SWOV
INSTITUTE FOR ROAD SAFETY RESEARCH

RESEARCH ACTIVITIES

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Editorial

In this issue we report on the situation regarding road casualties in the Netherlands and on the new approach that SWOV advocates to give road safety a boost. Furthermore, the new European Union project SafetyNet is introduced, and the results of two European studies on Daytime Running Lights are presented. A brief impression is given of the Road Safety Symposium in Tokyo as well as the 2nd ROSEBUD conference in Amsterdam. We also look back upon the UN General Assembly plenary session focused on road safety which was held on 14 April.

Traffic in the Netherlands, Great Britain, and Sweden is the safest in the world

The road safety policies in the Netherlands, Great Britain, and Sweden have resulted in them having the smallest numbers of road deaths per 100,000 inhabitants in the world. However, as appears from the SUNflower project, further improvements are still possible, whereby the three countries can learn from each other. The SUNflower report was presented to the Netherlands Minister of Transport, Mrs. Karla Peijs, in March 2004.

SWOV, TRL (Great Britain), and VTI (Sweden) compared the road safety policies of the three countries. This project was given the name SUNflower, SUN stands for Sweden, United Kingdom, and the Netherlands. The goal of the study was to discover what had made these three countries so successful.

Success factors

The study showed that during the past 20 years, all three countries had taken measures aimed at drink-driving, speeding offences, seat belt use, and safer roads. The three countries also use so-called quantitive targets: a percentage by which the number of traffic casualties had to

"Road safety is no accident. We have the knowledge to act now. It is a question of political will."

Dr. Lee Jong wook
Director-General, World Health Organization

QUOTE

decrease within a given period of time.
This systematic policy has resulted in the annual number of road deaths per 100,000 inhabitants in the SUNflower countries being the lowest in the world: 5.9 in Great Britain, 6.7 in Sweden, and 6.8 in the Netherlands. The EU average is 11 (road deaths per 100 000 inhabitants), in the United States 15.2, and in Australia 8.2.

We can do better...

The report makes recommendations to improve the road safety in the SUNflower countries even more. In the Netherlands, compared to the other two countries, the following issues stand out negatively:

- the high (crash) rate for mopedists,
- the mild punishment for drink-driving,
- seatbelt use, also on the rear seats (in the Netherlands nearly 90% of drivers wear a seatbelt, compared with 95% in Great Britain and Sweden; the rear seat use in the Netherlands is 60 %),
- the high (crash) rates on roads.

The research institutes also recommend that the European Commission takes measures to improve road safety within the EU. The EU also has a quantitive target: by 2010, 50% less road deaths than in 2000. According to the SUN institutes, this reduction can only be achieved with additional measures. The recommendations to the EU are as follows:

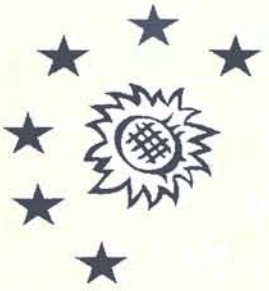
- there must be EU guidelines for sharpening the national road safety policies in the individual EU countries;
- there must be a EU subsidy fund to pay for large-scale measures. Examples of measures are: making the infrastructure safer and employing the police for surveillance of speeds, alcohol use, and seatbelt wearing,
- there must be EU guidelines for improving the safety of vehicles, for their occupants as well as their crash opponents,
- as was the case in the SUNflower project, there must be a detailed comparative follow-up study of the road safety policies of EU countries in various regions.

The SUNflower project was financed with support from the EU and from the Ministries of Transport of the three countries.

The complete SUNflower report can be downloaded from the SWOV website www.swov.nl.

Follow-up

The European Commission found that the results were reason to agree to a follow-up project. The method and results of the first study will be used to analyse the road safety problems in a number of other countries. Its purpose is to determine the most effective measures. This follow-up project

