



**SUMMARY AND PUBLICATION OF BEST PRACTICES  
IN ROAD SAFETY IN THE MEMBER STATES**

**BEST PRACTICES IN ROAD SAFETY.  
HANDBOOK FOR MEASURES AT THE EUROPEAN LEVEL**
























**THE FINAL REPORT OF SUPREME CONSISTS OF 14 PARTS:**

<b>PART A</b>	METHODOLOGY
<b>PART B</b>	LIST OF MEASURES COLLECTED AND ANALYSED
<b>PART C</b>	BEST PRACTICES IN ROAD SAFETY HANDBOOK FOR MEASURES AT THE COUNTRY LEVEL
<b>PART D</b>	<b>BEST PRACTICES IN ROAD SAFETY HANDBOOK FOR MEASURES AT THE EUROPEAN LEVEL</b>
<b>PART E</b>	REVIEW OF IMPLEMENTATION AT THE COUNTRY LEVEL
<b>PART F1</b>	THEMATIC REPORT: EDUCATION AND CAMPAIGNS
<b>PART F2</b>	THEMATIC REPORT: DRIVER EDUCATION, TRAINING & LICENSING
<b>PART F3</b>	THEMATIC REPORT: REHABILITATION AND DIAGNOSTICS
<b>PART F4</b>	THEMATIC REPORT: VEHICLES
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<b>PART F7</b>	THEMATIC REPORT: STATISTICS & IN-DEPTH ANALYSIS
<b>PART F8</b>	THEMATIC REPORT: INSTITUTIONAL ORGANISATION OF ROAD SAFETY
<b>PART F9</b>	THEMATIC REPORT: POST ACCIDENT CARE

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## PROJECT MEMBERS

	KfV Kuratorium für Verkehrssicherheit (Co-ordinator)	AT		ADT Malta Transport Authority	MT
	ÖRK Austrian Red Cross	AT		SWOV Institute for Road Safety Research	NL
	IBSR-BIVV Institut Belge Pour La Sécurité Routière	BE		TNO Business Unit Mobility & Logistics	NL
	CDV Transport Research Centre	CZ		DHV Group	NL
	DTF Danish Transport Research Institute	DK		TØI Institute of Transport Economics	NO
	DVR Deutscher Verkehrssicherheitsrat e.V.	DE		IBDIM Road and Bridge Research Institute	PL
	CERTH/HIT Hellenic Institute of Transport	EL		PRP Prevenção Rodoviária Portuguesa	PT
	FITSA Foundation Technological Institute for Automobile Safety	ES		SPV Slovene Road Safety Council	SI
	INRETS Institut National de Recherche sur les Transports et leur Sécurité	FR		VÚD Transport Research Institute Inc.	SK
	NRA National Roads Authority	IE		bfu Schweizerische Beratungsstelle für Unfallverhütung	CH
	SIPSiVi Italian Society of Road Safety Psychology	IT		VTT Technical Research Centre of Finland	FI
	ETEK Cyprus Scientific and Technical Chamber	CY		VTI Swedish National Road and Transport Research Institute	SE
	Celu satiksmes izpete, SIA (Road Traffic Research Ltd)	LV		TRL Limited	UK
	TRRI Transport and Road Research Institute	LT		CIECA Commission Internationale des Examens de Conduite Automobile	INT
	KTI Institute for Transport Sciences	HU		ETSC European Transport Safety Council	INT
	WHO Europe World Health Organization - Regional Office for Europe				

# Foreword

The goal of SUPREME was to collect, analyse, summarise and publish best practices in road safety in the Member States of the European Union,<sup>1</sup> as well as in Switzerland and Norway. This document aims to make the project's results available to decision makers and practitioners at the international, European and national level, thereby encouraging the take-up of successful road safety strategies and measures. In this way, the project is designed to contribute towards reaching the EU target of a 50% reduction in road fatalities by 2010.<sup>2</sup> In fact, the European Commission's Road Safety Action Programme<sup>3</sup> identifies the establishment and dissemination of best practice as one of the key success factors for reaching this ambitious Community road safety goal.

The project was commissioned by Directorate General Transport and Energy of the European Commission. It was started in December 2005 and concluded in June 2007. A total of 31 national and international road safety organisations were involved. More information about the project and its result can be found at [http://ec.europa.eu/transport/supreme/index\\_en.htm](http://ec.europa.eu/transport/supreme/index_en.htm).

The result of the data collection and analysis are presented in two publications: a Handbook for measures at national level,<sup>4</sup> gathering best practice measures in road safety from the 27 participating countries, and a Handbook for Measures at European Level. This publication aims at completing the information provided in the Handbook at national level by presenting Europe-wide best practices and best measures at the national level that could have an added value if implemented at the European level.

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<sup>1</sup> up to 2006, except Bulgaria and Romania

<sup>2</sup> White Paper European transport policy for 2010: Time to decide. COM (2001)  
[http://ec.europa.eu/transport/white\\_paper/index\\_en.htm](http://ec.europa.eu/transport/white_paper/index_en.htm)

<sup>3</sup> Halving the number of road accident victims in the European Union by 2010: A shared responsibility. COM (2003)  
[http://ec.europa.eu/transport/roadsafety\\_library/rsap/rsap\\_en.pdf](http://ec.europa.eu/transport/roadsafety_library/rsap/rsap_en.pdf)

<sup>4</sup> available at [http://ec.europa.eu/transport/supreme/index\\_en.htm](http://ec.europa.eu/transport/supreme/index_en.htm)

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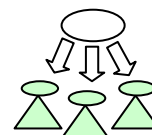
# Introduction



## Why this handbook?

The European Union has set itself the objective of halving the number of deaths on European roads between 2001 and 2010. To achieve this in the remaining short period of time, it is necessary to implement a range of effective road safety measures to the fullest extent. Reliable knowledge about the effectiveness of measures is a prerequisite for this task. Road safety work has to draw upon experience and avoid repeating mistakes. Since human and financial resources are often limited, the efficiency of road safety measures should be maximised.

This document contains a large variety of Europe-wide best, good or promising measures identified by international or European organisations. This publication also explores the synergy that could be obtained by linking road safety to other policy areas such as public health and environment or safety practice from other transport modes. We hope that these examples show that real road safety improvements can be made across national boundaries and that the recommendations will motivate those who are involved at the European or international level to take up practices that have a high potential to improve road safety.



## For whom?

The gross inequality between European regions and between European States in terms of road safety illustrates one principal axiom of contemporary transport safety policies: local, regional and national governments alone are not able to provide for a policy framework that ensures the highest practicable level as well as fair distribution of safety across the European Union.

EU Member States have acknowledged the competence of the European Community to take up measures to promote transport safety (Article 71 of the EU Treaty) and to deliver a high level of protection in the harmonisation process (Article 95(3))<sup>5</sup>. The competences and responsibilities of other international bodies such as the United Nations Economic Commission for Europe (UN/ECE), the World Health Organisation (WHO), The United Nations Children's Fund (UNICEF), the World Bank, the European Conference of Ministers of Transport (ECMT), the Organisation for Economic Co-operation and Development (OECD), the automobile industry, etc, have also been recognised at the global level<sup>6</sup>.

This document is primarily intended for decision makers across different sectors and levels of international bodies, in particular those responsible for developing and implementing road safety, transport, sustainable mobility or public health programmes and strategies in the public and private sector.

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<sup>5</sup> The Commission, in its proposals envisaged in paragraph 1 concerning health, safety, environmental protection and consumer protection, will take a high level of protection as a base, taking account in particular of any new development based on scientific facts. Within their respective powers, the European Parliament and the Council will also seek to achieve this objective.

<sup>6</sup> UNECE General Assembly Resolution A/RES/58/289 on improving global road safety. Paragraph 2: the United Nations Secretary-General "invites the World Health Organization (WHO), in close cooperation with the UN regional commissions, to act as a coordinator on road safety issues within the United Nations system".



## What type of measures?

The document describes best, good or promising road safety practices in the following eight areas:

- ◆ Policy framework for efficient road safety
- ◆ Vehicle safety
- ◆ Road infrastructure safety
- ◆ Enforcement of traffic law
- ◆ Tackling novice drivers' higher risks
- ◆ Campaigns
- ◆ Post accident care
- ◆ Data collection and analysis.



## Which measures are included?

The measures were collected through a questionnaire sent to experts working for international or European organisations, NGOS, interest groups and industries. The responding institutions were (by alphabetical order)<sup>7</sup>:

- ◆ ACEA (European Automobile Manufacturer Association)
- ◆ CIECA (International Commission for Driver Testing)
- ◆ EC DG-TREN (European Commission Directorate-General Energy and Transport)
- ◆ ERTICO (Intelligent transport systems and services-Europe)
- ◆ ETF (European Transport Workers Federation)
- ◆ ETSC (European Transport Safety Council)
- ◆ EuroNCAP (European New Car Assessment Programme)
- ◆ FEVR (European Federation of Road Traffic Victims)
- ◆ OECD/ECMT (European Conference of Ministers of Transport)
- ◆ RED CROSS Europe
- ◆ SEI (Stockholm Environment Institute)
- ◆ T&E (European Federation for Transport and Environment)
- ◆ TISPOL (European Traffic Police network)
- ◆ UNECE (United Nations Economic Commission for Europe)
- ◆ WHO (World Health Organisation)

The information collected through the questionnaires was supplemented by additional research from the authors.



## Best, good or promising practice?

The road safety measures suggested by the stakeholders and the authors were then submitted to an extensive procedure to decide whether or not a practice should be qualified best measure. Best practice measures do not exist. We never know whether a measure is actually the best possible. Perhaps an even better practice exists somewhere else or will be developed in the future. Best

<sup>7</sup> See Annex 2 for a short presentation of the different bodies



practice in our context means that, given the current state-of-the-art, we think that the measure belongs to the best in its category.

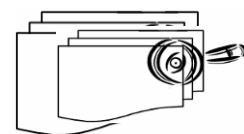
A distinction was made between best, good and promising practice. To be given 'best practice' status, a measure should bring about a scientifically proven or expected reduction of road crashes and/or deaths and serious injuries, a positive cost-benefit ratio, expected sustainability of effects and/or good public acceptance. It is worth mentioning that there is a clear lack of systematic evaluations of implemented measures. Therefore, measures have been rated 'good' when the available information on the above criteria was not sufficient to assess if they were the best practice in their category. Measures that have not yet been implemented at the European or international level but have proven to be successful in one or several Member States were rated 'promising'.

