries per 100 million vehicle km) (UK).
- Many ECMT Members have national targets apart from the ECMT’s own target. The various ECMT Associate Members’ national targets and sub-targets were noted above in Section 2.

6. *Draw up an action programme*

To accompany the quantitative targets, there should be a concrete action programme, including specific actions required and resource allocations. This typically involves a 5-10 year programme along the broad lines described in the strategy and, where relevant, regional elements.

To be effective, action programmes have to be derived from a sound understanding of the current problems, which in turn depends on high quality analysis of existing crash data and trends. A comprehensive, accurate crash data base is essential for this to be feasible.

Examples of this include the UK and Austrian road safety programmes (www.dft.gov.uk/stellent/groups/dft_rdsafety/documents/page/dft_rdsafety_504644.hcsp and www.kfv.at/index.php?id=452, respectively).

C. *Ensuring efficient financing and management of road safety efforts*

7. *Obtain adequate funding*

It is essential to allocate adequate resources, taking cost efficiency principles into account. Investment in prevention is likely to substantially reduce road trauma and generate savings in acute and

long term health care costs, as well as lessening the human impact of traffic safety risk. Indications are that most countries currently spend more on dealing with the results of crashes than on preventing them.

However, decision-makers should prepare themselves for sensationalist media attention focusing on individual cases where costs do not result in high crash reductions, playing on general public resistance to road safety measures.

One of the difficulties most jurisdictions face is their inability to track and trace the effects of road safety expenditures. Very little, if any, accurate information is available about the funding of road safety measures by individual governments. Governments and their communities should be prepared to identify the amount of road safety funding being provided in absolute terms and as a proportion of their budgets and of overall GDP. Furthermore, the allocation of resources to preventative measures should be compared with the funding of activities required to deal with the consequences of road crashes, such as those related to public health, legal issues, repair and replacement of property damaged, etc.

8. *Monitor progress*

Progress must be registered, and any failures noted and immediately rectified. For this reason, it is important to regularly monitor and evaluate the intermediate outcomes of the process towards reaching the targets. In addition, the systematic evaluation of delivered programmes will provide critical information and fresh insights to assist refinement of future programmes and quantification of the benefits achieved, which can then be published to build and maintain public support. To ensure public acceptance of findings, it is advisable that an independent body be in charge of this task.

Examples of this include:

- France publishes a monthly barometer of road safety indicators on the Internet: www.securiteroutiere.equipement.gouv.fr/infos-ref/observatoire/conjoncture/index.html.
- **Canada produces annual reports related to its Road Safety 2010 vision.**

9. *Provide efficient enforcement systems*

The laws and regulations associated with the principal causes of crashes and injuries should be efficiently enforced, particularly speed, alcohol and seatbelt wearing. This implies the streamlining of the legal, administrative and technical systems involved and the acquisition of modern control equipment. The introduction of a penalty points system for the prosecution of repeat offenders should be considered. This issue is discussed in more detail in Annex A.

Examples of this include, among others:

- Fully-automated speed control in France (comprising digital video cameras, automatic number plate recognition and system for automatic consultation with remote vehicle and driver licensing registries), which was accompanied by a major modification in the French legal framework, making car owners now fully responsible for most kinds of infringements committed with their vehicle. As a result, the average reduction rate of fatalities was at 12% per year between 2001 and 2004.
- In the UK, the implementation of speed cameras (radars) at fixed sites is reducing deaths and serious injuries by 50% at high-risk sites.

- Section control in Austria and the Netherlands involves a new speed enforcement technology that is based on the calculation of average speeds of individual vehicles along a road section of typically several kilometres. Video images, including time stamps, are taken from vehicles entering and exiting the section and, after comparison of images, average speeds are calculated. As a result, congestion, speed levels and crashes have been significantly reduced (www.asfinag.at/sicherheit/section_control.htm).
- Random breath testing in Australia and other countries has proven highly successful in reducing alcohol-related crashes and fatalities, particularly in combination with persuasive communications campaigns.
- UK legislation makes drug driving an offence on par with drunk driving, and also prohibits refusing to take a drug test and the 2004 Code of Practice detailed drug tests and training for police officers.

Conclusions

This report has described the challenges that face ECMT Member States if they hope to meet the ECMT target of a 50% reduction in road traffic fatalities between 2000 and 2012, established at the Bucharest Ministerial meeting in 2002, as well as many similar national targets.

The challenges are considerable, especially in some regions and particular Member States, and it is only by way of urgent, concerted action that the required progress will be made. This should involve a two-pronged approach, attacking the known fundamental causes of traffic fatalities, while also establishing the necessary framework for sustainable high levels of traffic safety. Furthermore, while fatality levels may be higher in some countries, the overall challenge is a collective one, and Member States should be proactive both nationally and in co-operation with one another in pursuit of the overall goal of reducing the impact of road transport on human life throughout the entire ECMT membership.

ANNEX A

SHORT TERM MEASURES TO ADDRESS CORE ELEMENTS OF ROAD SAFETY

Section 3 emphasises that there are many core elements of road safety that should be addressed as part of any initiative to reduce fatalities and injuries. These elements correspond to the most common principal factors in causing crashes and augmenting their severity.