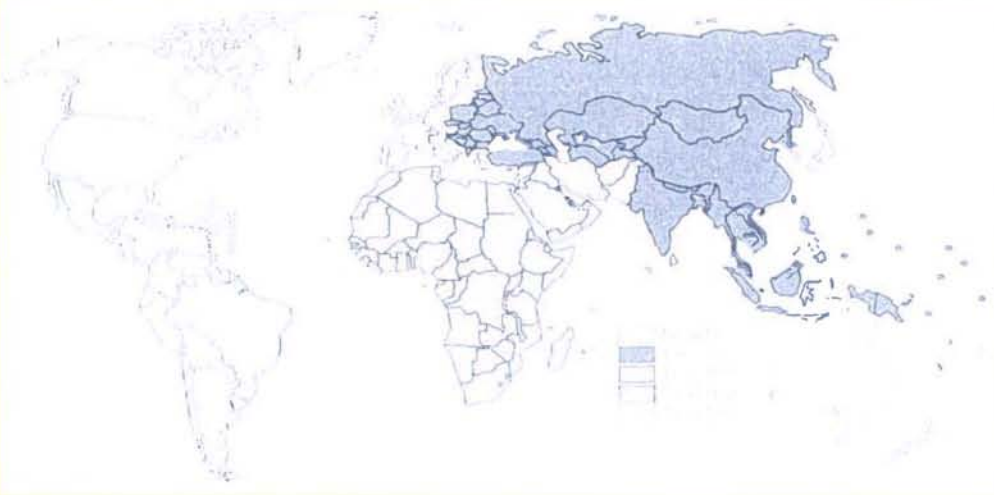


has already started with SUNflower+6 as its name. In addition to Sweden, the United Kingdom, and the Netherlands, the following countries are also participating: Portugal, Hungary, Greece, Slovenia, Spain (Catalonia), and the Czech Republic. The first results will be presented in late 2005. This study will, among other matters, pay attention to pedestrians, motorized two-wheelers, speeds, novice drivers, and the conducting of effective policy in general. ◀

14th April: UN General Assembly plenary session focuses on road safety for the first time in history

Countries discuss measures to reduce 1.2 million death toll on the world's roads

On 14th April 2004 for the first time, the United Nations General Assembly gathered for a plenary session devoted to road safety. The session was held in Geneva and came just one week after World Health Day when the World Bank and the World Health Organization (WHO) launched the *World Report on Road Traffic Injury Prevention*. During the General Assembly session, governments and UN agencies discussed how to implement the report's recommendations, aimed at stemming the growing toll of injury and death on the world's roads.



Source: Peden M et al (eds). World Report on Road Traffic Injury Prevention. Geneva, WHO, 2004.

Road traffic injuries kill 1.2 million people every year and injure or disable as many as 50 million more. Road crashes are the second leading cause of death globally among young people aged 5 to 29 and the third leading cause of death among people aged 30 to 44 years. They cost low and middle income countries more than the total development aid they receive.

Road traffic deaths and injuries can be prevented. "The key to successful prevention lies in the commitment of all relevant sectors, public and private health, transport, education, finance, police, legislators, manufacturers, foundations, and the media – to make road safety happen," said Kofi Annan, United Nations Secretary-General.

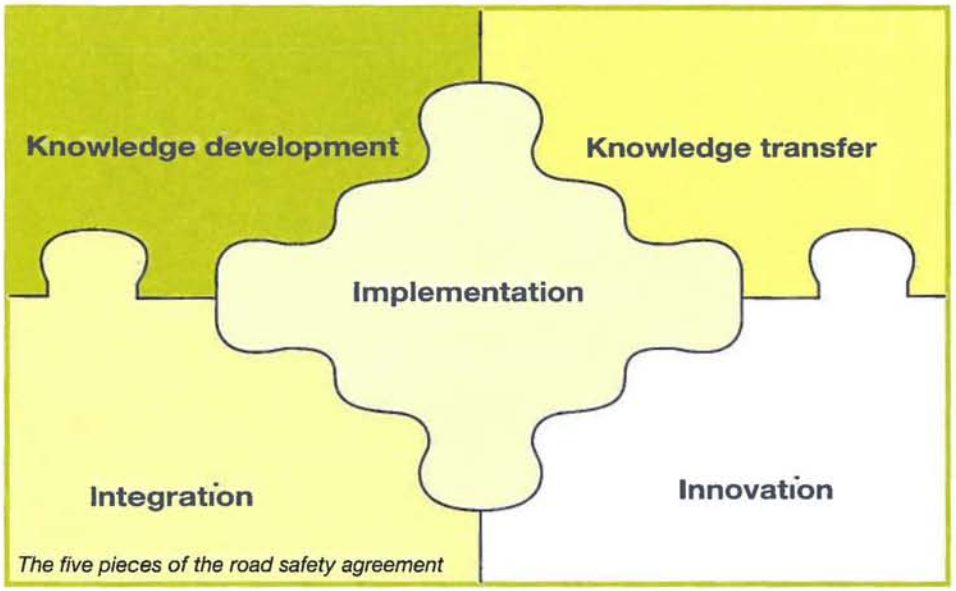
On World Health Day, 7 April 2004, tens of thousands of people participated in hundreds of events around the world. This meeting of the General Assembly strongly built on the global momentum triggered by World Health Day, when the call for action on road safety was loud and clear. "We must now use every day to act on road safety, and implement effective sustainable action to prevent injury and death on the world's roads," said Dr. Lee Jong-wook, Director-General of WHO.