The measures are presented in boxes of different colours:

<b>Best practice in green boxes</b>
<b>Good practice in yellow boxes</b>
<b>Promising practice in orange boxes</b>

For all categories, the implementation at the European or international level should offer an added value to implementation at the national level only.

This process resulted in a final list of measures to be included in this document<sup>8</sup>. More information about the submitted best practice candidates and the selection procedure can be found in the *Final report*<sup>9</sup>.



## Where to find what information?

Chapters I to VIII successively present the identified best or promising practices in the eight areas. Each chapter provides some general information about the aims, the general principles and the dos and don'ts, illustrated by a number of best, good or promising measures in that area.

Chapter IX explores the synergy that could be obtained by linking road safety to other policy areas such as public health and environment.

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<sup>8</sup> See Annex 1: list of best, good and promising practices

<sup>9</sup> The *Final report* is available at [http://ec.europa.eu/transport/supreme/index\\_en.htm](http://ec.europa.eu/transport/supreme/index_en.htm) (in English only).



# Policy framework for efficient road safety

The policy framework for efficient road safety refers to a variety of measures which, together, form the basis for implementation of safety measures in all fields of road safety. The practices in this area provide a support framework for all remaining road safety work. The best practices relate to road safety visions, targets and strategies, political leadership and to tools and strategies for the selection and implementation of cost-effective road safety measures.

## A shared vision

Stakeholders in the road transport system represent organisations driven by a variety of political and ideological motivations as well as by commercial interests and market forces. In other words, their actions and goals are not necessarily driven by health concerns. In this context, a common European vision could link the various organisations involved in creating a moral obligation to protect life and health in the road transport system. A vision can also be a very effective way of communicating safety objectives to citizens, politicians, leaders of private enterprises and other stakeholders, and of developing a common understanding of how the transport system needs to be changed. Such a common vision for Europe has not yet been implemented. Vision adopted at the national level (such as the Dutch Sustainable Safety or the Swedish Vision Zero) could serve as a basis for discussion.



## Best practice: road safety vision Swedish Vision Zero



### What is it about?

In 1997, the Swedish Parliament adopted the Vision Zero, a new road safety policy based on four principles:

- ◆ Ethics: human life and health are paramount; they take priority over mobility and other objectives of the road transport system;
- ◆ Responsibility chain: The providers, professional organisations and professional users are responsible for the safety of the system. The users have the responsibility to follow rules and regulations. If the road users fail to follow rules and regulations, the responsibility falls back on the providers of the system;
- ◆ Safety philosophy: humans make errors; road transport systems should minimise the opportunity for error and the harm done when errors occur;
- ◆ Driving mechanisms for change: providers and enforcers of the road transport system must do their utmost to guarantee the safety of all citizens and each of the participants should be ready to change to achieve safety.

### Effectiveness?

Vision Zero is estimated to achieve a possible reduction in the number of deaths by a quarter to one third over a ten-year period<sup>10</sup>. The adoption of Vision Zero in Sweden helped in developing further research and implementing a new system design. It helped in the implementation of the upgrading of single carriageways to 2+1 lanes roads with central cable barriers to shield drivers from opposite traffic.

### Public Acceptance?

The SARTRE 3 survey has shown that 37% of European drivers would support a target of no deaths. In a study published in March 2006, John Whitelegg and Gary Hap conducted a survey of 200 UK citizens who were very supportive of Vision Zero. European and international stakeholders (such as WHO) were also on the whole very supportive though concerns about achievability were expressed<sup>11</sup>.

### Next steps?

The European Union and/or other international organisations (the WHO, UN/ECE, ECMT) should debate on how to adopt a shared vision oriented towards the protection of the lives and health of road users and examine the opportunities provided towards this goal by Vision Zero and Sustainable Safety.

### More information?

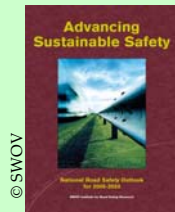
[http://www.vv.se/templates/page3\\_16644.aspx](http://www.vv.se/templates/page3_16644.aspx)

<sup>10</sup> Swedish National Road Administration, 2003

<sup>11</sup> Whitelegg, J., Hap G. (2006) Vision 0: adopting a target of Zero for Road Traffic Fatalities and Serious Injuries, <http://www.sei.se/editable/pages/sections/implement/VZFinalReportMarch06.pdf>



## Best practice: road safety vision Dutch Sustainable Safety



### What is it about?

Sustainable Safety has been the leading vision in the road safety policy of the Netherlands since the early nineties. It is based on the idea that the consequences of human errors and human vulnerability are to be minimised. The implementation of Sustainable Safety relies upon five main principles:

1. Functionality of roads: roads should be defined according to their main function: through-roads, distributor roads, access roads in a hierarchically structured road network;
2. Homogeneity of masses and/or speed and direction: Equality in speed, direction and masses at medium and high speeds;
3. Predictability of road trajectory and road user behaviour by a recognizable road design;
4. Forgivingness of the environment: Injury mitigation by forgiving roadsides and crash prevention by forgiving (potential) errors/violations committed by road users;
5. Task capability: users should be helped to assess their own task capability for participating in traffic.

### Effectiveness?

This concept has heavily influenced road safety work in practice and has led to the implementation of highly effective and sustainable road safety measures. For example, one of the consequences of the homogeneity principle is that motorised traffic and vulnerable road users (pedestrians, cyclists) can only mix if speeds of motorised traffic are low. If speeds cannot be low, separate facilities for vulnerable road users are required. Measures to this effect included the substantial increase in the number and size of 30 km/h zones in built-up areas; the introduction of 60 km/h zones outside built-up areas, and speed reduction measures at intersections.

### Next steps?

See Swedish Vision Zero

### More information?

<http://www.sustainablesafety.nl>



## A shared target

A quantified target usually states the maximum number of road crashes or road crash victims to be attained at a certain point of time with an ambition to reduce them more quickly than extended past trends would imply. Experience from several countries shows that quantified targets can be of paramount importance in facilitating the implementation of road safety strategies and measures and more effective use of resources. A target should be challenging enough in order to avoid complacency. At the same time, the target needs to be accepted as achievable in order to gain the support of all the stakeholders.

### Best practice: road safety target

#### Common targets for road safety in Europe



##### What is it about?

In its 2001 Transport White Paper, the Commission proposed the challenging target of halving the number of road deaths on European roads by 2010. This target has meanwhile been endorsed by the European Parliament and the Transport Council of Ministers. This strong political message triggered the adoption of similar targets by most of the Member States, thus stimulating the setting up of national road safety plans. The EU target also inspired non-EU countries such as Switzerland. In 2002, the European Conference of Ministers of Transport adopted a 50% reduction target for road deaths by 2012 for its 43 Member States. The WHO Health for All policy in Europe provides international targets for reducing road traffic deaths and injuries, calling for a reduction in mortality and disability from road traffic crashes of at least 30% by 2020 compared to 2001.

##### Effectiveness?

These international bodies regularly monitor progress towards achieving these objectives. In February 2006, the Commission issued a Mid-term Review of the European Road Safety Action Plan showing that if the number of deaths had fallen faster between 2001 and 2005 than between 1994 and 2000, stronger efforts were needed to achieve the EU objective. In a 2007 report on Achieving Ambitious Road Safety Targets, the OECD/ECMT Joint Transport Research Centre estimated that only around a quarter of ECMT member countries appear to be on track in terms of achieving the targets that have been set.

##### Next steps?

The adoption of further challenging targets by the EU and by international organisations would help in continuing raising the sights of decision makers at the national level. The EU or other international organisations should also consider adopting reduction targets for traffic injuries, as well as sub targets for specific groups overrepresented in accident statistics (e.g. vulnerable road users).

##### More information?

[http://ec.europa.eu/transport/white\\_paper/index\\_en.htm](http://ec.europa.eu/transport/white_paper/index_en.htm)

<http://www.cemt.org/JTRC/WorkingGroups/RoadSafety/performance.htm>



## Leadership and political will

Political commitment and leadership are prerequisites for preventing road traffic injuries. Road safety often presents a public policy dilemma. Improvements in road safety benefit all of society. However, individual road safety risk is usually relatively low, and individuals do not often directly perceive the full costs of road violence, while mobility is highly prized. People are also often likely to be more concerned about other social issues, such as health care, education or the threat of crime. Politicians might, therefore, be reluctant to support initiatives that are subject to limited public demand or even public hostility.

This is why political courage and leadership are required to introduce change, particularly when the benefits in terms of casualty savings may not be achieved within the short timeframes between elections. An essential first step is for politicians to publicly recognise the fact that road crashes and injuries are a health problem and proactively communicate to the public the benefits of countermeasures in terms of public health and cost savings.

### **Best practice: leadership and political will** **The French success story**

#### **What is it about?**

On 14 July 2002, President Jacques Chirac declared the “fight against road violence” one of the top three priorities of his second term in office. In September 2002, a high-level meeting involving all the concerned Ministries and stakeholders was convened and three months later, a first series of measures aimed at “ending drivers feeling of impunity” was adopted. France’s flagship measure has been the introduction of a fully automated speed management system. Checks and sanctions for all major traffic offences were tightened and follow-up procedures no longer dropped.

#### **Effectiveness?**

The involvement of the highest political level made it possible to quickly implement an automated speed enforcement system which had previously been deemed unpopular and therefore considered unacceptable by some decision makers. The strict application of “zero tolerance” linked to the progressive introduction of up to 1,000 fixed and 500 mobile speed cameras focusing on high risk crash spots contributed to about 75% of the massive reduction in fatal crashes between 2003 and 2005. The number of road deaths has dropped by more than 35% within the last five years from 8,160 (2001) to 5,318 (2005), which represents the best progress of any EU country over this period.

#### **Next steps?**

A European figure endowed with high authority by the EU and recognised by national governments could act as a road safety ‘czar’/director who would take pride in the success of European road safety policy or be held responsible for its shortcomings. European heads of states and governments should also jointly declare the “fight against road violence” as one of their main priorities.

#### **More information?**

<http://www.securiteroutiere.equipement.gouv.fr/>



## Promising practice: leadership and political will Safe Community Programmes



### What is it about?

The Safe Communities concept began its formal existence at the First World Conference on Accident and Injury Prevention held in Stockholm, Sweden, in September 1989. The resolution of the conference, states that "all human beings have an equal right to health and safety." This is a fundamental aspect of the World Health Organisation's (WHO) Health for All strategy and for the WHO Global Programme on Accident Prevention and Injury Control. Safe Community programmes are systematic accident prevention programmes that have the following characteristics:

- ◆ Hospitals or other health institutions record accident statistics systematically over a given period of time;
- ◆ Based on these accident records, the main accident problems in the local communities are identified;
- ◆ A steering group for accident prevention is set up, involving all parties which may help to prevent accidents, e.g. municipalities, schools, health services, police, voluntary organisations, industries, etc;
- ◆ A quantified target for accident reduction for a given period is set and measures are implemented;
- ◆ The resulting changes in the number of crashes and injuries are monitored closely and published;
- ◆ Measures are regularly evaluated and may result in changes in the targets or the safety programme.