The following is a synopsis of actions that can be taken in the short term to show achievements in these areas, in terms of reduced fatalities. Research reports on *Speed Management* and *Young Driver Risks and Effective Countermeasures* are being finalised by the Joint OECD/ECMT Transport Research Centre (JTRC), and should be available later in 2006. A further report on *Achieving Ambitious Road Safety Targets* will be completed next year. Materials regarding the primary conclusions of these projects are available separately.

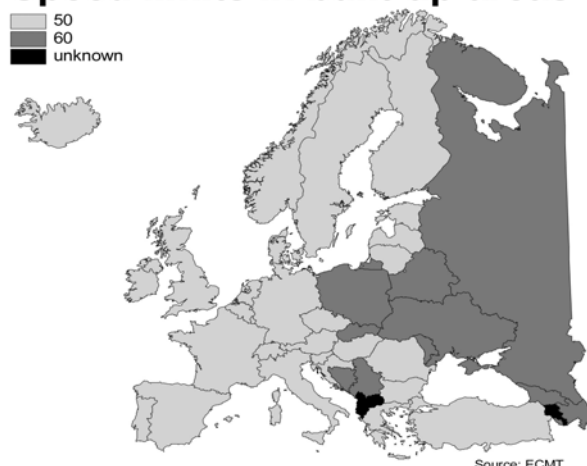
1. Tackle the speed problem

Speed is at the core of the road crash problem and is widely understood as the single most important determinant of road safety. Speed-related crashes typically account for around 30% of road fatalities. Levels of fatalities can be reduced dramatically by reducing vehicle speeds. For example, decreasing mean speeds by 5% can be expected to reduce injury crashes by around 10% and to save 20% of fatal collisions — starting almost immediately.

Speed limits on urban roads

As seen in Figure 9, some ECMT Member States maintain 60 km/h as a standard speed limit on urban roads, although urban pedestrian fatalities are typically high in these countries. It is highly recommended that maximum speed limits in urban areas be reduced to the de-facto EU standard of 50 km/h, as suggested in the 1996 ECMT Recommendation on Speed Moderation. Within this limit, lower limits should also be posted in sensitive areas, typically 30 km/h on access roads and in residential areas. Physical measures such as speed bumps and chicanes are well-established means of ensuring that these low limits are self-enforcing.

Figure 9.
Speed limits in built-up areas



Speed management on rural roads

Maximum speed limits on rural roads should be in line with those of the best performing countries — this typically means between 70-90 km/h on single carriageway rural roads and 110-120 km/h on non-urban dual carriageways and motorways.

A range of engineering measures is needed in addition to encourage appropriate speed and make hazards perceptible. These include provisions for slow-moving traffic and vulnerable road users, overtaking lanes and lanes for vehicles waiting to turn across the path of oncoming traffic, median barriers to eliminate head-on crashes on crash-prone stretches, roundabouts, and the systematic removal of roadside hazards such as trees, utility poles, and other solid objects.

Carry out efficient speed enforcement

There is much evidence that a reduction of average driving speeds significantly reduces crashes and fatalities, including several studies that show that a reduction of average speeds by 1 km/h reduces crashes by 2-4% and fatalities by 5%. It is therefore of vital importance that drivers keep to posted speed limits. Effective speed enforcement systems should be established, including the use of modern control technologies and methods. Penalties should be credible and accompanied by sound means of collecting them, including the streamlining of the legal and administrative frameworks associated with the sanctioning process.

Safety Performance Indicators: Speeds

In order to establish a starting point for interventions, measurements should be conducted on a regular basis of speed distribution, average mean speeds and the percentage of drivers exceeding the posted speed limits on different types of road.

2. Reduce alcohol-related road injuries

Several in-depth studies indicate that driving under the influence of alcohol (or drugs, or a combination thereof) accounts for a significant share of all fatal crashes.

Re-visit blood alcohol limits

The limit of 50 mg/100 ml is generally accepted as the norm in European countries and is recommended by the EU and by the ECMT in Resolution No. 46 of 1993. Some countries have introduced lower limits, such as Sweden and Norway (20 mg/100 ml). Limits for young novice drivers (see below) and professional drivers should be as close to 0 as possible.

Carry out breath testing in a manner that is a) highly visible, b) random, and c) admissible as evidence

Random, high visibility breath testing at roadside checkpoints, combined with hard-hitting publicity, is well established as the most effective means of achieving reductions in alcohol-related casualties. The requirement of suspicion should be removed from breath testing procedures to improve the efficiency of police operations. A refusal to undergo a test should lead to licence withdrawal. In addition, breath testing should be considered admissible evidence, in order to make complex medical tests unnecessary.

Safety Performance Indicators: Alcohol

Roadside surveys are needed to establish national levels of drinking and driving in normal traffic and to measure performance. Many jurisdictions have experience with this type of survey, which are conducted during hours when high alcohol use might be expected.