This historic plenary session followed last year's two UN resolutions on road safety, and the UN Secretary-General's report on the global road

safety crisis that calls for an urgent international response to address this major public health issue.

Celebrations on 7th April 2004 commemorating World Health Day included a wide range of events, from the global celebration in Paris attended by French President Jacques Chirac, Dr. Lee Jong-wook, and several ministers and other road safety experts, to music, drama and poetry contests on the theme of *Safe roads, safe lives* in Uganda. Celebrations also included *Anywhere, anytime* speed enforcement campaigns in New Zealand; the *Safe Kids* programme that awards those who have made special efforts to promote road safety in the United Arab Emirates and the launch of a new seat belt initiative in China.

The report 'World report on road traffic injury prevention, Peden M et al' can be consulted on and downloaded from the international WHO-site: www.who.int/violence_injury_prevention/unintentional_injuries/World_Report_on_Road_Traffic_Injury_Prevention/en.



The five pieces of the road safety agreement

End of the decrease in Dutch road crash casualties calls for a new approach

In 2003, the number of road crash casualties in the Netherlands again rose well above 1000. The decrease that had been going on for a long time has not continued during recent years. "The stagnation in the decrease calls for a new approach", said SWOV managing director Fred Wegman at the National Road Safety Congress on 21st April 2004 in Rotterdam. He pleads for the formation of a National Committee that, within a year, will prepare an agreement with clear statements about the future road safety policy, based on the successful Sustainably Safe vision.

In order to correctly interpret the road safety development, it is necessary to study the data over a longer period of time. It then becomes striking that, during the last few years, the number of road deaths in the Netherlands has decreased slower than during the 1990s. That decrease was partly the result of measures such as establishing 30 km/h zones, 60 km/h zones, constructing roundabouts, more enforcement and moped's on the carriageway. The basis of these measures was the Sustainably Safe vision that was introduced as a central approach in the early 1990s.

New measures take too long coming

A possible cause of the number of road deaths remaining stationary is the lack of new measures during the past few years. The new Minister of Transport, Mrs. Karla Peijs, however, has shown fresh attention for the road safety problem by initiating the *Driving Licence Revolution*. According to this new initiative, the minimum age of mopedists and light mopedists will be raised and the drivers' education will be improved. Surveys (a.o. SARTRE 3) show that there are also other conceivable measures that can rely on public support: more police surveillance, lower alcohol limits for novice drivers, introduction of a black box in cars, improving driving lessons, improving roads, and more information campaigns.

"Road crash casualties can be prevented and we also know how to"

At the National Road Safety Congress 2004 Fred Wegman pleaded for the formation of a National Sustainably Safe Committee. The coming year this committee will have to prepare a road safety agreement in which five subjects will be further examined:

- clear agreements between all those involved, about the implementation of measures to achieve the national target,
- more integration between the road safety policy and mobility, accessibility, quality of life, environment, and health care,
- more attention and stimulus for innovation and creativity,
- more attention for, and cooperation in, knowledge development,
- more profit from each others' experiences and knowledge by better knowledge transfer.

These activities must result in a Second Generation Sustainably Safe Measures. In 2005, all parties involved in road safety (governments, police, social organizations, private sector) must sign the agreement.

National Road Safety Congress 2004: Working for a maximum effect

On 21st April of this year, the biannual National Road Safety Congress was held, and was again jointly organized by SWOV and the Royal Dutch Tourist Association ANWB. The Theme of the congress was *Working for a maximum effect*. In this, the emphasis was on the application of road safety measures in practice. The National Road Safety Congress is targeted at traffic and transport professionals working at municipalities, provinces, and the national government, but is also relevant for representatives of the advisory world, the police, and the business sector.

At the National Road Safety Congress, the Netherlands Minister of Transport, Mrs. Karla Peijs, followed an old tradition by announcing the crash data of the past calendar year (2003). (see also further in this newsletter).