### Effectiveness?

Safe Communities Programmes have been implemented so far in more than 100 cities around the world. Evaluations studies of some Safe Communities Programmes in local communities in Norway, Sweden and the USA showed a decrease of around 30% in the number of traffic crashes<sup>12</sup>.

### Next steps?

The programme lacks visibility in the sectors primarily involved in road safety work. WHO should communicate more broadly about the objectives and methods of the Safe Community Programmes through a partnership involving the transport sector, e.g. the ECMT. WHO should also encourage Ministries of Health to promote the programme in their respective countries in order to involve more cities and municipalities and to provide a support framework to help initiate and develop such community based injury prevention schemes.

### More information?

[http://www.phs.ki.se/csp/who\\_introduction\\_en.htm](http://www.phs.ki.se/csp/who_introduction_en.htm)

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<sup>12</sup> Elvik et al. (2004) The handbook of road safety measures



## Efficiency analysis

Efficiency analyses are conducted to evaluate the effects of road safety measures or programmes at different stages of their implementation. A distinction needs to be made between impact assessment, cost benefit analysis and a posteriori evaluation.

Impact assessment refers to the use of information about the expected effect of a measure, e.g. on the basis of evaluations of measures elsewhere. Impact assessments provide a scientific basis for deciding whether or not to implement a particular measure. Software tools are in use with which effects of all types of measures on the numbers of crashes and on costs can be estimated.

Cost-benefit analyses are also conducted prior to the implementation of specific safety measures and used in decisions about which measures to implement. The costs of implementing a measure are compared to the expected (monetary) benefits of saving crashes and casualties. It is also possible to include other benefits than safety in cost-benefit analyses (e.g. related to environment and mobility).

Both approaches have shown that systematic assessments and evaluations contribute significantly to road safety by supporting the implementation of the most effective safety measures. The greatest challenge will be to assure the actual use of the results of the analyses in the decision-making process.

A posteriori evaluation of safety measures, carried out after full implementation, is a necessary complement to check that expected effects have been obtained, or, if not, to improve implementation conditions and procedures.

The EU project ROSEBUD provides more details about efficiency analyses and an overview of the cost-benefits of a wide variety of measures<sup>13</sup>.

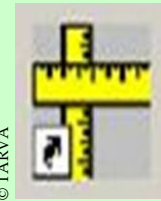
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<sup>13</sup> [http://ec.europa.eu/transport/roadsafety/publications/projectfiles/rosebud\\_en.htm](http://ec.europa.eu/transport/roadsafety/publications/projectfiles/rosebud_en.htm)

The ROSEBUD Handbook on Evaluated Road Safety Measures:  
[http://partnet.vtt.fi/rosebud/products/deliverable/Handbook\\_July2006.pdf](http://partnet.vtt.fi/rosebud/products/deliverable/Handbook_July2006.pdf)



## Best practice: efficiency analysis European Commission Impact Assessment Guidelines



### What is it about?

In 2002, the Commission introduced a new Impact Assessment procedure designed to contribute both to an effective and efficient regulatory environment and to a more coherent implementation of the Lisbon Development Strategy and the Sustainable Development Strategy. The procedure was completed in 2005 with the publication of EU impact assessment guidelines. This paper contains requirements to be considered by the Commission service in charge of developing a legislative proposal: considerations concerning objectives (specification, measurability, acceptance), key procedural steps (planning, consulting of all interested parties, carrying out analysis, etc) and key analytical steps (identification of the problem, development of main policy options, definition of objectives, analysis of impacts, comparison of options, outlining policy monitoring and evaluation). It is stated that there always has to be the option of “no EU action” which means the possibility of “an alternative approach to ‘classical’ forms of regulation” should be considered unless there is a decision by the Commission that has already ruled this out.

### Effectiveness?

The necessity of doing an impact assessment for all new regulations has contributed to better regulations and better coordination within the Commission. By providing a comprehensive analysis of likely social, economic and environmental impacts, both direct and indirect, it also improves the quality of policy proposals. Since the adoption of these guidelines, impact assessment studies were published by the Directorate General for Transport and Energy together with the proposals for a directive on blind spot mirrors, infrastructure safety and enforcement.

### More information?

[http://ec.europa.eu/governance/impact/docs\\_en.htm](http://ec.europa.eu/governance/impact/docs_en.htm)



## Vehicle Safety

Vehicle safety addresses the safety of all road users and currently comprises measures to help avoid a crash (crash avoidance systems) or reduce injury in the event of a crash (crash protection systems). Substantial and evidence-based improvements have been made and research has identified large scope for further enhancing vehicle safety. If all cars were designed to provide crash protection equivalent to that of the best cars in their class, half of all fatal and disabling injuries could be avoided.<sup>14</sup> There is also great potential for casualty reduction as a result of crash avoidance and active safety technologies if technology development is prioritised to give maximum casualty reduction.

Improvements to vehicle safety result from legislation (much of which is now agreed internationally) consumer information, the initiatives of individual manufacturers and product liability considerations. EU and UNECE legislation aims for a minimum but high level of protection across the product line; consumer information aims to encourage the highest possible level of safety; and car industry policies increasingly promote safety as a marketable commodity.

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<sup>14</sup> [http://www.erso.eu/knowledge/content/50\\_vehicle/vehicle.htm](http://www.erso.eu/knowledge/content/50_vehicle/vehicle.htm)





## Car design

Requirements regarding car design are set at international (UN/ECE) and European level (EC). However, there is a clear gap between the minimum requirements set by these international bodies and what is potentially possible from a safety perspective. Hence, there are also substantial differences in the safety performance of different cars. Information to the consumers on the safety performance of a car seems to work in two directions. It will create a consumer demand for safer cars and it will stimulate car manufacturers to do well in ratings, so they can use it in their marketing.

### Best practice: car design

#### EuroNCAP: an incentive for developing safer cars



##### What is it about?

The European New Car Assessment Programme (EuroNCAP) addresses injury reduction in the event of a crash by performing crash tests on the most popular cars sold in Europe to assess the protection they offer to occupants and to pedestrians. Tests performed include a frontal impact test at 64 km/h into an offset deformable barrier, a side impact test at 50 km/h, a side impact pole test at 29 km/h and tests with pedestrian head and leg forms at 40 km/h. The safety performance is evaluated for adults and children. Seat-belt reminders are also taken into account in the evaluation. Based on the results, occupant protection, pedestrian protection, and child protection are evaluated on scales with 1 to 5 stars: more stars indicate better protection. Test procedures evolve continuously to take account of new developments.

##### Effectiveness?

An evaluation study showed that the risk of being killed or seriously injured in a car with 4 stars is about 30% lower than in a car with 2 stars. In a Swedish cost-benefit analysis, it has been estimated that each additional EuroNCAP star increases the costs for new cars by ca. € 600.

##### Next steps?

EuroNCAP does not take into consideration the protection of occupants of other vehicles such as older and lighter cars. Due to the characteristics of the crash barriers used for testing the crashworthiness of cars, EuroNCAP is pushing for structures to become more rigid for all vehicles and, regrettably, contributing towards an increase in the rigidity of the vehicles. Discussions are underway within EuroNCAP to resolve the problem by adopting another type of barrier. EuroNCAP is now moving towards active safety, e.g. Electronic Stability Control, and discussions are underway to see how to include active safety as part of its safety rating system.

##### More information?

<http://www.euroncap.com>

## Driver support systems

Driver support systems help drivers to drive their vehicle safely, e.g. when they exceed the legal speed limit (Intelligent Speed Assistance), when they or their passengers forget to use the safety belt (Seatbelt Reminders) or when they are about to lose control of the vehicle (Electronic Stability Control). Other measures include alcohol locks, which prevent a car from being started if the driver is under the influence of alcohol. Most of these technologies are or will be made available by the manufacturers in new cars or as an after market (retrofit) product.

### Best practice: driver support systems

#### Advanced Seat Belt Reminders (SBR) in front seats



##### What is it about?

This countermeasure is to be understood as a legal requirement for all new motor vehicles in the 27 EU-countries to be equipped in front seats with SBR which fulfil EuroNCAP test criteria. To fulfil EuroNCAP criteria, seat belt reminders must use a combination of visual and sound signals. Front seat reminders must give a “loud and clear signal” for at least 90 seconds if the driver or passenger is unbelted.

##### Effectiveness?

The seat belt is the single most effective feature in the car to reduce the incidence and severity of personal injuries when a crash occurs. Using the seat belt reduces the risk of dying in a serious crash by about 50%. Latest studies have shown that advanced seat belt reminders can encourage up to 99% of drivers to use their seat belt. Although a lot of progress could be made in promoting seat belt wearing by back seat passengers (a safe practice which is not easy to enforce), substantial safety gains can be obtained by further enhancing seat belt wearing by front seat passengers. As a large part of daily car travel only involved one to two persons in the vehicle, most efforts have so far addressed the front seat position.

##### Next steps?

ACEA committed to provide SBR on “a large majority of new cars sold in Europe by 2010”.<sup>15</sup> ACEA could further commit to provide advanced SBR on all new cars sold by 2010. In its final report, the CARS 21 Group recommended that the European Commission adopt a legislative proposal on mandatory installation of advanced SBR in all new cars.

##### More information?

[http://www.etsc.be/documents/ETSC\\_Seat\\_belt\\_reminder\\_oct\\_06.pdf](http://www.etsc.be/documents/ETSC_Seat_belt_reminder_oct_06.pdf)

<http://ec.europa.eu/enterprise/automotive/pagesbackground/competitiveness/cars21finalreport.pdf>

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<sup>15</sup> “By signing the Charter, the European automobile industry pledges to continue progressively equipping cars and heavy trucks with seatbelt warning systems. By 2010, an overwhelming majority of new vehicles will feature this life-saving tool”.  
<http://www.acea.be/node/335>

## **Best practice: driver support system Alcohol interlocks (also termed “alcolocks”)**



### **What is it about?**

Alcolocks are devices that require the driver to take a breath test before starting the car. If the driver fails the test, the device locks the ignition of the car. Recent technical innovations have made alcohol interlocks largely fraud-resistant. Alcolocks can be installed as aftermarket devices in any type of car. The device is often used to prevent people who have been convicted of driving under the influence from re-offending. In these cases, the alcolock is generally part of a wider rehabilitation programme, including medical and psychological support. Alcolocks are also used in the professional transport sector.