3. Increase seatbelt use

Crash studies indicate that the use of seatbelts more than halves the risk of fatal injury in car crashes.

Make seatbelt fitment and use obligatory

All seats in new cars should be equipped with seatbelts, and their use obligatory at all times. No exceptions should be granted for certain professional groups, such as police or drivers of taxis, lorries or ambulances.

Carry out effective enforcement combined with publicity

Studies have shown that enforcement can achieve incremental increases in seat belt usage if it meets certain conditions, and that there is a high benefit-cost ratio to effective enforcement programmes. Enforcement needs to be risk-targeted, highly visible and well-publicised, conducted over a sufficiently long period, and repeated several times during a year. It is recommended that programmes combining publicity and enforcement be established to increase seat belt use.

Safety Performance Indicators: Seat belt and child restraint use

Wearing rates for seat belts and child restraints need to be measured on an annual basis, and targets should be set for increasing levels of use. The highest levels secured to date in European countries are over 90% for the front seat and over 80% for the rear seat. The police should record whether the seat belt or child restraint was used in crashes.

4. Stop young drivers from killing themselves and others

Traffic crashes are the single greatest cause of death among young people of driving age in OECD countries. Young drivers are involved in over 20% of all traffic fatalities in many countries.

Reduce Exposure in the key learning period

Novice drivers should be subject to high levels of well-managed accompanied practice before licensing for solo driving. The period immediately following licensing is subject to particularly high risk, and, thus, should involve protective restrictions that are progressively removed as the novice driver gains experience. In particular, novice drivers should be subject to minimal BAC restrictions (e.g. 20 mg/100 ml). More stringent tests will also reduce the number of unprepared young drivers on the roads. Any lowering of the age for solo driving will result in more fatalities.

Vigorously enforce traffic laws and regulations

The success of countermeasures related to the licensing system will be contingent on effective enforcement of traffic regulations, particularly with regard to speed, alcohol and seatbelt use.

Undertake persuasive communications campaigns

Other initiatives, particularly enforcement, should be accompanied by persuasive communications campaigns aimed at explaining the reasoning behind the countermeasures and at altering attitudes about road safety. It should be noted that safety-related attitudes are typically established well before the driving age, and are highly susceptible to the influence of role models.

Prevent migration to more dangerous modes

The conditions for the licensing of drivers of passenger vehicles should not lead to migration to less safe vehicles, particularly motorised two-wheelers. To prevent this, conditions for licensing for two-wheelers, including the minimum driving age, should be similarly stringent.

5. Address Infrastructure Issues

The rapid economic and industrial growth currently being experienced in many ECMT countries, especially in the Baltic States and the CIS countries, and the accompanying development of residential, commercial and industrial activities, poses new challenges for safety management. In order to deal with growing traffic flows, trunk roads are often being upgraded to motorway-like designs without providing alternative routes, crossing aids for vulnerable road users, or public transport, which again regularly triggers high death tolls among non-car occupants. Ensuring the separation of pedestrians and motor traffic at speeds of over 30 km/h in and around cities, towns and villages should therefore be a high priority for future infrastructure development.

6. International Co-operation

Clearly, the road safety situations are different according to countries' specific circumstances. Many countries face larger challenges based on rapid economic growth and motorisation, combined with infrastructure and legal frameworks that were not designed for the current traffic. For this reason, it is important that co-operation occur, by way of organisations like the ECMT, to ensure that the highest possible standards and international best practices are universally pursued.

The ECMT has successfully carried out Road Safety Peer Reviews of Member States, starting with Lithuania (2003) and Russia (2005). In the course of a Peer Review, an international team of road safety experts — after thorough analysis of statistical information and institutional and organisational settings — visits the country and carries out technical site inspections as well as interviews with decision makers and practitioners at all levels. As a result, a comprehensive set of recommendations is produced and discussed with the respective country. In both the Lithuanian and the Russian cases, the work on the Peer Reviews has triggered favourable development towards raising the profile of road safety in the governments' agendas. The ECMT encourages Member States to get involved in the Peer Review process.

Similarly, detailed road safety research projects are being conducted through the JTRC, including those mentioned above, and more projects are being considered for the Centre's 2007-2009 Programme of Work. These projects include the exchange of ideas and best practices among road safety experts from throughout the ECMT and OECD.

Furthermore, it should be noted that traffic crashes exact an enormous toll on countries outside of the ECMT and OECD, particularly the poorest and those with the most rapidly developing levels of motorisation. The World Health Organization (WHO) expects road traffic will be the 3rd leading cause of disabled adjusted life years lost (an index of which combines years of life lost as well as years free from disabilities), from disease or injury in 2020. The lessons learned in improving road safety performance in ECMT and OECD countries should be shared internationally, including by way of the UN Road Safety Collaboration Initiative, led by the WHO.

Last but not least, the UN Regional Commission and the WHO will organise the First UN Global Road Safety Week on 23 to 29 April 2007 around the common theme of Young Road Users, including Young Drivers. ECMT and OECD countries should participate actively in this campaign by launching national campaigns and activities on Young Road Users.