SWOV sheds light on implementation of daytime running lights in EU

The implementation of legislation concerning daytime running lights (DRL) varies greatly amongst countries in the European Union (EU). In preparation of the setting up of European guidelines for the implementation of DRL, the European Commission has funded a project designed to assess the effects of DRL and possible strategies for implementing the use of DRL in the European Union.

SWOV was an active participant in this project, focusing on two topics: state of the art with respect to implementation of DRL and scenarios for the implementation of DRL in the EU.

State of the art

The first study conducted was aimed at providing an inventory of the currently legislated requirements for the use of DRL in the EU and elsewhere, and how that legislation has been implemented in these countries. Its second objective was to assess what has been learned under the existing implementations. This can then be taken into account in the later development of realistic implementation strategies.

To obtain accurate current information, a questionnaire was drafted and sent to the fifteen member states of the EU as well as to the future member states of the EU, and the remaining countries where DRL has been implemented. Among the DRL countries involved in the survey were the Scandinavian countries (Denmark, Finland, Norway, and Sweden), Canada, Italy, and Hungary, while non-DRL participants included France, Germany, USA, Spain, the Netherlands, and four other countries. The resulting inventory shows that DRL has been implemented both as a behavioural measure and as a technical measure. When implemented as a technical measure, DRL are switched on automatically when the engine is started. So far, the majority of DRL countries chose to impose DRL as a behavioural measure. However, most cars in the Scandinavian countries are sold with an automatic DRL switch as well. Furthermore, the countries which currently have DRL legislation can be distinguished in whether they impose DRL during the entire year or in winter time only, and on all roads or on rural roads only.

What can be learned from the existing implementations is that, irrespective of the type of implementation used, most of the opposition against DRL greatly subsided in countries after DRL legislation was implemented, and that most DRL countries used a gradual approach to the implementation of DRL.

When setting up European guidelines it is important to take the arguments against DRL into account. These include reduced conspicuity of vulnerable road users, increased fuel usage, environmental concerns, more frequently burned-out bulbs, and other arguments. However, in a meta-analysis of the existing studies on the effect of DRL on traffic safety, conducted by TOI, positive effects were found for motorized vehicles, with no negative effects for vulnerable road users. Furtermore, in a laboratory experiment performed by TNO, no evidence was found for a reduced conspicuity of vulnerable road users. Moreover, it was found that most of the other adverse effects can be reduced or even completely solved by the implementation of DRL as a technical measure. Therefore, it is recommended to make the installation of automatic dedicated DRL on new cars an essential part of the DRL implementation scenarios.

Implementation scenarios

In the second study conducted by SWOV, in cooperation with TOI, TNO and VTT, five possible implementation scenarios were identified, ranging from a purely behavioural to a purely technical measure, and combinations of these two.

A cost-benefit analysis of these five policy options performed by TOI showed that the benefits outnumber the costs in all five options. It was concluded that the following option is likely to yield the largest acceptance in non-DRL countries of the EU: the mandatory use of dipped headlights for the current car stock, together with the installation of automatic dedicated DRL on new cars, both to be implemented at the same time, and preceded by a period of recommended DRL usage combined with a large-scale publicity campaign.

However, should the technical part take too long, the report recommends to start imposing the use of dipped headlights as DRL as soon as possible to avoid an unnecessary delay in the expected road safety benefits of DRL. ◀

More information about the two studies on DRL can be found on the SWOV website: www.swov.nl.

Road crash data 2003 in the Netherlands: slight rise in road fatalities and fall in in-patients

In 2003 the number of road deaths increased by 2%, while the number of police-registered in-patients decreased by 4% compared to 2002. Netherlands Minister of Transport, Mrs. Karla Peijs, announced this at the National Road Safety Congress on 21st April 2004. The absolute number of deaths rose from 1,066 in 2002 to 1,088 in 2003, whereas the number of registered in-patients was 11,018 in 2002 compared to 10,596 in 2003. The annual decrease in road fatalities which the country has shown since 1999 was interrupted last year. It is too soon to speak of a break in trend, as an increase in the number of deaths has occured before, after which the decreasing trend resumed the following year. SWOV is currently examining the causes of the increase in road casualties.