### **Effectiveness?**

It is estimated that alcolocks lead to 40-95% reductions in the recidivism rate of convicted drink-drivers. The costs of an alcolock programme for drink driving offenders consist of introduction costs (administration, medical examination and installation; around €400), the annual running costs (rent of alcolock equipment and four medical examinations; around € 2000) and dismantling costs (around € 100). In France, a pilot project was started in 2004: drink driving offenders caught with a BAC of 0.8 to 1.6 mg/ml could opt to participate in an alcohol interlock programme as an alternative to prosecution. There was no case of recidivism one year after the completion of the programme and participants expressed a high level of support for the measure.

### **Next steps?**

Alcolock programmes for offenders would need legislation, an organisation to install and 'read' the alcolock data and an organisation to assess and accompany the alcolock drivers medically and psychologically. Other Member States could introduce legislation that would create a market for alcolocks. The European Commission could recommend the mandatory installation of an alcohol lock in cars for every driver who is caught with a BAC level of 1.3 g/l or higher or for drivers who are caught twice with a BAC level between 0.5 g/l and 1.3 g/l (IMMORTAL recommendation). The European Union could also promote the use of this device in professional transport.

### **More information?**

<http://www.immortal.or.at>

[http://ec.europa.eu/transport/roadsafety\\_library/rapport\\_swov\\_alcolock.pdf](http://ec.europa.eu/transport/roadsafety_library/rapport_swov_alcolock.pdf)

## Promising practice: driver support systems Intelligent Speed Assistance (ISA)



### What is it about?

Intelligent Speed Assistance is a general term for an Intelligent Transport System that aims to increase speed limit compliance. ISA systems establish the position of a vehicle and compare the current speed of the vehicle with the posted speed limit or recommended safe speed at that particular location. In case of excess speed, the system gives feedback to the driver about the speed limit in force or even restricts vehicle speed to the speed limit.

### Effectiveness?

It is generally estimated that excessive and inappropriate speeds are the cause of about a third of all fatal and serious crashes. Yet there is little sign of progress in reducing speeds. Both average speeds and numbers of speed limit violations remain high across Europe with only a few exceptions. The benefits of such in-car technology have been studied extensively. In the Netherlands, researchers found that ISA technology could help to achieve 90% compliance with speed limits and thereby reduce the number of road deaths by 25% by 2050. The European PROSPER research project predicts fatality reductions of up to 50% by 2050 for individual countries in an authority-driven scenario. The benefits are greater on urban roads and for the more intervening forms of ISA. ISA systems can also help to reduce fuel consumption and noise and to improve air quality. It was calculated that benefits would outweigh costs by a factor that was double (market-driven) or 3.5 times (authority-driven) higher by 2050.

### Public acceptance?

It is too often believed that the public is reticent of any speed limiting device which is seen as intrusive. A study by the Fondation Internationale de l'Automobile found that more than 60% support physical limiter systems in cars to prevent them from exceeding in 30 km/h speed limits and just over 50% support these systems on main roads and motorways.

### Next steps?

Market penetration of informative systems is increasing. However, to ensure wider implementation, Member States must set up speed limit databases and promote the uptake of ISA. Public authorities can play a crucial role in promoting ISA by including it in their procurement criteria, such as in the case of the Swedish Road Administration, which agreed to equip its whole fleet with Intelligent Speed Assistance. Some insurance companies are also offering lower premiums to drivers whose vehicle is equipped with ISA. EU legislation would achieve faster and wider application.

### More information?

<http://www.speedalert.org>

<http://www.rws-avv.nl/prosper>



## **Promising practice: driver support systems**

### **Fitting of vehicles with Electronic Stability Control (ESC)**



© www.esafetyaware.eu

#### **What is it about?**

Electronic Stability Control first emerged some ten years ago. ESC enhances vehicles' lateral stability by recognising when a skid is starting to happen. In a fraction of a second the electronic control unit applies the brakes at individual wheels, helping to keep the car under control before the skid develops. Whether the skid is the result of an emergency avoidance manoeuvre or a simple error of judgment, ESC can help a driver maintain control of the vehicle.

#### **Effectiveness?**

Recent research suggests that ESC can be highly effective in reducing rollover and other loss-of-control crashes, thus showing that cars fitted with ESC are less likely to be involved in crashes than those which are not. Estimates vary, but ESC could prevent around one death in five of car occupants. The number of vehicles sold in the EU with these devices installed is currently increasing. The EuroNCAP study showed, however, that there were huge differences in the extent to which this technology was offered to car-buyers across Europe. Some models have ESC fitted as standard equipment in one country, yet it is not available, even as an option, in others.

#### **Next steps?**

The Australian New Car Assessment Program (ANCAP) is currently considering an industry proposal to require ESC as part of its safety rating system. The penetration of this technology on the European market would certainly benefit from a similar approach from EuroNCAP.

On the 6th April 2007, the USA adopted a new law requiring the fitting of ESC on all new vehicles below 4.5 tonnes sold in the USA by September 2011. Such a requirement does not exist in Europe. However, a 'Choose ESC' Campaign has been launched led by the eSafety Aware under the patronage of the European Commission, with the goal of raising awareness of ESC. In its final report, the CARS 21 Group recommended that the European Commission come up with a legislative proposal in 2007 on ESC in heavy-duty and light-duty vehicles.

#### **More information?**

[http://www.esafetyaware.eu/download/related\\_documents/PAINE\\_ESC\\_TESTS.pdf](http://www.esafetyaware.eu/download/related_documents/PAINE_ESC_TESTS.pdf)

<http://ec.europa.eu/enterprise/automotive/pagesbackground/competitiveness/cars21finalreport.pdf>



## Vehicle conspicuity

It is important for road safety that the presence of other road users is detected in time. Better and earlier recognition of other traffic will lead to earlier action to avoid a collision or to decrease the severity of a crash.

### Best practice: vehicle conspicuity Daytime Running Lights (DRL)

#### What is it about?

Daytime Running Lights (DRL) refer to motor vehicles driving with low beam headlights or with special DRL lamps during the whole year, independent of time of day, light conditions and location. DRL aims at reducing daytime-crashes that involve more than one participant and at least one motor vehicle. DRL increase visibility and improve distance and speed perception of motor vehicles. They improve the capacity of other road users to detect motor vehicles and to adjust their own behaviour. 14 EU Member States have mandatory rules on DRL so far, with different requirements, and some Member States recommend the use of DRL.

#### Effectiveness?

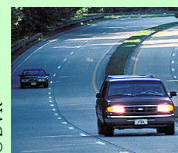
It has been estimated that DRL could help to save between 1,200 and 2,000 lives per year in the European Union over a period of 12 years and that the benefits exceed the costs.<sup>16</sup> Some resistance by the public (in particular motorcyclists) has been noted in some countries before adoption. Acceptance and use increase with time. DRL increases fuel consumption and CO<sub>2</sub> emissions by up to 1.5% if dipped headlamps are used but this is reduced to only 0.3% in the case of dedicated DRL.

#### Next steps?

In the 3rd Road Safety Action Programme, the European Commission promised to take steps toward the adoption of legislation in the field of DRL. The CARS 21 final report also mentions DRL as a possible future initiative. A public consultation was launched on this subject on 1 August 2006. The European Union or the UN/ECE could require all motor vehicles to drive with low beam headlights or with special DRL lamps. Legislation should be a mixture of vehicle legislation (for new vehicles) and behavioural legislation (for the existing fleet).

#### More information?

[http://ec.europa.eu/transport/roadsafety/vehicles/daytime\\_running\\_lights\\_en.htm#consultation](http://ec.europa.eu/transport/roadsafety/vehicles/daytime_running_lights_en.htm#consultation)



<sup>16</sup>ETSC (2003) Cost effective EU transport safety measures, <http://www.etsc.be/documents/costeff.pdf>



## Road infrastructure safety

Besides the vehicle and the driver, infrastructure is the third pillar of any comprehensive road safety work. Estimates show that bad road design and equipment or road maintenance defects have an impact on the occurrence of over a third of injury crashes. Well-documented experiences from Europe and elsewhere shows that formal systematic infrastructure safety procedures such as road safety impact assessment, audits and inspections are a demonstrably effective and cost-beneficial tool to prevent road crashes in the short term; provided that the corrective measures pinpointed through such procedures are adequately budgeted. Impact assessment, audits and inspections bring to public knowledge the safety problems related to infrastructure design or maintenance. On the underlying assumption that all stakeholders are held to their responsibilities for road users' life and health, the problems cannot be ignored by the system's managers and treatment should follow. These procedures already exist and are applied in varying degrees in some EU Member States.

The harmonisation of Member States legislation on road safety assessment, audits, management and inspections would provide common instruments to ensure a high level of safety of roads in all EU Member States, especially new ones, which are in the process of upgrading and extending their road networks. Exchange of best practices through research projects, working groups, conferences and workshops has been going on for several years in the EU and in the international arena, but, nevertheless, no general improvement in road infrastructure safety performance has been registered. Other infrastructure safety measures such as site-specific remedial measures, better road hierarchy governing road design and equipment, forgiving roadsides have proven to be effective and would certainly contribute to fewer crashes if implemented throughout Europe.

### **Promising measure: road infrastructure safety EU-wide application of infrastructure safety management**



#### **What is it about?**

Infrastructure safety management forms a broad procedure that includes budgeting for measures and investment management of those instruments that enable road safety to be an explicit consideration in planning, designing and maintaining road infrastructure. Examples of these instruments are road safety impact assessment, road safety audits and inspections.

#### **Effectiveness?**

If only applied to the Trans-European road networks, infrastructure safety management is estimated to reduce the number of deaths by more than 600 per year and the number of injuries by about 7,000 per year. This corresponds to more than 2.4 billion € per year. If infrastructure safety management would be extended to other motorways and to main roads, the reduction in fatalities is estimated to be around 1,300 every year; this corresponds to more than € 5 billion per year. These estimates exceed costs by a considerable factor.

#### **Next steps?**

A proposal for an EU Directive on road infrastructure safety management is currently being discussed by the European Parliament and the Council. The aim of this proposal is to extend road safety impact assessment, road safety audits and inspections to the whole of the EU, without defining technical standards or requirements, but leaving the Member States free to keep already existing procedures or to introduce their own.