During the last few years, a great deal of attention has been paid to improving road safety in the Netherlands. The measures are aimed at, among other things: speed reduction at road works, promoting seat belt use, prohibition of radar detectors, obligation of blind spot mirrors for lorries, and lowering the use of alcohol. For the coming years (i.e. up to 2010), nearly €400 million has been made available for regional road safety policy. At the national level, another €23 million is available. In addition, the Ministry is working on the introduction of a number of road safety measures. The action plan *Moped Safety*, which will soon be sent to parliament, must ensure a reduction of at least 28 road deaths per year for young mopedists.
The Minister also wants to lower the alcohol limit for novice drivers, from 0.5 g/l to 0.2 g/l. Before the summer, a plan will be launched to enable the introduction of a demerit points driving licence for motorists.
Moreover, the Ministry of Transport is working together with the vehicle trade to introduce a package of measures that is aimed at making delivery van traffic safer. To support these and other activities the ministry is continuing its road safety campaigns.

Road Safety Symposium Tokyo: Road safety by the SUN model in Japan?

At the Road Safety Symposium in Japan held in November 2003, the road safety policies of the three SUN countries (Sweden, the United Kingdom, and the Netherlands) were presented. The reason for this was Japan's intention to reduce the number of traffic casualties by half within 10 years.

Strong ambitions

With the announcement of its road safety target, Japan is following the model of the European Union. If Japan succeeds, this would be a tremendous achievement, because the European countries have taken 30 years to halve their numbers. In order to obtain ideas for a new, yet to be determined, road safety policy, five European road safety experts were invited from the SUN countries. The Japanese were very interested in the European policies followed, and especially those of the three SUN countries. Their question was which of the policy parts could also be applied in Japan.

SUN countries: knowledge shared

The contributions from the UK were from Professor Richard Allsop of University College London (UCL) and David Lynam (TRL). Allsop illustrated the importance of improving road safety by stating that the risk per hour in traffic is five times the average accident risk. Core concepts that Allsop used are: improving the mindset in society and the cooperation of the various parties involved. David Lynam's presentation focused on education, control, and surveillance. The Swedish contributions were from Tingvall (SNRA) and Pettersson (VTI) and presented the Zero-Vision in Sweden, human errors in traffic and the distribution of responsibilities between road users, road authorities and vehicle companies.

Sustainable Safety: the Dutch approach

The Dutch contribution was made by SWOV managing director Fred Wegman and was entitled: *Fewer crashes and fewer casualties by safer roads.* Wegman presented an overview of infrastructural measures that could be taken using the Sustainable Safety vision as a starting point. This vision strives to reduce the chance of crashes. And if a crash does occur, severe injury must be excluded as much as possible.
The characteristics of a Sustainably Safe infrastructure were presented: a recognizable layout in accordance with the function of the road (through, distributor or access). Also the road design must make clear what behaviour is expected. Using experience in the Netherlands, Wegman sketched a scenario for the implementation of a road safety policy such as Sustainable Safety. Of the utmost importance in this is that all major stakeholders are involved in the development and implementation of that policy.

During the symposium, Sustainably Safe appeared to be seen as a strong vision because it combines an intrinsic vision on how crashes occur with the management of risks and an organized approach of these risks.

Young drivers improving their driving behaviour

Novice motorists of 18-24 years old are a vulnerable group of road users. Compared with older and more experienced drivers, they have a nearly three times greater chance of being injured or killed in a road crash.

In order to reduce the number of young road casualties, SWOV has included *Novice drivers and the driving course* in its 2003-2006 Programme. Central in this project are understanding, influencing, and measuring 'calibration'. Calibration means the extent to which drivers estimate their skills and can judge the complexity of the driving task. These factors must be balanced in order to have safe traffic behaviour. It is exactly with the young, that this is often not the case: they underestimate traffic dangers and overestimate their own abilities.

Study parts

The project *Novice drivers and the driving course* consists of various parts. In the first part, the possibilities of intervention to influence (mis) calibration are examined. The second part examines how calibration develops during the learning process. The third study is aimed at a further scientific foundation of the calibration phenomenon and the possibilities of measuring this in a valid way. The insights won will be transformed to course methods and diagnostic measuring instruments for the driving course. The first part is also part of the EU study NovEV in which 6 countries study the training of novice car drivers. NovEV will be completed by December 2004.

Design

In the meantime, the first part has started and attempts to change the beginners' attitude by means of practice, experience exchange, and self-confrontation. A group of 300 young motorists who have had their driving licence for six months is requested to complete a questionnaire about their driving behaviour. In addition, they have to keep a diary for three weeks with specific experiences that they have had in traffic. Following this, half of them are offered a day of courses. On that day they receive training on a practice ground where they are confronted with all sorts of difficult and usually dangerous traffic situations and they are taught how to avoid such situations. Other parts of the day are filled with a driving skills analysis by an expert, viewing an information video, and a discussion with other young motorists. In order to study what influence such a day has on driving behaviour, the participants are then asked to again complete the questionnaire and keep the diary. Finally, a month after this day, they do another driving test with an instructor. The results will show if the driving behaviour of these drivers has been changed, and whether following the course has had an added value.

Website

The training programme for young motorists in the first study part is an initiative of the Provincial Road Safety Board in (the province of) Gelderland. The project is supported by the Ministry of Transport and, in the implementation of the training programme, various organizations that are active in road safety are involved. The project makes extensive use of the possibilities of the Internet. The questionnaires are conducted via a special website, which also provides course participants with practical information. Moreover, the website offers the possibility of, via a forum, exchanging experiences. In the sequence of this project, this website will also be used for a second study part entitled *Development of calibration and the influencing/related factors*.

For more information: http://youngdrivers.swov.nl (in Dutch)

Divera Twisk, Senior Researcher at SWOV, is the new chairperson of the ECMT/OECD working group on Young Drivers.

Obstacles and solutions
ROSEBUD congress discusses using efficiency analyses

Why are cost-benefit analyses used so little when choosing road safety measures, and how can this be improved? These were the questions during the 2nd ROSEBUD congress on 6th February.

Measures to improve road safety can sometimes be expensive and inefficient. That is why it makes sense to determine how decision makers can weigh as "rationally" as possible the costs and benefits of the alternatives available to them. Proven economic models and methods can result in well-founded choices when judging these alternatives.

ROSEBUD

The EU ROSEBUD (**Ro**ad **S**afety and **E**nvironmental **B**enefit-Cost and Cost-Effectiveness Analysis for **U**se in **D**ecision-making) project began in 2002 with as goal to judge the efficiency of road safety measures by using Cost-Benefit Analyses (CBA) and Cost-Effectiveness Analyses (CEA) and to stimulate their use. 14 organizations from 13 EU countries took part in ROSEBUD. The project's interim findings were presented internationally and discussed during the 2nd ROSEBUD congress in the RAI in Amsterdam.

(Continued on page 8)

SafetyNet: harmonizing data on crashes and casualties on EU level

In May 2004 the SafetyNet project was launched, aimed at collecting harmonized data on crashes and casualties in the EU, including the 10 new member countries. The data will be made available through the Internet, allowing comparison on an international level.

In 2001 over 40,000 people were killed on the roads of the 15 member states of the EU. Additionally, around 3.3. million people were injured. With the accession of 10 new countries in the EU, the estimated number of road fatalities will increase by 25% to more than 50,000 each year. In 2001, the European Commission decided to aim at reducing fatalities by 50% in 2010 and identified several areas where it could make direct contributions to reach this target. The target was reconfirmed in 2003 in the Road Safety Action Programme (RSAP).