#### **More information?**

[http://ec.europa.eu/transport/roadsafety\\_library/infrastructure/directive\\_proposal\\_en.pdf](http://ec.europa.eu/transport/roadsafety_library/infrastructure/directive_proposal_en.pdf)



**Good practice measure: road infrastructure safety**  
**European Road Assessment Programme (EuroRAP):**  
**How safe are you on Europe's roads?**



**What is it about?**

The European Road Assessment Programme (EuroRAP) is a sister project to EuroNCAP. The aim of EuroRAP is to provide a Europe-wide safety rating for roads across Europe. Crash risks (the number of killed and seriously injured road users per km driven) are shown on a colour-coded road map. Roads are also rated using a Road Protection Score (RPS). The RPS compares the road protection potential in case of four different crash types: head-on collisions; run-off the road crashes; impacts at intersections and crashes with vulnerable road users.

**Effectiveness?**

EuroRAP is giving road engineers and planners vital benchmarking information to show them how well, or badly, their roads are performing compared with others, both in their own and other countries. Until EuroRAP there were no internationally recognised standards to measure the safety of European roads. Roads were assumed to be safe if they met the engineering standards of the time when they were built. EuroRAP has assessed that the lowest risk roads in Europe are a new type of 4-star single carriageway found in Iceland, Ireland and Sweden.

**Next steps?**

EuroRAP should generate pressure from the road users on the decision-makers to improve road infrastructure. Information on the safety of the road could be provided to drivers on their satellite navigation systems. The EuroRAP methodology could benefit from co-operation with the EU funded project SafetyNet, which developed safety performance indicators on roads.

**More information?**

<http://www.eurorap.org>





### **Best practice measure: road infrastructure safety**

#### **Safety on secondary rural roads**



#### **What is it about?**

Secondary roads have received far less attention than primary roads in the past, even though a large proportion of fatalities in rural areas occur on secondary roads. Design guidelines for these types of roads still rarely exist within Europe. As a result, a vast number of these roads are in a state which is inappropriate for modern road traffic. Launched in 2005 and bringing together experts from 14 countries, the EU funded project RIPCORD-ISEREST aims at improving road safety on single carriageway rural roads.

#### **Effectiveness?**

Secondary rural roads account for over 60% of the total number of road fatalities. Hence, there is a large potential for safety improvements.

#### **Next steps?**

The RIPCORD-ISEREST final handbook will be published by the end of 2007. This publication could serve as a basis for European guidelines for safety on secondary roads.

#### **More information?**

<http://www.ripcord-iserest.com>

## Enforcement of Traffic Law

It is widely recognised that large scale and visible enforcement, especially when targeting speeding, drink driving and non-use of seat belts is a cost-effective way to achieve substantial improvement in road safety within a relatively short period<sup>17</sup>.

This is why the European Commission adopted a Recommendation on enforcement in the field of road safety in 2003<sup>18</sup>. In this Recommendation, Member States are asked to apply in a national enforcement plan what is known to be best practice in the enforcement of speed, alcohol and seat belt legislation. However, since the Recommendation is not legally binding, it has failed to result in an EU-wide introduction of best enforcement methods. Structured and systematic progress all over the EU towards more stringent enforcement has not yet taken place. Moreover, the Recommendation did not lead to the cooperation necessary to create an EU-wide system for effectively dealing with cross-border enforcement.

### **Promising practice: enforcement of traffic law EU-wide introduction of best enforcement methods**



#### **What is it about?**

Much is known about effective traffic law enforcement methods. To control speeds, automated speed enforcement systems must be used, and offences must be followed up with procedures able to manage a large number of violations. For drink-driving, random breath testing with alcohol screening devices must be applied and reliable breath testing devices used. In the area of seat belt use, intensive enforcement actions of a specific duration must take place several times a year.

#### **Effectiveness?**

A study performed by ICF Consulting before the EU enlargement of 2004 showed that, annually, good enforcement practices could prevent 5,800 road deaths per year resulting from speeding, 4,300 road fatalities resulting from not wearing seat belts and 3,800 fatalities resulting from drink driving. 680,000 per year injuries could be avoided. Best practice enforcement measures are transferable to all countries.

#### **Public acceptance?**

Information campaigns about the purpose of the measure and support at a high political level are necessary to overcome some public resistance. Public acceptance is also dependent on the fact that the money collected through traffic fines is channelled back to road safety measures.

#### **Next steps?**

The European Commission is currently considering proposing a Directive on enforcement. This Directive would require Member States to apply what is known to be best practice in the enforcement of speed, alcohol and seat belt legislation.

#### **More information?**

[http://ec.europa.eu/transport/roadsafety/enforcement/introduction\\_en.htm](http://ec.europa.eu/transport/roadsafety/enforcement/introduction_en.htm)

<sup>17</sup> Cost-Benefit Analysis of Road Safety Improvements – Final Report. ICF Consulting (2003)

<sup>18</sup> Commission Recommendation 2004/345/EC of 21 October 2003 on enforcement in the field of traffic law

## Promising practice: enforcement of traffic law EU-wide system for facilitating cross border enforcement



### What is it about?

Enforcement measures apply to non-resident traffic offenders mainly when offences are subject to on-the-spot-fines. When offences are registered by an automatic device, police cooperation for cross-border enforcement of traffic offences is either not being implemented properly or has to be performed through a complex web of bilateral agreements and cooperation on data file treatment. These conditions leave many offenders unsanctioned. Not only does this impunity jeopardise road safety, but it is also intended to encourage drivers not to respect traffic rules in countries other than their own.

### Effectiveness?

While overall statistical evidence for the whole EU does not yet exist, the following figures show the potential magnitude of the problem: In Luxembourg, non-resident drivers account for 30% of road traffic offences and 23% of fatal crashes. In France, 25% of the speed offences are committed by non-resident drivers. In the Netherlands, which is not a transit country, over 10% of the traffic offences are committed by non-resident drivers.

### Next steps?

The Member States could set up enforcement co-ordination points to ensure that serious or repeated offences committed by non-resident drivers are reported to the competent authority of the Member States in which the vehicle is registered. The Commission should also envisage legislation to ensure that enforcement is fully effective for drivers' violations of traffic law in whichever EU country they are driving. The European Union should help facilitate the cross border enforcement of penalty offences and adopt a recommendation on mutual recognition of penalty offences and driving restrictions as it is the case for financial offences<sup>19</sup>.

### More information?

[http://ec.europa.eu/transport/roadsafety/enforcement/introduction\\_en.htm](http://ec.europa.eu/transport/roadsafety/enforcement/introduction_en.htm)

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<sup>19</sup> Council Framework Decision on the Application of the Principle of Mutual Recognition to Financial Penalties, 2005



**Good practice: enforcement of traffic law**  
**TISPOL, the European Traffic Police Network**



**What is it about?**

TISPOL, the European Traffic Police Network, is an initiative set up in 1996 to provide an opportunity for police officers to share best practice and to highlight and improve road safety across Europe. TISPOL members are police officers from 25 states including 21 EU Member States. Each year, TISPOL organises several large-scale coordinated cross-border enforcement operations linked to large press coverage on speed, non-use of safety restraint, alcohol and the safety of heavy good vehicles.

**Next steps?**

The network needs to secure funding to be fully effective. In addition, the work undertaken by TISPOL is dependant on the effective follow-up with proportionate sanctions by Member States. The police forces would benefit the implementation of a cross border EU-wide mechanism.

**More information?**

<http://cms.tispol.org>



## Tackling novice drivers higher risks

Traffic crashes are the single largest killer of 15-24 year olds in OECD countries. Based on experiences drawn from member countries, the highest risk circumstances of young drivers – in particular male drivers – are associated with speeding, drink driving, non-wearing of seat belts, drugs, night-time driving and driving with peer-age passengers. Some of these circumstances and issues are best addressed by general road safety policy and enforcement action; others are best addressed by young driver-specific measures. In both cases, one of the aims is to provide safer driving conditions in which young drivers can acquire experience.

*General action:* Significant reductions in young driver risk could be already achieved with increased levels of accompanied practice prior to solo driving, as well as by stringent legislation and enforcement of the key road safety problems.

*Young driver specific action:* The circumstances best addressed by measures specifically targeted at novice drivers are likely to be:

- ◆ Specific maximum BAC level of no more than 0.2 g/l
- ◆ Improved driver training including possible post-test training measures
- ◆ Special demerit point systems

In some European States, novice drivers are subject to special demerit point systems that apply during the period of probation. This means that probationary drivers are potentially subject to punitive (e.g. loss of licence) or rehabilitative (e.g. mandatory traffic risk awareness training) measures if they lose a certain number of points, and the threshold for such measures is lower than it would be for other drivers<sup>20</sup>.

In broad terms, the literature on driver education/training, testing and licensing issues suggests that the ideal driver licensing process should include:

- ◆ A combination of professional driver instruction and accompanied driving at the pre-licence stage;
- ◆ Measures to encourage a significant amount of structured accompanied practice (i.e. accumulation of driving experience in safe, varied circumstances) in the pre-licensing phase;
- ◆ Focusing not only on vehicle control and driving in traffic, but also on the higher levels of the Goal for Driver Education (GDE) matrix<sup>21</sup>, and associated risks;
- ◆ Measures promoting the self-evaluation and independent decision-making of the learner driver;
- ◆ A close relationship between (clear) training goals, driver training and the test;
- ◆ Progressive or 'graduated' access to the driving licence, including post-licence restrictions for novice drivers (probationary period), additional training measures, etc...

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<sup>20</sup> OECD/ECMT (2006), Young drivers, the road to safety

<sup>21</sup> [http://ec.europa.eu/transport/roadsafety/publications/projectfiles/gadget\\_en.htm](http://ec.europa.eu/transport/roadsafety/publications/projectfiles/gadget_en.htm)



## **Promising practice: tackling novice drivers higher risks Guidelines for driver training (graduated training - accompanied driving)**



### **What is it about?**

The model closest to meeting the requirements mentioned above is the new Norwegian driver training curriculum, in combination with its already established driving test and post-licence restrictions. It has been designed on the basis of the Goals for Driver Education matrix. It includes a step-by-step process to the licence, including over 30 mandatory lessons with professional driving instructors and providing ample opportunity for accompanied driving.

### **Effectiveness?**

Considering that it has only recently been introduced, results should be monitored over the coming years.

### **Next steps?**

EU Directives (2nd Driving Licence Directive 1991/439, Commission Directive 2000/56, Recast Directive 2006/126/EC) lay down minimum requirements for certain aspects of the driving test and the driving licence, but issues such as driver training and post-licensing measures (e.g. probationary periods) have not yet been addressed by European-level regulations. Whilst current scientific knowledge is not complete enough to justify regulatory intervention, the European Commission could consider adopting European guidelines for driver training and post-licensing on the basis of the recommendations identified by different EU research projects to encourage the take up of best practice measures by the Member States.

### **More information?**

<http://www.vegvesen.no/servlet/Satellite?cid=1164637133457&pagename=engelsk%2FPage%2FSVVsubSideInnholdMal&c=Page>

<http://www.cieca.be>



## Campaigns

Road safety communication campaigns have been found to be effective when combined with other countermeasures, particularly enforcement. Important tasks of road safety communication include promoting public acceptance of road safety measures (e.g. enforcement measures) and lessening the public's tolerance of risky behaviour. Media can influence attitudes e.g. by providing information about rules, explaining the consequences of risky behaviour, and giving information about police enforcement and possible punishments. Since the target of the campaigns are people or groups of people, and as their behaviour may differ from one country to another, the specific messages addressed to the target group chosen for a campaign may vary from country to country and even within a single country. Campaigns carried out at the European level and supported by European and international organisations (such as in the measures described below) contribute towards maintaining a high profile for road safety and thus towards mobilising the decision-makers at all levels.

In many cases, however, it is difficult to estimate the impact of the campaign itself, especially if the campaign is combined with elements of enforcement or other road safety targeted measures whose effects possibly overlap. Furthermore, the effects of a campaign have to be separated from general developments in road safety.

### Good practice: campaigns

#### UN Road Safety Week/European Road Safety Day



##### What is it about?

Road Safety Days or Road Safety Weeks are part of a set of road safety campaigning activities that aim to improve road user behaviour. They target people by providing information which influences them and thus can have an impact on their course of action. The United Nations Economic Commission for Europe organises regular road safety weeks. The first United Nations Global Road Safety Week targeting young drivers was held between the 23<sup>rd</sup> and the 29<sup>th</sup> of April 2007. The first European Road Safety Day was organised during the Global Road Safety Week on the 27<sup>th</sup> of April.

##### Effectiveness?

The duration of road safety days/weeks are shorter than other forms of campaigning. For this reason, their effect can be considered to be limited; except if they are part of a more global strategy and combined with other measures. Moreover, the support provided by the UN secretariat can be determining for countries where political will is lacking. It is in these countries that such campaigns are particularly useful in encouraging decision-makers to put road safety on the agenda and to make the public more aware of the importance of the issue.

##### Next steps?

The Road Safety Days or Weeks could be coupled with enforcement actions and/or adoption of new pieces of legislation.

##### More information?

<http://www.unece.org/trans/roadsafe/rsweeks.html>



## Good practice: campaigns European Road Safety Charter

### What is it about?

In the 3rd European Road Safety Action Programme – Halving the Number of Road Accident Victims in the European Union by 2010: a Shared Responsibility, the European Commission called for a larger mobilisation from all level of governments, industry and civil society's organisations and institutions to assume responsibility in this area. The European Road Safety Charter aims at providing a forum and a platform for the signatories to exchange experiences and new ideas – across national borders – in their efforts towards greater safety on European roads. The signatories' commitments are monitored and made accessible to the public so that other people may be inspired by their experiences.

### Effectiveness?

More than 750 enterprises, associations and cities have signed a commitment in the framework of the Charter. Their number is expected to increase by 2010. A greater effort could be asked from the signatories in terms of their level of commitment and evaluation.

### More information?

<http://ec.europa.eu/transport/roadsafety/charter.htm>







## Post accident care

Post accident care takes place after a crash has occurred and deals with optimising the chances of the medical and psychological recovery of the victims. The care given after a crash usually consists of several integrated steps: first aid, emergency call, efficient response of emergency systems, security and safeguarding of the crash site, transportation and medical treatment to enable the transport of the victims, further treatment at medical centres and psychological support of victims and their relatives.

One weakness of many national emergency response systems is their inability to pinpoint the location of a call, in particular from a cell phone, following a crash. If the victim cannot tell the alert system operator which road he had been driving on an important piece of emergency response information is missing: the crash location. The response to emergency calls must be efficient, ensuring a fast arrival of the right emergency services at the crash spot.

### **Promising practice: post accident care Emergency call system “eCall”**



#### **What is it about?**

A combination of technical solutions can be used to reduce the time between the emergency call and the rescue activity. The in-vehicle eCall is an emergency call generated either manually by vehicle occupants or automatically via activation of in-vehicle sensors. When activated, this in-vehicle eCall system will establish a voice connection directly with the relevant PSAP (Public Safety Answering Point). At the same time, a minimum set of incident data (MDS) will be sent to the eCall operator receiving the voice call.

#### **Effectiveness?**

eCall will reduce the rescue time. When medical care for critically and severely injured people is available sooner after the crash, the death rate can be lowered. Due to a shorter rescue time, eCall will reduce congestion time because the faster arrival of rescue teams, police and towing firms enables the crash scene to be cleared more quickly.

#### **Next steps?**

eCall needs to function seamlessly across the EU. So far, only eight Member States have signed the Memorandum of Understanding, casting doubt over the ability of the public sector to respond to eCall emergency calls by the operational target date of September 2009. The Commission should encourage Member States to sign the Memorandum of Understanding and ensure the functioning of the emergency number 112.

#### **More information?**

[http://europa.eu.int/information\\_society/activities/esafety/doc/esafety\\_library/mou/invehicle\\_ecall\\_mou.pdf](http://europa.eu.int/information_society/activities/esafety/doc/esafety_library/mou/invehicle_ecall_mou.pdf)

### **Good practice: post accident care**

## **Emergency lanes in congestion in Germany and Switzerland**



#### **What is it about?**

The German term “Rettungsgasse” (emergency lane) is defined by law in Germany and Switzerland. It means that, if there is traffic congestion and an emergency vehicle needs to get through, traffic has to form a free lane in the middle of two lanes. If there are more than two lanes, all cars on the outer left lane shall move to the left, all others shall move right. This free lane enables all emergency vehicles to provide fast and efficient help in congested traffic conditions.

#### **Effectiveness?**

The benefits are that, in case of traffic congestion, emergency vehicles arrive faster at the crash location. The costs are mainly limited to publicity costs when the new law is introduced. Although no precise estimates are available, the cost-benefit ratio is likely to be favourable.

#### **Next steps?**

The European Commission could recommend the implementation of the emergency lanes in congestion to avoid confusion among cross-border travellers.

#### **More information?**

<http://www.oeamtc.at/netautor/pages/resshp/anwendg/1124101.html>



## Data collection and analysis

Road safety data are essential for the development of well founded road safety strategies<sup>22</sup>. Various organisations gather data at the international level. IRTAD (International Road Traffic and Accident Database) of the OECD countries<sup>23</sup>, CARE (Community Database on Accidents on the Roads in Europe)<sup>24</sup>, and data from EuroStat<sup>25</sup>, the United Nations<sup>26</sup>, or the World Health Organisation<sup>27</sup> are measures. However, the data provided so far at the international level are neither fully comparable, nor complete. Reliable and comparable accident statistics, as well as exposure data, are needed to quantify the scale of the problem and to identify the most effective countermeasures.

Determining whether the data are reliable and comparable largely depends on the data collection method and definitions of crashes, road deaths, injury severity, road types, etc. Presently, several international projects, in particular the EU Safety Net project<sup>28</sup>, are attempting to harmonize data and make definitions comparable at the global or European level.

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<sup>22</sup> This chapter includes information collected in the framework of the European project SAFETYNET:

[http://www.erso.eu/safetynet/content/safetynet\\_results.htm](http://www.erso.eu/safetynet/content/safetynet_results.htm)

<sup>23</sup> <http://www.cemt.org/irtad/IRTADPUBLIC/index.htm>

<sup>24</sup> [http://ec.europa.eu/transport/roadsafety/road\\_safety\\_observatory/care\\_en.htm](http://ec.europa.eu/transport/roadsafety/road_safety_observatory/care_en.htm)

<sup>25</sup> <http://epp.eurostat.ec.europa.eu>

<sup>26</sup> <http://www.unece.org/stats/Welcome.html>

<sup>27</sup> [http://www.who.int/tb/country/global\\_tb\\_database/en/index.html](http://www.who.int/tb/country/global_tb_database/en/index.html)

<sup>28</sup> <http://www.erso.eu/safetynet/content/safetynet.htm>



## Road crash statistics

Not all road crashes are registered with their data stored in a database. Generally, fatal crashes are the most reliably registered, but even here the data are not complete. As injury severity decreases, the registration rate decreases further. Moreover, crashes involving motor vehicles are registered more comprehensively than other crashes.

In most European countries, road accident databases are maintained by the police, ministries, and statistical services. In some countries, such as Denmark, Netherlands, Greece, Hungary and Slovenia, road accident databases are maintained by hospitals. Medical data are essential in cross-checking data collected by the police, since they enable the identification of the degree of crash underreporting of the police files. Apart from not being complete, crash collection and analysis requires professional analysts with the necessary skills. The experience of the USA in tackling both challenges is instructive.

### Good practice: road crash statistics

#### US Fatality Analysis Reporting System (FARS)



##### What is it about?

The Fatality Analysis Reporting System (FARS) is a nationwide census managed by the National Highway Traffic Safety Administration (NHTSA), providing the American public with yearly data pertaining to fatal injuries suffered in motor vehicle traffic crashes. NHTSA has a cooperative agreement with an agency in each State government to provide specific information in a standard format on fatal crashes occurring in the State, which generally includes some or all of the following: Police Accident Reports, Vehicle Registration Files, Driver Licensing Files, Highway Department Data, Death Certificates, Coroner/Medical Examiner Reports, Hospital Medical Reports and Emergency Medical Service Reports.

##### Effectiveness?

Thousands of analysts have been trained to fill in the forms and perform advanced types of analysis while public access to the database and queries has allowed a more informed debate about the problem of road crashes and the effectiveness of countermeasures in the USA than in most European countries.

##### Next steps?

The EU CARE database is a first important step towards a similar approach in Europe. However, the European public has not benefited from the same access to crash datasets like those in the USA. Having a system in common would incorporate all aspects, including the definitions of fatal, serious and slight injuries, in-depth data from stratified samples of crashes, and the use of uniform methodologies as well as allowing for the investigation of crash and injury causation. Discussions are currently underway at SafetyNet on how to move towards a more harmonised European system for recording road crash data.