Deficit of harmonized data

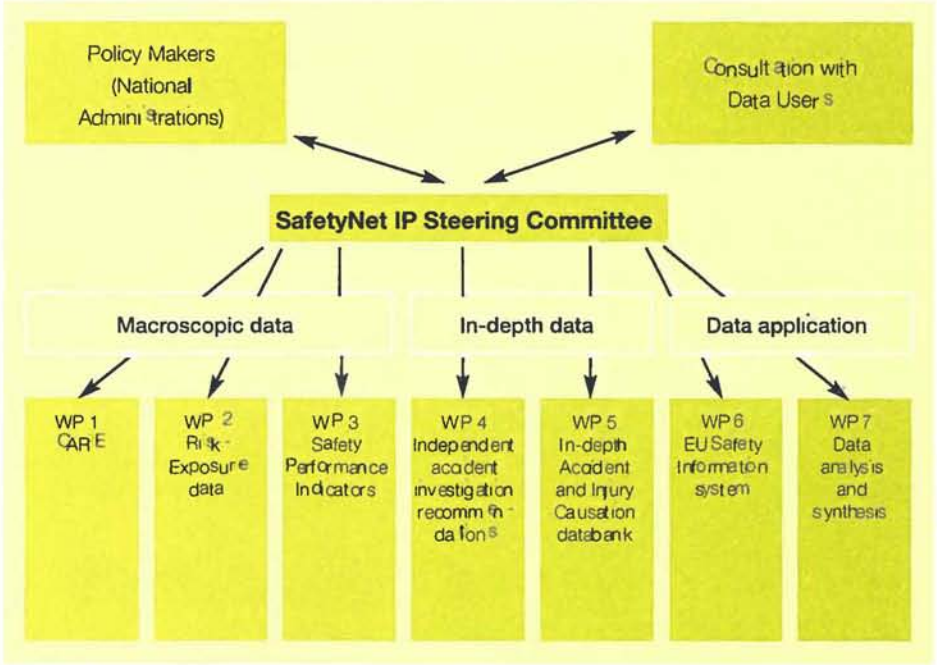
The RSAP identified that there was a structural deficit at EU level of harmonized data describing the totals and characteristics of crashes and casualties. It recognized that its road and vehicle safety could not be better directed without the ability to compare crashes between countries, prioritize countermeasures, and measure effectiveness of countermeasures.
The CARE database, which assembles the national accident data from the member states, was the most developed database available at EU level, providing useful core data. Although some additional data were available at the EU through other European projects, significant data gaps existed. The lack of data prevented inter-country comparisons, particularly for the ten new member states, and also at in-depth level as limited detail was available on the causes of accidents.

European Road Safety Observatory

In an effort to fill the data gaps, the European Commission has agreed to initiate the Road Safety Observatory by funding the SafetyNet project. The project, which started on 1st May but will be formally kicked-off in June, will last over four years and will eventually cover all 25 EU member states as well as other countries. It plans to build the basic structure and to bring together harmonized data at several levels, which will be made available through the Internet. The project activity is divided into three main areas, in total consisting of seven Working Packages (WPs), as shown below. The main areas are: Macroscopic data, In-depth data and Data application.

Project Implementation

SWOV is an active participant in the SafetyNet project, leading WP3 and WP6 while also contributing to other WPs.
Over the next 18 months, the project aims to lay down the framework, collect and organize data, and produce the first results. SafetyNet will not operate in isolation but will seek to develop links with other EU and national activities. Moreover, it will establish consultative links with potential data user groups and the High Level Group on Road Safety.



Colophon

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Obstacles and solutions

According to Knut Veisten of TØI (Norway), interviews with policy makers and deciders have shown that the most important obstacles to using efficiency analyses are of an institutional nature. Examples of this are lack of interest, lack of knowledge, or the unwillingness to take unpopular decisions. Obstacles such as lack of financial means or unreliability of methods also play an important role.

In his paper, Paul Wesemann of SWOV provided a number of possible solutions:

- achieve unanimity and draw up agreements at the beginning of the efficiency analysis,
- use a standard method,
- exchange data,
- control the quality,
- make financial means available and work with procedures,
- create expertise by training and information.

Panel discussion

All the participants in the discussion: Kate McMahon of the Department for Transport (United Kingdom), Tineke Netelenbos, ex Minister of Transport of the Netherlands, and Rudolf Krupp of BASt (Germany) endorse the importance of efficiency analyses in decision-making. In Great Britain, Germany, and the Netherlands, CBAs are used. In Germany, a CBA is even obligatory in decision-making about investments. According to McMahon, the pressure of public opinion and the media has lead to CBA results of unpopular measures often not being used. Netelenbos' opinion is that the more accurate the cost-benefit analyses are, the more useful they are when used. Finally, Krupp thinks that CBAs must provide transparent arguments for the politicians, but that they are ultimately responsible for the decision-making.

Recommendations

In his closing speech, Fred Wegman of SWOV concluded that efficient road safety measures deliver enormous savings; an efficiency analysis is, therefore, also very important for making sound decisions. It is striking that the limited budgets work in both the advantage as well as disadvantage of efficiency analyses. With limited resources, efficiency is a first prerequisite; but on the other hand, there must be money available for conducting analyses. There is broad international support for the use of cost-benefit and cost-effective analyses at all levels of road safety decision-making. Based on this, Wegman makes the following recommendations:

- the development of a communal method for efficiency analyses,
- use of cost-benefit, cost-effectiveness analyses, and evaluations to optimize road safety programmes,
- establish a 'knowledge database', a clearing house function, and a central distribution point of 'evidence-based' knowledge in the EU,
- a legal framework to develop efficiency analyses must be considered.