##### More information?

<http://www-fars.nhtsa.dot.gov/>



## In-depth crash data

In-depth crash studies aim to get more detailed information about the causes and the outcome of crashes than is available from police records. In these studies, crashes are reconstructed retrospectively by means of on-the-spot, interviewing participants and witnesses, inspecting the damage to the vehicles involved, and obtaining information about the sustained injury. The extra information is used to detect shortcomings and potential improvements in, for example, vehicle design, road design, road user training and medical care. In-depth studies are rather common in other transport modes, but less common for road traffic. One of the reasons may be that it is a rather costly type of study.

### Good practice: in-depth crash data Crash Analysis System (CAS) in New Zealand



#### What is it about?

Every year all road crash information reported by the police to Land Transport New Zealand is loaded into an integrated high tech computer system: the Crash Analysis System (CAS). This can mean up to 30,000 non-injury crashes, between 9,000 and 10,000 injury crashes and up to 400 crashes involving death. CAS integrates three primary sources of road safety data: crash reports, diagrams of crashes and road data, which includes road categorisation and traffic flows. Major users of crash data include Land Transport NZ, the New Zealand Police, Transit New Zealand, local authorities, engineering consultants, ambulance services, fire services and road safety co-ordinators.

#### Effectiveness?

CAS is an integral part of the national 'black spot' treatment programme developed in 1985 to investigate all New Zealand roads, identify black spots and make improvements to them where necessary. CAS includes a system to track crashes at black spots and link site improvements to crash reductions. This allows reporting to road authorities on the results of their remedial programmes, ensuring that the knowledge gained can be beneficial to others.

#### Next steps?

It would be desirable to develop such an in-depth database in Europe, linking road crash information to road data. EuroRAP is a first step but is not yet providing the same level of in-depth analysis as the New Zealand scheme.

#### More information?

<http://www.ltsa.govt.nz/research/cas/index.html>

## Road statistic analysis

The number of road traffic victims and the severity of the injuries are the most direct measure of road safety. However, it is also useful to monitor road user behaviour or characteristics of the road that have been proven to relate to the road safety level. Such safety performance indicators help in giving a more complete picture of the level of transport safety and in understanding road crash trends. Other tools such as public surveys or online knowledge portals can also help to increase general road safety awareness.

### Good practice: road statistic analysis Safety Performance Indicators (SPI)



#### What is it about?

Transport safety performance indicators (SPI) are defined as any measurement causally related to crashes or injuries that is used in addition to a count of crashes or injuries; e.g. behavioural indicators on speed, alcohol, restraint systems and safety devices as well as SPI in the areas of quality management of road networks, vehicle fleets and emergency services. Performance indicators are an important part of the road safety target hierarchy that was developed under the SUNflower and Safety Net projects<sup>29</sup>. They provide the link between the casualties from road crashes and the measures taken to reduce them. They can point to the emergence of new problems at an early stage, before these problems show up in the form of crashes.

#### Effectiveness?

Since these monitoring results can become available far more quickly than registered crashes, they are particularly useful for policymakers. Experience in some EU Member States shows that the authorities using performance indicators are more committed to their policies if performance indicator data are reported to them regularly.

#### Next steps?

The European Commission could set up a series of relevant SPI and require Member States to collect them in a regular and harmonised way for international comparison. The European Union could also adopt quantified targets on the basis of SPI. The SUNflower methodology is a good starting point as an aid to both planning and monitoring progress.

#### More information?

<http://sunflower.swov.nl/>

[http://www.erso.eu/safetynet/fixed/WP3/sn\\_wp3\\_d3p6\\_spi\\_theory.pdf](http://www.erso.eu/safetynet/fixed/WP3/sn_wp3_d3p6_spi_theory.pdf)

<sup>29</sup> Hakkert et al. (2007), Road Safety Performance Indicators Theory

### **Good practice: road statistic analysis SARTRE studies (“Social Attitudes to Road Traffic Risk in Europe”)**



#### **What is it about?**

SARTRE, an acronym for "Social Attitudes to Road Traffic Risk in Europe," is a research project, which aims at studying the opinions and reported behaviours of car drivers throughout Europe. The project is based on ad hoc data collection repeated every five years using the same methodology since 1991. Results collected in such a way allow for:

- ◆ analysis of attitudes and reported behaviour of car drivers in their respective countries
- ◆ description of differences between drivers from various European countries
- ◆ definition of the level of social acceptance for performed or planned preventive solutions
- ◆ follow-up of the changes in the opinions and reported behaviour of European car drivers.

#### **Effectiveness?**

The size of the sample (over 24,000 drivers were interviewed) and the length of the questionnaire (with well over 100 questions being asked) of SARTRE 3 represent a unique source of data for providing a valuable ‘portrait’ of the attitudes, opinions and behaviours of European drivers. It creates a unique possibility to follow the changes in the opinions and reported behaviour of European car drivers over a longer period of time.

#### **Next steps?**

The EU should finance support to the SARTRE study. The SARTRE consortium could in the future compare the survey results and crash statistics and performance indicators.

#### **More information?**

<http://sartre.inrets.fr/english/sartre3E/Booklets/english/Page01.htm>



### **Promising practice: road statistic analysis European Road Safety Observatory (ERSO)**



#### **What is it about?**

The European Road Safety Observatory (ERSO) is one of the final results of the EU funded project SafetyNet. ERSO aims at providing an information platform for policy makers, researchers, road safety advisors and citizens wanting to find out more about European road safety legislation, data, best practices, actors etc.

#### **Next steps?**

The website is under construction. A continuous and rigorous up-to-date of the information provided is crucial to ensure that the website is being used by the road safety community and the general public.

#### **More information?**

<http://www.erso.eu>





## Best Practice from other policy areas

Why not learn from other policy areas? Synergies can be obtained by linking road safety to other political processes or transfer best practices in other policy areas to road transport.

### From environment protection policy to road safety

Mainstreaming road safety across different sectors, such as environment protection, is emerging as a still largely untapped opportunity for developing synergy and new partnership. Integrating road safety under a broader policy framework so that road safety becomes one of the performance criteria of the transport system would allow road safety to be improved along with other objectives related to health and environmental protection.

#### **Best practice: The Cardiff process**

#### **Mainstreaming road safety across other sectors**

##### **What is it about?**

The Cardiff process is the name given to the process launched by European heads of state and government during the European Council meeting in Cardiff, in June 1998, requiring different Council formations to integrate environmental considerations into their respective activities, putting article 6 of the EC Treaty into practice. The Cardiff process generated a sense of ownership of environmental integration in some Council formations with positive knock-on effects on actions in other EU institutions and Member States.

##### **What about road safety?**

Non-road safety policy decisions could have important impacts on road users' risk levels. This includes the availability and cost of public transport and parking, decisions regarding land-use, road pricing, or the location of establishments serving alcohol, among others. The possible road safety costs, in terms of crash risk, should be factored into all public policy decisions, where relevant, similar to the way in which environmental costs are currently considered.

##### **Next steps?**

The European heads of state and government could adopt a strategy to achieve a stringent integration of road safety in all policies that have an impact on road users' risk levels. Mainstreaming road safety across different sectors would mean better synergy of actions, more political leadership, higher visibility in the media, and better elimination of side effects on road safety of other policy areas.

##### **More information about the Cardiff process?**

<http://europa.eu/scadplus/leg/en/lvb/l28075.htm>

## Advocating health

The health sector has historically regarded road safety as not being part of its core business, leaving the main responsibility to the transport sector. Although the health and transport sectors already cooperate in many areas in research on factors that influence driving, and in developing systems for quality insurance, benchmarking and knowledge transport, organizing this cooperation better would use resources more efficiently. The World Health Organisation proposes that the health sector takes a more proactive role and brings road traffic injuries back into its core business.

### Promising measure: Advocating health

#### Using health professionals as advocate for road safety



##### What is it about?

Professionals involved in preventive medicine and environmental health, together with public health administrators and public servants, can be instrumental in placing road safety on the agenda of other sectors. They can do this by promoting greater awareness about the relationships between road safety and other transport-related health effects, facilitating the identification of new strategies and implementing win-win policies with other relevant sectors.

##### What about road safety?

The health sector could play a leading role in monitoring and reporting on road traffic injuries and deaths as well as various risk factors. It could then make this information available to inform research aiming at redesigning road transport systems around the vulnerability of the human body and at identifying cost-effective strategies for treating and rehabilitating people who are injured.

In particular, the health sector has a unique role in:

- ◆ Developing injury information systems based on hospital data and supporting the reconciliation of injury data from different sources;
- ◆ Developing good practices and guidelines on essential trauma care and emergency services;
- ◆ Estimating the real social costs of road traffic injuries;
- ◆ Putting pressure on other sectors to act upon the health information provided to improve road safety (if needed, initiating an intersectional co-operation processes).

##### Next steps?

Such integrated information system could be linked to other relevant information systems, including those developed in environmental health indicators and in policy integration, such as the Transport and Environment Reporting Mechanism (TERM) developed by the European Commission and the European Environment Agency (EEA).

##### More information?

<http://www.euro.who.int/document/e82659.pdf>

## **Good measure: Advocating health Promoting healthier transport modes**



### **What is it about?**

Non-motorised means of transport, such as cycling and walking, account for a very marginal share of road transport: the average person in the EU cycles about 0.5 km, walks about 1.0 km and travels 28 km by car per day. Cycling accounts for a significant modal share in only very few countries, such as Denmark and the Netherlands. More than 50% of the total urban trips currently carried out by car in the EU are shorter than 5 km: a distance that could be cycled in about 15 minutes. More than 30% of the total urban trips are shorter than 3 km: a distance that could be walked in about 20 minutes.

### **What about road safety?**

It is often claimed that cycling or walking should not be encouraged as it is a less safe transport mode than cars. British Medical Association (BMA) rejects this excuse because the advantages of cycling for public health (a healthy life through regular exercise) far outweigh its disadvantages (the risk of a crash). Indeed, for many people, the bicycle is the only way of regularly practising moderate exercise without having to drastically change one's habits. A risk of coronary heart disease for a person who takes no regular physical exercise is equal to that of a smoker smoking 20 cigarettes a day. Two trips of 15 minutes by bicycle a day are enough to guarantee a healthy heart.

### **Next steps?**

Addressing the safety of vulnerable road users therefore appears to be a key determinant of whether more sustainable and healthier transport modes can increase or maintain their share of total transport. The international bodies could support initiatives, such as the National Cycling Strategy in the U.K and the Dutch Bicycle Master Plan aimed at promoting bicycle use while simultaneously increasing the safety and appeal of cycling.

### **More information?**

[http://europa.eu.int/comm/environment/cycling/cycling\\_en.pdf](http://europa.eu.int/comm/environment/cycling/cycling_en.pdf)



## Concluding remarks

Although knowledge about effective preventive measures exists, progress in road safety is hampered by ineffective implementation processes. Numerous models and approaches have been developed that define the basic requirements for delivering road safety. These include:

- ◆ Exercising leadership and political commitment;
- ◆ Ensuring the accountability of stakeholders and coordinating their actions;
- ◆ Establishing a relationship between goals, plans, organisation and financing;
- ◆ Building capacities for road safety;
- ◆ Using and disseminating best practices;
- ◆ Including stakeholders and target groups in developing and implementing road safety measures;
- ◆ Monitoring and evaluating systematically the implementation of road safety measures.

International bodies such as the European Union, the World Health Organisation, the United Nations Economic Commission for Europe, the European Conference of Ministers of Transport, the OECD, the World Bank can play a major role in advocacy, capacity building, disseminating information, mainstreaming road safety into their own policies as well as taking part in intersectional co-operations and promoting a support framework for them if needed. In addition to supporting the implementation of measures proven to be effective and the development and enforcement of regulations, international bodies should also concentrate on facilitating and encouraging the broader use of tools and processes for delivering a safer transport system, including removing any legal and political barriers.

Non governmental organisations should be active in placing road safety higher on the political agenda.

The health sector should advocate for safety, provide injury surveillance and deliver post-accident support.

The industry should behave as a responsible user, develop safer cars for occupants and other road users and purchase transport safety services for its employees.

Traffic safety is a shared responsibility. Instead of pointing at the responsibility of others, let us focus on what each of us can contribute in our own constituency.



# Annex 1: Overview of best (B), good (G) and promising (P) measures

## Best practice measures:

### Policy framework for efficient road safety

- ◆ Swedish Vision Zero
- ◆ Dutch Sustainable Safety
- ◆ Common targets for road safety in Europe
- ◆ Leadership and political will – The- French success story
- ◆ European Commission Impact Assessment Guidelines

### Vehicle safety

- ◆ EuroNCAP: an incentive for developing safer cars
- ◆ Advanced seat belt reminders in front seats
- ◆ Alcohol Interlocks
- ◆ Daytime Running Light

## Good practice measures

### Road infrastructure safety

- ◆ European Road Assessment Programme (EuroRAP)
- ◆ Safety on secondary roads

### Enforcement

- ◆ TISPOL, the European Traffic Police Network

### Campaigns

- ◆ Global Road Safety Week/Road Safety Day
- ◆ European Road Safety Charter

### Post accident care

- ◆ Emergency lanes in congestion

### Data collection and analysis

- ◆ US Fatality Analysis Reporting System (FARS)
- ◆ Crash Analysis System (CAS) in New Zealand
- ◆ Safety Performance Indicators (SPI)
- ◆ SARTRE (“Social Attitudes to Road Traffic Risks in Europe”) studies

## Promising practice measures

### Policy framework for efficient road safety

- ◆ Safe Community Programmes

### Vehicle safety

- ◆ Intelligent Speed Assistance (ISA)
- ◆ Fitting of vehicles with Electronic Stability Control (ESC)

### Road infrastructure safety

- ◆ EU-wide application of infrastructure safety management

### Enforcement

- ◆ EU-wide introduction of best enforcement methods
- ◆ EU-wide system for facilitating cross-border enforcement

### Tackling young drivers higher risks

- ◆ Guidelines for driver training

### Post accident care

- ◆ Emergency Call system (eCall)



### **Data collection and analysis**

- ◆ European Road Safety Observatory (ERSO)

## **Practices from other policy areas**

### **From environmental protection to road safety**

- ◆ A Cardiff process for road safety?

### **Advocating health**

- ◆ Using health professionals as advocate for road safety
- ◆ Promoting healthier transport modes



## Annex 2: Participating organisations

The following is a short presentation of the organisations which have participated in the inquiry (in alphabetical order). Information presented here is taken from particular websites.

**ACEA:** European Automobile Manufacturer Association ([www.acea.be](http://www.acea.be)) represents the 13 major European car, truck and bus manufacturers in the EU. ACEA is a key interlocutor to the EU Institutions.

**CIECA:** International Commission for Driver Testing ([www.cieca.be](http://www.cieca.be)). CIECA members include driver testing authorities from 32 countries worldwide. CIECA aims to play a leading role in enhancing road safety and to encourage the development of high, common standards for driving licences throughout its member countries. Since 1993, CIECA has become a leading project partner of the European Commission's Energy and Transport Directorate, issuing "best practice" recommendations for driving qualifications for the EU and beyond and participating in numerous research studies and projects.

**EC DG TREN:** European Commission Directorate-General Energy and Transport ([http://ec.europa.eu/dgs/energy\\_transport](http://ec.europa.eu/dgs/energy_transport)) aims at promoting sustainable mobility combining Europe's competitiveness with the welfare of its citizens, ensuring greater safety and security and enhanced rights. It is an essential component of the Lisbon strategy and contributes to the European Union's social and territorial cohesion. The White Paper "European transport policy for 2010: Time to decide" reflects a marked change in policy aimed at speeding up the reforms needed, preparing for enlargement and slanting European policies towards citizens.

**ERTICO:** Intelligent Transport Systems and Services in Europe ([www.ertico.com](http://www.ertico.com)) is a Brussels-based public private partnership working to facilitate the safe, secure, clean, efficient and comfortable mobility of people and goods in Europe through the widespread deployment of Intelligent Transport Systems and Services. ERTICO provides a platform for its partners to define their common research and development needs at the EU level in order to bring intelligent transport systems to the market. It also manages publicly funded research and development projects on behalf of the partners, formulates the necessary European framework conditions for the deployment of intelligent transport systems, and enhances the awareness of intelligent transport systems benefits amongst decision makers and opinion leaders. It was founded in 1991, and represents the interests of industry, public authorities, infrastructure operators, users and some others. ,

**ETF:** European Transport Workers Federation ([www.itfglobal.org/etf/index.cfm](http://www.itfglobal.org/etf/index.cfm)) was created in 1999. Its principal activity is to defend the interests of transport workers throughout Europe. It formulates and coordinates trade union transport and social policy, organises concerted industrial activities, provides education and training and conducts innovative research on a variety of subjects from worker's health and safety to employment impact studies. ETF is the recognised social partner in the European social dialogue and represents the interests of transport workers across Europe vis-à-vis the European Commission and the Council of Ministers.

**ETSC:** the European Transport Safety Council ([www.etsc.be](http://www.etsc.be)) is a Brussels-based independent non-profit making organisation dedicated to the reduction of the number and severity of transport crash injuries in Europe. It was founded in 1993. ETSC provides an impartial source of expert advice on transport safety matters to the European Commission, the European Parliament, and Member States. ETSC is independent through funding from a variety of sources. The organisation seeks to identify and promote effective measures on the basis of international scientific research and best practice in areas which offer the greatest potential for a reduction in transport crashes and causalities.



**EuroNCAP:** European New Car Assessment Programme. ([www.euroncap.com](http://www.euroncap.com)). EuroNCAP provides motoring consumers with a realistic and independent assessment of the safety performance of some of the most popular cars sold in Europe. It was established in 1997 and now it is backed by five European governments, the European Commission and motoring and consumer organisations in every EU country. EuroNCAP has rapidly become a catalyst for encouraging significant safety improvements to new car design.

**FEVR:** European Federation of Road Traffic Victims ([www.fevr.org](http://www.fevr.org)). The first aim of the FEVR is to help victims and families of victims by providing free psychological, juridical and social support. The second objective is to contribute to improve road safety by sensitising public opinion to the road dangers in order to induce the institutions and the authorities to adopt more stringent road safety measures. The FEVR is promoting the creation of centres of assistance to the victims, where they could find free moral, juridical and social assistance. The Federation has also drawn a series of legislative proposals to improve the recovery and health situation of road crash victims.

**RED CROSS Europe:** The Red Cross/EU Office ([www.redcross-eu.net](http://www.redcross-eu.net)) represents and promotes the interests of National Red Cross Societies of the European Union Member States, and ensures the representation of the International Federation of Red Cross and Red Crescent Societies. The core functions are:

(a) to develop partnerships amongst nations in the European Union in activities of common interest and with particular relevance to proposals, policies and priorities of the EU; (b) to advocate, represent and seek recognition by the EU institutions of the specific mandate of the Red Cross, its principles, policies and activities and in particular the auxiliary role of EU National societies in the EU Member States; (c) to develop and present Red Cross common positions on relevant subjects discussed within the EU institutions; (d) to remain informed on EU developments, in order to anticipate on challenges and opportunities, and (e) to assist members to access financial resources of the EU in support of activities both within and outside the EU.

**SEI:** Stockholm Environment Institute ([www.sei.se](http://www.sei.se)) is an independent, international research institute specializing in sustainable development and environment issues. It works at local, national, regional and global policy levels. SEI's mission is to support decision-making and induce change towards sustainable development around the world by providing integrative knowledge that bridges science and policy in the field of environment and development. The Institute was established in 1989. It has research centres in Sweden, Estonia, the United Kingdom, and the United States.

**T&E:** European Federation for Transport and Environment ([www.transportenvironment.org](http://www.transportenvironment.org)) is Europe's principal environmental organisation campaigning specifically on transport. Together with 44 member organisations in 20 European countries, T&E works to promote an environmentally-sound approach to transport and mobility. T&E was founded in 1989.

**TISPOL:** the European Traffic Police Network ([www.tispol.org](http://www.tispol.org)) aims at promoting and improving police enforcement of traffic laws on European roads by extending cooperation and exchange of good practice. Pan-European enforcement operations and campaigns are organised jointly several times a year.

**UN ECE:** United Nations Economic Commission for Europe (<http://www.unece.org/>). Established in 1947, the commission strives to foster sustainable economic growth among its 56 member countries. The Working Party on Road Traffic Safety (WP.1), a subsidiary body of the Inland Transport Committee of the UN ECE, is responsible for update of the existing legal instruments administered by ECE, such as the Vienna Conventions on Road Signs and Signals and on Road Traffic of 1968. The WP.1 also develops new legal instruments and recommendations as the needs arise and considers





actions at national and international levels on such specific issues as: pedestrians' safety, road works signing, international driving permits, national road safety requirements, exchange of experiences, and assistance to countries in transition.

The World Forum for Harmonization of Vehicle Regulations (WP.29) addresses global issues regarding vehicle safety, environmental pollution, energy and vehicle security.

**WHO:** the World Health Organisation ([www.who.int.org](http://www.who.int.org)) is the United Nations specialised agency for health. It was established in 1948. Road traffic injuries are one important health topic of WHO.