Follow-up

ROSEBUD's remaining term will be used to test the analysis instruments on selected road safety measures, and to make recommendations for future use. ROSEBUD will be concluded in 2006.

More information about ROSEBUD can be found on the website http://partnet.vtt.fi/rosebud/

A Cost-Benefit Analysis (CBA) produces a systematic reproduction of the financially expressed effects (benefits) and costs of alternative projects.

A Cost-Effectiveness Analysis (CEA) examines which alternative, given a certain size of the intended effects, can be realised as efficiently possible (cost minimization), or studies how, with the given means, to realise as many intended effects possible (effect maximization).

Publications

Most SWOV reports are written in Dutch but they all include an English summary. Below is a selection of reports that have recently been published by SWOV. Records of all SWOV reports that were published from 1980 onward can be found on our website (www.swov.nl). Reports that were published in or after the year 2000 can be downloaded free of charge.

Road safety decision-making in Provincial and Regional Traffic and Transport Plans;
Report within the 'Decision-making in the Dutch National Traffic and Transport Plan'
Drs. C.A. Bax. R-2003-26. 68 + 26 blz. € 12.50. (In Dutch)
In Provincial and Regional Transport and Traffic Plans (PTTPs and RTTPs), the road safety policy of provinces and Framework Act areas is established. This study examines which factors ensure a decisive road safety policy. With decisive policy is meant that it is effective and efficient as well as ambitious.

State of the art with respect to implementation of daytime running lights;
Study in the framework of a European Commission project, Work Package 1
Jacques Commandeur. R-2003-28. 34 + 35 pp. € 12.50 (In English)
The European Commission funded a project, designed to assess the effects of Daytime Running Lights (DRL) and possible strategies for implementing the mandatory use of DRL in the European Union. This study is an inventory of the currently legislated requirements for the use of DRL in the European Union and elsewhere, and how that legislation has been implemented in these countries.

Scenarios for the implementation of daytime running lights in the European Union;
Study in the framework of a European Commission project, Work Package 4
Jacques Commandeur, René Matthijssen, Rune Elvik (TØI), Wiel Janssen (TNO) & Veli-Pekka Kallberg (VTT). R-2003-29. 25 pp. € 8.75 (In English)
The European Commission funded a project, designed to assess the effects of Daytime Running Lights (DRL) and possible strategies for implementing the mandatory use of DRL in the European Union. This study gives implementation scenarios for DRL in the EU, as well as further specific recommendations for implementation that would maximize the positive effects, while minimizing the negative effects.

The kerb weight of motor vehicles;
Developments since 1985
Ir. L.T. B. van Kampen. R-2003-35. 42 blz. € 11.25 (In Dutch)
Vehicle mass, or (kerb) motor vehicle weight plays an important role in the course and especially the outcome of collisions. In this report, the development of the (kerb) mass of vehicles for the period 1985 - 2001 is brought into the picture. Moreover, the possible causes of these developments have been analysed, as well as the expected road safety effects.

The road safety effect of demerit point systems;
A literature study
Drs. W.P. Vlakveld. R-2004-2. 30 blz. € 8.75 (In Dutch)
Demerit point systems keep count of penalty points of traffic offenders, which means that recidivists can be punished by, for example, a (temporary) disqualification from driving. This report gives an overview of what is known about the effects of demerit point systems and examines the possible effects of the introduction of such systems in the Netherlands.

Political support for Intelligent Speed Adaptation (ISA);
Interview study among representatives of Netherlands political parties
Dr. Ch. Goldenbeld. R-2004-5. 46 + 6 blz. € 11.25 (In Dutch)
Many road safety experts regard Intelligent Speed Adaptation (ISA) as a powerful instrument for regulating safe driving speeds and achieving more safety. With regards to national politics, no clear course has yet been set out as to the introduction of a type of ISA as a road safety measure. This brings us to the question of how politicians view ISA. This report presents the results of a study of the political support for an 'ISA measure', by means of interviews with representatives of political parties.

Non-technical measures for influencing traffic behaviour;
Recommendations based on Dutch experiences and projects in the period 1990-1995
Dr. Ch. Goldenbeld. D-2003-10. 30 pp. € 8.75 (In English)
All activities to improve road safety aim at changing the road user's behaviour. This study uses the general behavioural approach to problems of traffic safety to give recommendations about effective use of non-technical measures for influencing traffic behaviour.

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